



# 202 之会责任报告 SOCIAL RESPONSIBILITY REPORT

nergy China Group Social Responsibility Report 202

中国能建2020社

会责任报告



地址: 北京市朝阳区西大望路 26 号 1 号楼 Addr.: Building 1, No. 26, Xidawang Road, Chaoyang District, Beijing, China 邮政编码 Postcode:100022 邮箱 Email:csr@ceec.net.cn 电话 Tel: 010-59099841 传真 Fax:010-59098888



扫一扫,在线阅读报告 Scan QR code to read this report online







- 101 O 责任绩效 Report Index
- 103 展望 2021 Outlook 2021
- 105 指标索引 Report Index
- 107 编制说明 About the Report
- 109 读者意见反馈表 Feedback

# **83**0

85

89

96

#### 价值共享 服务美好生活新向往

Sharing Value and Serving People's Aspiration for a Better Life

筑牢发展基础 Cementing the Foundation of Development

赋能员工成长 Empowering Employee Growth

> 助力民生改善 Helping Improve People's Wellbeing

### 董事长致辞 Message from the Chairman



中国能源建设集团有限公司党委书记、董事长 Song Hailiang Party Committee Secretary and Chairman of China

Party Committee Secretary and Chairman of China Energy Engineering Group Co., Ltd.

2020 年是极不平凡的一年。新冠肺炎疫情暴发,世界经济严重衰退,国际局势动荡加剧,面对百年未有之大变局,在以习近平总书记为核心的 党中央坚强领导下,中国能建上下坚决贯彻党中央、国务院的决策部署和国务院国资委的工作要求,全面落实"六稳""六保"任务,全面实现"三 稳四保一加强""两个力争",在加快构建新发展格局进程中,切实肩负起"顶梁柱""稳定器""压舱石"的责任担当,为我国率先控制疫情、 率先复工复产、率先实现经济正增长、决战脱贫攻坚、决胜全面小康、实现第一个百年奋斗目标贡献了"能建之力",展现了"能建之为",取 得来之不易的成绩。

The year 2020 was an extraordinary year. We saw the unexpected COVID-19 onset and the consequent global economic slump and increased international instability. Facing great changes unseen in a century, Energy China Group followed the strong leadership of the CPC Central Committee with Comrade Xi Jinping at its core and fully implemented the decisions of the CPC Central Committee and the State Council as well as the working requirements of the State-owned Assets Supervision and Administration Commission of the State Council ("SASAC") by ensuring stability on the six fronts and security in the six areas, "three stability, four security and one enhancement" and "two efforts". We served as a pillar, stabilizer and anchor in building a new development paradigm. We contributed to China's endeavor to take the lead in controlling the epidemic, resuming economic activities, and achieving positive growth. We also shouldered responsibilities in fighting against poverty, winning a decisive victory in building a moderately prosperous society in all respects and fulfilling the first centenary goal. Overall, our achievements were hard-won.

**实干报国,践行国家发展新战略。**中国能建充分发挥央企脊梁作用,忠诚践行国家战略,高水平贡献区域协调发展,精准对接京津冀协同发展、 长江经济带发展、雄安新区建设、海南自贸港建设等重大战略实施。与海南省发展控股有限公司签署全面战略合作协议,为共同贡献海南自贸 港开发建设搭建良好平台。乌东德水电站、阿里与藏中电网联网工程、张北柔性直流电网试验示范工程等一批超级工程陆续投产。克服新冠肺 炎疫情全球蔓延不利影响,高质量共建"一带一路",国际业务新签合同额同比增长 16%,乌兹别克斯坦锡尔河 1,500 兆瓦燃机项目、摩洛 哥努奥三期 150 兆瓦塔式光热电站等一批标志性工程在沿线国家开工或投产。高标准践行生态文明建设,锚定"双碳"目标,持续推动节能 减排技术研发,扩展清洁能源和生态治理业务布局,加快绿色转型升级,越南海阳、山西平定等一批高效清洁火电、风电项目顺利投运。 We work hard to serve the country and implement the country's new development strategies. As a central SOE, we commit ourselves to the implementation of national strategies, including the coordinated development of the Beijing-Tianjin-Hebei region, the development of the Yangtze River Economic Belt, Xiong'an New Area, and Hainan Free Trade Port, making substantial contribution to coordinated regional development. We have signed a comprehensive strategic cooperation agreement with Hainan Development Holdings Co., Ltd. to jointly contribute to the development of Hainan Free Trade Port. A number of major projects, such as the Wudongde Hydropower Project, the Ngari-Central Tibet Interconnection Project, and the Zhangbei Flexible DC Power Grid Pilot Demonstration Project were put into operation one after another. We have overcome the adverse impact of the global spread of COVID-19 and contributed to high quality development of the Belt and Road cooperation. The number of our new contracts signed for international business went up by 16% year on year. The 1,500MW CCGT power plant of the Syrdarya Region in Uzbekistan, the Noor III 150 MW Tower Concentrated Solar Power (CSP) Plant in Morocco and other landmark projects were launched or completed in countries along the Belt and Road in 2020. We also advance ecological progress in practice. We have set our own carbon peak and carbon neutrality targets. We continue to develop technologies for energy conservation and emission reduction, expand our business in clean energy and ecological governance, and accelerate our transition towards green growth. Our projects to produce efficient and clean thermal and wind power have been put into operation in Haiyang, Vietnam and Pingding County, Shanxi Province.

专业至臻,争做能源建设排头兵。中国能建积极践行能源安全新战略,深入参与能源供给侧结构性改革,高标准推进国家"十四五"能源、电 力和技术创新三大规划研究工作。严控工程质量,全面落实"334"工程,提升精细化管理水平,倾力打造品质项目。2020年获得国家科学技 术进步奖特等奖1项、国家优质工程奖29项、中国建设工程鲁班奖2项、中国安装工程优质奖7项。不断提升科技创新能力,获得专利授权1,428 项;首批重大科技专项"工程建设安全保障技术研究"取得重要突破,成功应用于20多项工程;"535kV耦合负压式直流断路器"研制成功, 达到世界领先水平,被列入"央企1025工程"。

We strive to be the leader in energy construction. We actively implement the new strategy of energy security, participate in the supply side structural reform of the energy sector, and advance the research on the planning of energy, power and technological innovation in the 14th Five-Year Plan. We have strictly controlled project quality, fully implemented the "334" project, improved lean management, and delivered high quality projects. In 2020, we won one Special Prize of the National Science and Technology Progress Award, 29 National Quality Project Awards, two Luban Awards, and seven Excellence Awards for China Installation. We constantly improved our scientific and technological innovation capabilities, with 1,428 patents in hand. Major breakthroughs were made in one of the first major science and technology projects, "Research on Safety Guarantee Technology in Project Construction", which have been applied to more than 20 projects. The world-leading 535 kV coupled negative-voltage hybrid DC circuit breaker was developed and listed in the "1,025 projects for central SOEs".

价值共享,服务美好生活新向往。中国能建勇于担当国民经济的"稳定器""压舱石"角色,大力落实国企改革三年行动方案,以稳健运营持续 创造价值,以开放态度积极共享价值。全力贡献疫情防控阻击战,第一时间向湖北省武汉、宜昌两市捐赠2,000万元,投入超13万人次下沉社 区志愿服务,参与多地方舱医院、定点医院建设。在决战决胜脱贫攻坚的重要节点,累计投入帮扶资金1,355万元、消费扶贫资金2,579万元, 通过投资建设高速公路、光伏扶贫电站,创造就业机会,带动产业发展。定点帮扶的陕西镇巴县、广西西林县11.4万贫困人口全部脱贫,为打 赢脱贫攻坚战贡献能建力量。倾力为员工打造平等、和谐、包容的工作环境,竭力关爱和帮助境内外员工克服疫情影响,构建起坚实的身心健康 防线。

We share value and serve people's aspiration for a better life. Energy China Group acts as an anchor of the national economy. We are fully implementing the three-year action plan for SOE reform. We continue to create value through sound operations, and share our value with an open mind. In 2020, we contributed to the national fight against COVID-19. We donated RMB 20 million to Wuhan and Yichang of Hubei Province, sent more than 130,000 community volunteers to the cities, and participated in the construction of several Fangcang shelter hospitals (temporary treatment centers) and designated hospitals. In this crucial year in the battle against poverty, we invested a total of RMB 13.55 million to assist the poor and RMB 25.79 million to buy products from impoverished areas. We also created jobs and boosted industrial development through investment in expressways and photovoltaic power plants. In Zhenba County of Shaanxi Province and Xilin County of Guangxi Province, we helped all of the 114,000 poor residents out of poverty, thus contributing to the decisive success in eradicating extreme poverty. In addition, we are committed to creating an equal, harmonious and inclusive working environment for our employees. We care for and help our employees at home and abroad to overcome the impact of the virus, and protect their physical and mental health.

征途漫漫,惟有奋斗。2021年,中国共产党将迎来百年华诞,"十四五"规划渐次铺展,全面建设社会主义现代化国家新征程拔锚起航。站在"两个一百年"历史交汇点上,中国能建将全力贯彻《关于全面加强党的领导、加快高质量发展、深化系统改革和加强科学管理的若干意见》,大力实施"1466"战略,瞄准"行业领先、世界一流"战略愿景,在践行国家战略上走在前列、在推动能源革命上走在前列、在加快高质量发展上走在前列、在建设美好生活上走在前列,加快建设一流的能源一体化方案解决商、一流的工程总承包商、一流的基础设施投资商、一流的生态环境综合治理商、一流的城市综合开发运营商、一流的建材与工业产品和装备提供商,努力为客户、股东、员工和社会创造更大价值! The road ahead is long, and hard work is the only way forward. In 2021, the Communist Party of China will celebrate the 100th anniversary of founding; the 14th Five-Year Plan is being comprehensively implemented; and we are embarking on a new journey of fully building a modern socialist country. At the intersection of two centenary histories, we will fully implement *the Directives on Strengthening Overall Party Leadership, Accelerating High-quality Development, Deepening Systematic Reform and Ensuring Efficient Management.* Vigorously implement the "1466" strategy, aspiring to become "industry leading, world class", we will take the lead in implementing national strategies, advancing energy revolution, accelerating high-quality development, and improving living standards. We will step up our efforts to establish ourselves as a first-class integrated energy solution provider, main engineering contractor, infrastructure investor, environment governor, urban development operator, and provider of building materials, industrial products and equipment. We will work hard to create greater value for our customers, shareholders, employees and the community!



### 公司简介 Company Profile

中国能源建设集团有限公司(以下简称中国能建或公司)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公司。2014年12月19日, 中国能建与全资子公司电力规划总院有限公司共同发起设立 了中国能源建设股份有限公司(中国能建持股99.53%); 2015年12月10日,中国能源建设股份有限公司首次公开 发行H股在香港联合交易所有限公司主板挂牌上市(股票代 号:3996.HK)。公司注册资本260亿元,2020年末职工人 数120,963人。

中国能建是我国乃至全球能源电力、基础设施和房地产等行 业提供整体解决方案、全产业链服务的综合性特大型集团公 司,主营业务涵盖能源电力、水利水务、铁路公路、港口航 道、市政工程、城市轨道、生态环保、水泥、民爆和房地产 等领域,具有集规划咨询、评估评审、勘察设计、工程建设 及管理、运行维护和投资运营、技术服务、装备制造、建筑 材料为一体的完整产业链。公司连续八年进入世界 500 强, 在 ENR全球工程设计公司 150 强、国际工程设计公司 225 强、 全球承包商 250 强和国际承包商 250 强排名中均名列前茅, 在 80 多个国家和地区设立了 200 多个境外分支机构,业务 遍布世界 140 多个国家和地区。

公司凭借领先的技术水平和卓越的创新能力,服务国家战略、 引领行业发展。截至2020年底,公司拥有2个国家级企业 技术中心、3个院士专家工作站、11个博士后科研工作站、 49个省级研究机构、96家高新技术企业;累计获得国家科 Founded on September 29, 2011, with registered capital of RMB 26 billion, China Energy Engineering Group Co., Ltd. (Energy China Group) is directed by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC). On December 19, 2014, China Energy Engineering Corporation Limited (Energy China) was established by Energy China Group, and Electric Power Planning & Engineering Institute Co., Ltd. (EPPE Company). On December 10, 2015, China Energy Engineering Corporation Limited was listed on the main board of Hong Kong Stock Exchange (Stock code: 03996.HK). By the end of 2020, the Group had 120, 963 employees.

Energy China Group is a comprehensive super-sized conglomerate that provides overall solutions and services encompassing the whole industry chain for energy, power, infrastructure, and real estate industries in China and even the world. Energy China Group specializes in energy and power, water conservancy and related business, railway and road, port and waterway, municipal works, metro, environmental protection, cement, civil explosion, and real estate, and runs a complete industry chain from planning, consultancy, assessment, review, survey and design, engineering construction to management, operations, maintenance, investment, technical services, equipment manufacturing, and building materials. For eight consecutive years, we have been listed in the Fortune Global 500 companies as well as ENR Top 150 Global Design Firms, ENR Top 225 International Design Firm, ENR Top 250 Global Contractors and ENR Top 250 International Contractors. Energy China Group has more than 200 overseas offices in over 80 countries and regions, and our business presence covers over 140 countries and regions around the world.

With its leading technology and innovation capacity, the Group serves national strategies as an industrial leader. By the end of 2020, we had 2 state-level enterprise technology centers, 3 academician expert workstations, 11 post-doctoral research workstations, 49 provincial research institutions and 96 high-tech enterprises. We had won 48 National Scientific and Technologi-

技进步奖 48 项、重大科技成果 2,100 余项,制修订国家标准 和行业标准 1,100 余项、拥有有效专利 10,082 项。在三峡工 程、南水北调、西气东输、西电东送、三代核电等一系列关 系国计民生的重大工程中,公司作为工程建设领域主力军 和 国家队,先后承建了世界首个"三百"火电工程、世界首个 AP1000、CAP1400 核电工程、世界最大风光储输工程、世 界首个多端柔性直流输电工程、世界首个 1240 兆瓦高效超 超临界燃煤发电工程、世界首个特高压多端混合直流工程、 世界海拔最高的输变电工程等一批重大工程,创造了多项世 界第一。

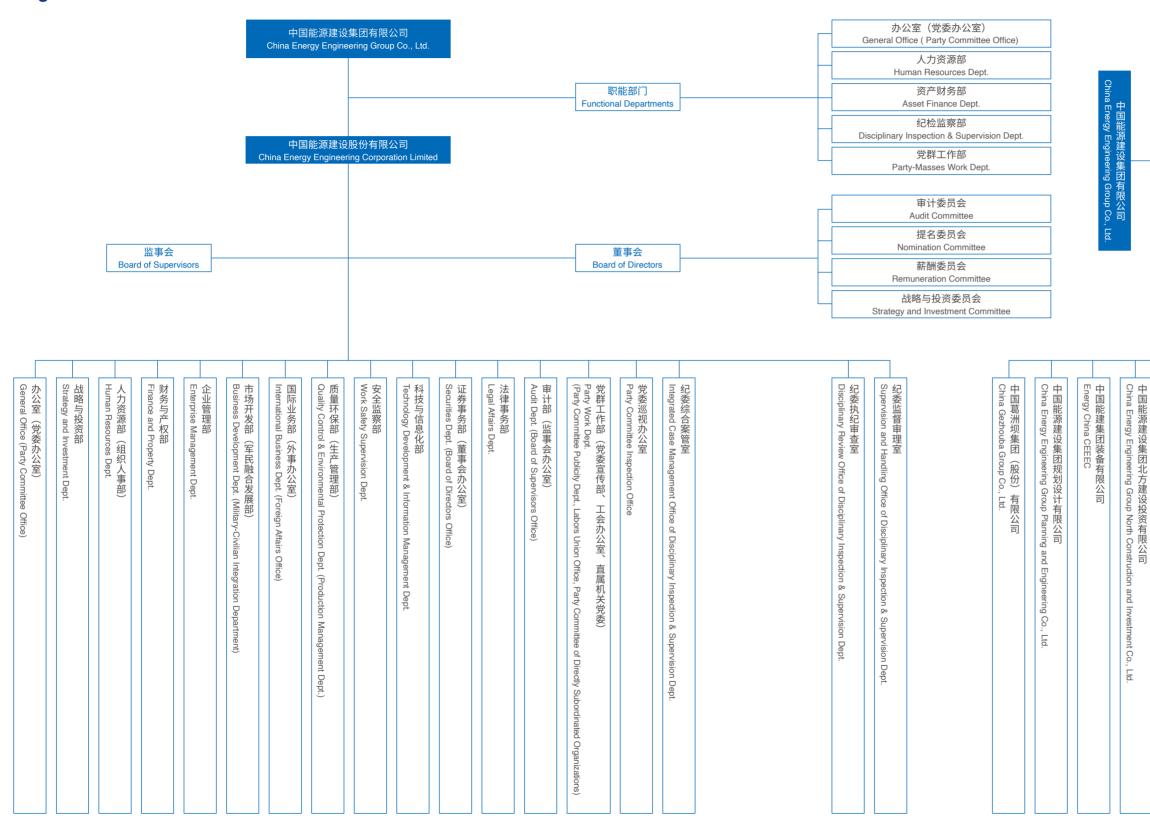
公司秉承"行业领先、世界一流"的战略愿景,致力于打造 一流的能源一体化方案解决商、一流的工程总承包商、一流 的基础设施投资商、一流的生态环境综合治理商、一流的城 市综合开发运营商、一流的建材与工业产品和装备提供商, 在践行国家战略上走在前列、在推动能源革命上走在前列、 在加快高质量发展上走在前列、在建设美好生活上走在前列, 加快建设具有全球竞争力的世界一流企业,持续为客户、股 东、员工和社会创造更大价值。

Energy China Group holds the strategic vision of "industry leading, world class" and aspires to be a first-class integrated energy solution provider, main engineering contractor, infrastructure investor, environment governor, urban development operator, and provider of building materials, industrial products and equipment. We aim to take the lead in implementing national strategies, advancing energy revolution, accelerating high-quality development, and improving living standards. Our goal is to be a world-class enterprise with global competitiveness that creates greater value for its customers, shareholders, employees and the community. cal Progress Awards, made more than 2,100 major technological achievements, formulated and revised more than 1,100 national and industrial standards, and possessed 10,082 valid patents. In a collection of major projects related to the national economy and people's livelihood, such as the Three Gorges Project. the Southto-North Water Transfer Project, the West-to-East Gas Transmission Project, the West-to-East Power Transmission Project, and nuclear power plants using third-generation technologies, we acted as the main force and national team in engineering, successively undertaking a number of major projects that set many world records, including first "300" coal-fired power plant project, the first AP1000 and CAP1400 nuclear power projects, the largest wind and solar energy storage and transmission project, the first multi-terminal flexible DC transmission project, the first 1240MW high-efficiency ultra-supercritical coal-fired power unit project, the first UHV multi-terminal hybrid DC project, and the highest-altitude power transmission and transformation project.



扫一扫, 观看中国能建 2020 国际宣传片 Scan and watch Energy China Group 2020 international promotional video

### 组织架构 Organizational Structure



电力规划总院有限公司(电力规划设计总院) Electric Power Planning & Engineering Institute Co., Ltd. (Electric Power Planning & Engineering Institute) 中国能源建设集团资产管理有限公司 China Energy Engineering Group Assets Administration Co., Ltd. 中国能源建设股份有限公司 China Energy Engineering Corporation Limited 中国 中国: 中国; China 中国 中国は China 中国能源建! China Energy Engineering Finance Co China Energy Engineering Group Financial a Energy Co., 能源 E 服 『源 ergy Eng 建设 建设 建 集团南方建设投资有限公司 集团投资 集团西北建设投资有限公司 团科 Ltd. ring Group Science ring Group Ea: 有限公司 (有限公司 , Ltd and Lea Co gg Ltd D Co Ltd Гtd Ltd Ltd

### 企业战略 **Corporate Strategy**

中国能建坚持"创新、协调、绿色、开放、共享"新发展理念, 矢志"世界能源,中国能建"使命,着力提升电力建设的核 心竞争力,争做我国能源建设的排头兵,竭诚为我国和世界 奉献一流精品工程。"十四五"期间,中国能建将大力实施 "1466"战略,努力实现"总体翻番,再造一个高质量发展 的新能建"的战略目标。

With the new development philosophy featuring innovative, coordinated, green, open and shared growth, as well as the mission of "bringing energy to the world", Energy China Group strives to enhance the core competitiveness of electric power construction, leading China's energy sector to bring more first-class projects to China and the rest of the world. During the 14th Five-Year Plan period, we will vigorously implement the "1466" strategy to achieve the strategic goal of "doubling overall performance for a new Energy China Group with high-quality growth".



行业领先、世界一流 Building an industry-leading, world-class enterprise.

在推动能源革命和能源转型发展上取得突破性进 展、在加快高质量发展上取得突破性进展、在深 化系统改革上取得突破性进展、在全面加强科学 管理上取得突破性进展、在全面提升企业核心竞 争力与组织能力上取得突破性进展、在加强党的 全面领导和党的建设上取得突破性进展 Making breakthroughs in advancing energy revolution and energy transformation, accelerating high-quality development, deepening system re-

TX THE AND

eakthroughs

forms, strengthening scientific management, improving the Company's core competitiveness and organizational capability, and strengthening overall Party leadership and Party building.

> $\times$  ${ >}$

 $\ge$ 

中国能建"1466"战略 Energy China Group's "1466" strategy

在践行国家战略上走在前列、在推动能源革命上走 在前列、在加快高质量发展上走在前列、在建设美 好生活上走在前列

Playing a leading role in implementing national strategies, promoting energy revolution, accelerating high-quality development, and making a better life.

一流的能源一体化方案解决商、一流的工程总承 包商、一流的基础设施投资商、一流的生态环境 综合治理商、一流的城市综合开发运营商、一流 的建材、工业产品和装备提供商

World-class integrated energy solution supplier, world-class general engineering contractor, worldclass infrastructure investor, world-class comprehensive ecological management company, world-class comprehensive urban development & operation company, and world-class supplier of building materials, industrial products and equipment.



## 社会责任管理 **CSR Management**

### 责任理念和管理 **CSR Concepts and Management**

中国能建坚持以"初心聚能,美好共建""奉献精品,造福 人类""同在一方热土,共建美好家园""聚天下之能,建 世界之基"为出发点和落脚点,遵循"自主创新、奉献社会, 科学发展、共建和谐"的社会责任观,坚持"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, 不断完善企业社会责任管理体系和制度,将社会责任工作融 入企业各项工作中,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。

Guided by the principle of "pooling energy to build the foundation of the world for a better future", "offering high-quality products for the benefit of mankind", and "building a better home together on the same land", Energy China Group follows the social responsibility concept of "independent innovation, social contribution, scientific development and mutual harmony". To fulfill the mission of "bringing energy to the world", we hold the strategic vision of becoming a "world-class industrial leader with global competitiveness". Therefore, we constantly improve our CSR management system, and integrate CSR factors into various areas of work. We also work hard to manage the impact of our operations on the community and the environment, and promote the virtuous circle of corporate development and CSR fulfillment, striving to be a CSR model

社会责任工作委员会 **CSR** Committee

• 以董事长为主任、其他领导和 高管为副主任,各部门主要负 责人为成员的社会责任工作委 员会,负责领导、推进社会责 任工作

With the chairman of the board as the director, other leaders and senior executives as the deputy directors, and major heads of each department as its members, the CSR committee aims to lead and promote CSR work.



• 负责协商社会责任相关工作 Responsible for the negotiation of CSR work.

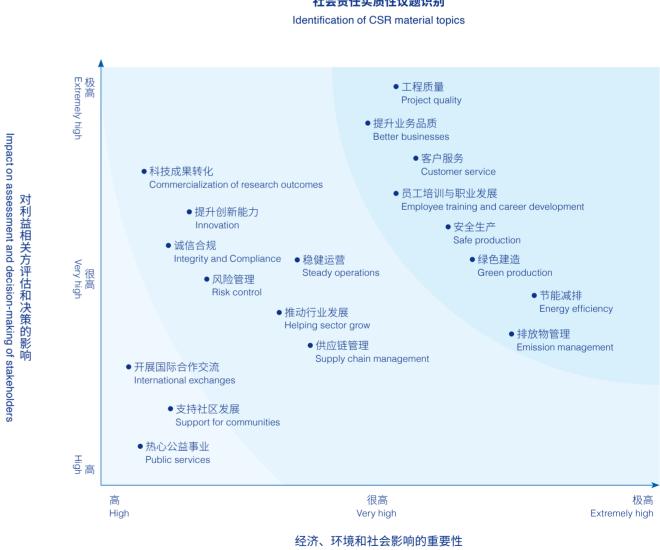


#### 所属企业社会责任领导机构 CSR Leading Organization of Affiliated Enterprises

- 细化社会责任工作职责 To refine responsibilities of CSR work
- 明确各单位社会责任工作归口管 理部门 To define centralized management department of CSR of each organization
- 配备社会责任管理人员 To assign personnel for CSR management

### 实质性议题分析 **Analysis of Material Topics**

中国能建依据社会责任相关制度与标准,按照公司业务对经 济、社会和环境的影响和对利益相关方评估和决策的影响两 个方面,确定具有实质性的社会责任议题,以期更好地指导 社会责任实践和信息披露工作。



Impact on economy, environment, and society

Based on relevant CSR system and standards, Energy China Group has determined the CSR topics with materiality in terms of the impact of our businesses on the economy, society, and environment and on stakeholders' assessment and decision-making, to better guide our CSR practices and information disclosure.

### 社会责任实质性议题识别

### 利益相关方沟通 Stakeholder Communication

中国能建持续完善利益相关方常态化沟通机制,及时了解利 益相关方的期望与诉求,加强与利益相关方的交流沟通,希 望获得利益相关方的信赖和支持,共促高质量、可持续的发 展进程。 Energy China Group strengthens the communication with stakeholders by continuously improving regular communication mechanisms, in an effort to understand the expectations and demands of stakeholders and give response in a timely manner, thus obtaining the trust and support of stakeholders and jointly promoting the high quality and sustainable development.

利益相关方 期望与诉求 Appeals & Expectations Stakeholders 招 • 公开采购 Bic Open procurement 合 • 公开公正 供应商与分包商 Co Transparency and fairness • 公 Suppliers and Contractors ● 严格履约 Op Strict performance of • 会 agreements and contracts Me visi • 健 So ● 薪酬与福利 • 职 Compensation and benefits Em rep 健康与安全 • 征: Health & safety 员工 • 职业发展 Asl Employees Occupational development • 完 • 人文关怀 Im Care for employees • 纾 He 社 Co & v • 公益慈善 Charity • 社: • 环境友好 So 社区与公众 Environmental friendliness • 捐 Communities and the Public ● 社区发展 Do Community development • 志[ ● 社区就业 Volu Community employment • 环 En 编 For and • 加; • 公平竞争 Inte Fair competition 行业 •参 • 推动行业进步 The Industry Joir Promote industrial progress 战 Ca

### 利益相关方沟通表

Stakeholder communication

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	<ul> <li>收益回报 Return on investment</li> <li>社会责任 Social responsibilities</li> </ul>	<ul> <li>全面工作汇报 Report all works</li> <li>严格报送报表 Strictly submit statements</li> <li>贯彻相关精神 Implement relevant guiding principles</li> <li>接受派驻监督 Accept supervision and inspection</li> </ul>	<ul> <li>超额完成业绩考核 Exceed the performance target</li> <li>持续加强风险管理 Continuously enhance risk management</li> <li>深化企业改革 Deepen corporate reform</li> <li>配合国资委调研 Assist the SASAC with investigation and research</li> <li>承担企业社会责任 Undertaking corporate social responsibility</li> </ul>
股东与投资者 Shareholders & Investors	<ul> <li>收益回报 Return on investment</li> <li>公开透明 Transparency</li> <li>权益保护 Protect rights and interests</li> </ul>	<ul> <li>公开透明质量 Open and transparent quality</li> <li>投资者关系维护 Maintain sound investor relationship</li> <li>严格信息披露 Strictly disclose information</li> </ul>	<ul> <li>提升经营业绩 Promote business performance</li> <li>完善公司治理 Improve corporate governance</li> <li>保护股东权益 Protect the rights and interests of shareholders</li> <li>发布年度财务和非财务报告 Issue annual financial and non-financial reports</li> </ul>
政府 The Government	<ul> <li>依法纳税 Pay tax in accordance with the law</li> <li>遵纪守法 Observe disciplines and laws</li> <li>响应政策 Respond to policy</li> </ul>	<ul> <li>主动纳税 Pay taxes proactively</li> <li>合规经营 Run business in compliance</li> <li>参与扶贫、拉动就业 Engage in poverty relief and promote employment</li> </ul>	<ul> <li>依法合规经营、足额纳税 Run business in compliance, and pay all due taxes</li> <li>参与精准扶贫和乡村振兴 Take part in targeted poverty alleviation</li> <li>稳定增长、带动就业 Realize stable growth, and stimulate employment</li> </ul>
业主和客户 Proprietors and Customers	<ul> <li>严格履约 Strictly observe agreements and contracts</li> <li>质量优良 Good quality</li> <li>响应投诉 Respond to complaints</li> </ul>	<ul> <li>调查客户需求 Investigate into customer demands</li> <li>严格生产管理 Conduct strict production management</li> <li>加强质量管理 Strengthen quality management</li> <li>积极沟通 Carry out active communication</li> </ul>	Solve complaints in a positive manner

回应方式 Responses	责任实践 CSR Practice
招投标、商业谈判 iddings, business negotiations 同执行 ontact performance Y开采购平台 pen procurement platform 议、互访与交流 eetings, mutual sits, exchanges	<ul> <li>坚持诚信、严格履约 Commitment to integrity, strict contracts performance</li> <li>公开采购、公正评标 Open procurement, and fair bids evaluation</li> <li>遵守互利、共赢原则 Observe the principle of mutual benefits and win-win cooperation</li> <li>建立良好合作关系 Establish sound partnership</li> </ul>
全的制度基础 ound institutional basis 工监事、代表、工会 mployee supervisor, presentatives, and Labor Union 求合理化建议 sk for reasonable advices 告培训体系 mprove training system 解员工困难 elp employees in difficulties	<ul> <li>稳定的薪酬激励 Stable salary and incentives</li> <li>关注员工发展 Pay attention to staff development</li> <li>开展各类培训 Organize various trainings</li> <li>关注并预防职业病 Pay attention to and prevent occupational diseases</li> <li>开展困难职工帮扶 Make efforts in helping employees in difficulties</li> </ul>
E区交流、慰问 ommunity exchanges visits 在会公益活动 pocial welfare activities 發、捐助 onations 感者活动 olunteer activities 5境保护 nvironmental protection	<ul> <li>参与社区公益和福利事业 Engage in community public services</li> <li>投身抢险救灾 Devote to disaster rescue and relief</li> <li>推进本地采购和雇佣 Promote local procurement and employment</li> <li>重视项目对社会环境的影响 Attach importance to social and environmental impacts of projects</li> <li>加大环保产业投入 Increase inputs into environmental industries</li> </ul>
制标准和规范 ormulate standards nd specifications 1大研发投入 tensify R&D efforts 动行业协会 oin industrial associations 略合作 arry out strategic cooperation	<ul> <li>开展规划研究、技术研发, 引领行业发展 Conduct planning research and technology R&amp;D to lead the development of the industry</li> <li>发挥全产业链优势,为行业 提供优质服务 Give full play to the edges across the entire industrial chain and offer good quality services</li> <li>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</li> </ul>

### 2020 责任荣誉 2020 CSR Honors

荣誉 Honors	<b>评选机构</b> Award Institutions	
中国能建荣获中央企业负责人(2019)年度经营业绩考核 A 级 Energy China Group was rated Class A in the Annual Business Performance Assess- ment of the Leadership of Central State-owned Enterprises (2019) by the SASAC.	国务院国有资产监督管理委员会 The State-owned Assets Supervision and Administration Commission of the State Council (SASAC)	
南方建投广电工程局"基于建筑主体结构施工的钢筋定位结构"获科技进 步一等奖 The achievement of "Rebar Positioning Structure based on the Construction of the Main Building Structure" of Guangdong Electric Power Engineering Bureau Co., Ltd. won the First Prize of Scientific and Technological Progress Award.	中国科学技术学会 China Association for Science and Technology (CAST)	
安徽电建一公司承建 ±11000 千伏古泉换流站工程荣获国际项目卓越管理 奖银奖 The ±11000kV Guquan Converter Station PMC Project, undertaken by Anhui	国际项目管理协会(IPMA)	
No.1 Electric Power Construction Co., Ltd., won IPMA Global Project Excellence Award. (Small-/Medium-Sized Project, Silver Winner in 2019). 湖北华电江陵发电有限公司一期 2×660MW 超超临界燃煤发电机组工程	International Project Management Association (IPMA)	
和通州区再生能源发电厂两项工程荣获 2020~2021 年度第一批中国建设 工程鲁班奖 The 2×660MW Ultra Supercritical Coal-fired Power Unit Phase I Project of Hubei Huadian Jiangling Power Generation Co. Ltd. and Beijing Tongzhou Renewable Energy Power Generation Factory won 2020-2021 Luban Prize of Architectural Engineering.	建设 中国建筑业协会 Jbei China Construction Industry Association (CCIA) able	
滇西北至广东 ±800 千伏特高压直流输电工程、±420 千伏渝鄂背靠背直 流联网工程、国电舟山普陀 6 号海上风电场 2 区工程等八项工程荣获国家 优质工程金奖	中国施工企业管理协会	
The ±800 kV Northwest Yunnan-Guangdong UHV DC Transmission Project, the ±420 kV Chongqing-Hubei Back-to-Back HVDC Project, Guodian Zhoushan Pu- tuo No.6 No. 2 Zone Offshore Wind Farm Project, and five other projects won the National Quality Project Award.	Chongqing-Hubei Back-to-Back HVDC Project, Guodian Zhoushan Pu- No. 2 Zone Offshore Wind Farm Project, and five other projects won the	
电力工程中外技术标准体系研究与国际化应用和全水头高效反击式水轮发 电机组设计制造及工程应用关键技术荣获中国电力科技进步奖一等奖 The key technology achievements of "Research and International Application of Chinese and Foreign Technical Standard Systems for Power Engineering" and "Design, Production and Engineering Application of Total-hydraulic head High-efficiency Reaction Turbine Hydroelectric Generator Set" won the First Prize of China Electric Power Science and Technology Progress Award.	中国电机工程学会 Chinese Society for Electrical Engineering (CSEE)	
锦屏水电站工程荣获水力发电科学技术奖特等奖 Jinping Hydropower Station Project won the Special Prize of Hydropower Science and Technology Award.	中国水力发电工程学会 China Society for Hydropower Engineering (CSHE)	



"十三五"期间,中国能建坚持以习近平新时代中国特色社 会主义思想为指导,深入贯彻党的十八大、十九大以及历次 全会精神,立足新发展阶段,贯彻新发展理念,融入新发展 格局,加快高质量发展,深化系统改革,强化科学管理,加 强科技创新,全面加强党的领导党的建设,在"量"上稳中 有进,在"质"上优化提升,在筑牢"根"和"魂"上久久 为功、持续加强,矢志建设具有全球竞争力的世界一流企业, 为全面建成小康社会作出能建贡献。



中国能建始终牢记发展企业、创造价值的经济初衷,坚持将 保持稳定增长作为首要任务,聚焦主责主业,狠抓市场开拓 和生产经营,深入开展提质增效,企业总体保持了良好的发 展态势。



2020年底公司资产总额较 2015年同期增长 75.35% By the end of 2020, total assets increased by 75.35% compared with the same period in 2015.

During the 13th Five-Year Plan period. Energy China Group followed the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and implemented the guiding principles of the 18th and 19th CPC National Congresses and plenary sessions in full. In the new development stage of China, we followed the new development philosophy and integrated ourselves into the new development paradigm. We pursued highquality development, deepened systematic reforms, strengthened scientific management, and fostered scientific and technological innovation. We also strengthened Party leadership and promoted Party building. In summary, we made progress in both quantity and guality, contributing to the building of a moderately prosperous society in all respects. Going forward, we will continue to strengthen our root and soul, and renew our commitment to building a worldclass enterprise with global competitiveness.

Energy China Group has always kept in mind the original aspiration of developing the enterprise and creating value. We have been taking stable growth as our top priority, and focusing on our main responsibilities and businesses. We pay close attention to market exploration, production and operations, and have intensified our efforts to improve the quality and efficiency. As a result, we maintain a good momentum of development.





# 353 391 2015 年 2020 年 世界 500 强排名 ranking of Fortune Global 500 list

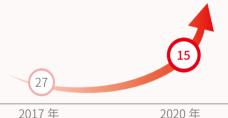
2020年世界企业 500 强排名第 353 位, 较 2015年提高

Energy China Group ranked 353th among the Fortune Global 500

38 位

#### 2020 年利润总额较 2015 年同期增长 **57.6**%, "十三五" 期间年均增速 **9.5**%

In 2020, the total profit grew by 57.6% over the same period in 2015, with an average annual growth rate of 9.5% during the 13th Five-Year Plan period.



.7年 20

### ENR250 强国际承包商排名

ranking of the ENR Top 250 International Contractors

### 2020 年 ENR250 强国际承包商排名第 **15** 位,较 2017 年首次参评上升 **12** 位

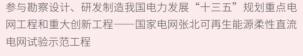
Energy China Group ranked 15th among the ENR Top 250 International Contractors, up 12 places from that in 2017, the first year of participation.



#### 4次获评国务院国资委经营业绩考核A级

in 2020, up 38 places from that in 2015.

4 times assessed as Class A in the SASAC's Annual Business Performance Assessment of the Leadership of Central Stateowned Enterprises.



Participating in the survey, design, research, development and manufacturing of Zhangbei Flexible DC Power Grid Pilot Demonstration Project, a key state grid project and major innovation project for China's electric power development during 2016-2020



中国能建积极发挥能源电力、基础设施建设全产业链一体化 集成优势和国家队、主力军作用,全面参与我国"十三五" 重大项目和重点工程建设,为推动国民经济社会发展作出了 突出贡献。 Energy China Group has capitalized on our advantages in the integrated industrial chain of energy, power and infrastructure as a key member in the national team. We participated in the construction of major programs and key projects during the 13th Five-Year Plan period(2016-2020) and made outstanding contributions to the national economic and social development.



参与设计承建我国能源发展"十三五"规划跨省区输电重点工程——昆柳龙直流工程

Participating in the design and construction of Kunliulong DC Project, a key cross-provincial power transmission project for China's energy development during 2016-2020



设计参建国家重点工程、江苏省"十三五"期间的重大投资建 设项目——田湾核电5号机组

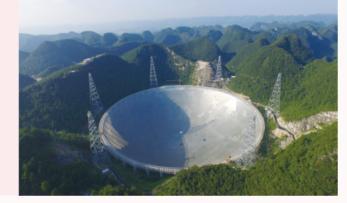
Designing and participating in the construction of Unit 5 of Tianwan Nuclear Power Plant, a national key project and major investment and construction project in Jiangsu Province during 2016-2020



承建"西电东送"国家重大工程——乌东德水电站 Undertaking the Wudongde Hydropower Plant, a key power source for the "West — to — East Power Transmission Project"



Participating in the design of "China Eye" — five-hundred-meter Aperture Spherical Radio Telescope ("FAST")





设计全球装机容量最大火力发电厂——内蒙古大唐托克托电厂 Designing the world's largest installed capacity of thermal power plant — Inner Mongolia Datang Tuoketuo power Plant

设计世界电压等级最高、输送容量最大、技术水平最高的超长 距离 GIL 创新工程——淮南—南京—上海 1000 千伏特高压输 变电工程苏通 GIL 综合管廊工程

Designing the ultra-long distance GIL innovation project with the highest voltage grade, the largest transmission capacity and the highest technical level in the world — Huainan — Nanjing — Shanghai 1000 kV ULTRA-high voltage power transmission and transformation project — Sutong GIL Integrated Pipeline Corridor Project





五年来,中国能建坚持对标一流,持续深化改革,推动制度 建设,优化产业结构布局,倾力提升科技创新能力,企业内 生活力进一步增强。

# 全面深化改革

### Deepening reform comprehensively

我们积极开展对标世界一流管理提升行动,坚持优化提升管 理能力,积极推进瘦身健体、提质增效、结构调整、转型升级, 构筑高层次的企业竞争力、创新力、控制力和抗风险能力, 各项改革取得了积极成效。



Over the past five years, Energy China Group has adhered to firstclass standards, kept deepening reform, promoted institutional construction, optimized industrial structure and enhanced our scientific and technological innovation capabilities. Our endogenous vitality has been further enhanced.

Energy China Group has actively improved management to meet world-class standards, enhanced management capabilities, streamlined administration, improved quality and efficiency, adjusted structure, and accelerated transformation and upgrading so as to develop a strong ability to compete, innovate, control and resist risks. All reforms have produced positive results.

#### 建立健全治理结构 Establishing and improving governance structure

• 规范股份公司董事会建设,进一 步明确党委会、董事会、监事会 和经理层的法定地位和职权。

Standardizing the construction of the board of directors of joint-stock companies, and clarifying the legal status and powers of the party committee, the board of directors, the board of supervisors and the management.

• 加快直属企业董事会、监事会建 设工作,培育专职董事监事队伍。 Speeding up the construction of the board of directors and the board

of supervisors of directly affiliated enterprises, and cultivating a team of full-time directors and supervisors.

#### 稳步推进对标提升 Making improvement to meet first-class standards

 优选 10 家对标对象,明确 9 大 重点领域 43 项对标任务和 129 项工作举措,有序推动各项措施

稳步实施。 Selecting 10 benchmarking enterprises and institutions, identifying 43 tasks and 129 measures in 9 key areas, and implementing measures steadily.

 一体化推进"总部机关化"问题 专项整改,取得阶段性成果,在 央企进行交流。

Rectifying the problem of "bureaucracy of headquarters" with preliminary results, and sharing experience with central SOEs.

#### 混合所有制改革 Carrying out the mixed ownership reform

• 分阶段、分层次有序推进混合所有制 改革,积极探索"以打造上市为新平 台、以转型升级为新增长点、以改革 试点为新突破"的混合所有制改革模 式。所属企业混合所有制户数620家, 占比达到 95% 以上。

Advancing the mixed ownership reform in an orderly manner, and exploring the reform pattern with "listing as a new platform, transforming and upgrading as a new growth point, and pilot projects as a new breakthrough". The number of affiliated enterprises with mixed ownership reached 620, accounting for more than 95%.

# 聚焦科技创新

### Focusing on scientific and technological innovation

我们坚持"科技引领、专业强化、重点推进、全面提升"的 科技发展方针,围绕主业,聚焦重点,锐意创新,核心竞争 力不断提升。

Guided by the principle of pursuing science and technology, strengthening expertise, advancing key business, and improving all respects, we pay close attention to our main business, focus on key areas, and encourage innovation. As a result, our core competitiveness has been sharpened.



特高压交直流输电设计技术先后两次荣获国家科技进 步特等奖

Winning two Special Prizes of the National Science and Technology Progress Award twice with the design technology of UHV AC/DC transmission

#### 攻克复杂地质条件下大型地下洞室群施工技术

Overcoming difficulties of the construction technology of large underground caverns under complicated geological conditions



拥有 3 个国家级和 49 个省级研究机构 27

Owned 3 national and 49 provincial research institutions

3 院士专家工作站(个) Academician expert workstations

博士后科研工作站(个)

Postdoctoral research workstations

特等奖(项) First prizes

nology Awards

15

#### 供给侧结构性改革 Carrying out supply-side structural reform

- 开展"处僵治困"和重点亏损子 企业治理工作,公司所属15户重 点亏损子企业总体扭亏为盈。 Helping 15 subsidiaries in huge losses turn around.
- 持续强化企业"压减"工作,完 成197户法人企业注销工作,圆 满完成三年"压减"工作目标任务。 Cutting down enterprises by cancelling 197 enterprises, and achieving the target of the three-year task.

#### 优化调整产业布局 Optimizing the industrial layout

- 对同质化企业组织实施多次调整重 组,将所属电力装备制造企业全部重 组并入中国能建集团装备有限公司。 Adjusting and reorganizing homogeneous enterprises, and merging all power equipment manufacturing enterprises into Energy China CEEEC.
- 将 18 家省级电力工程建设企业分区域 重组整合为4家区域性建设投资公司。 Reorganizing 18 provincial power engineering construction enterprises and integrating them into 4 regional construction investment companies.

íIII  $\left[ \mathcal{O} \right]$ 

#### 重大风险防范化解持续深入 Preventing and resolving major risks

• 合规和风险管理全面融入,开展 风险隐患排查及专项整治行动, 对下属单位有关重大风险专项排 查,守牢"三个不得、十个严禁" 的红线底线。

Pursuing compliance and risk management, identifying and rectifying potential risks, investigating major risks of affiliated companies and guarding the red line of "three prevention and ten prohibitions".

我们攻克了一系列关键核心技术,引领我国能源建设行业高 速发展;建立了科技奖励和科技先进评选制度,激发了各单 位和广大科技工作者科技创新的积极性和创造性。

We have overcome a series of difficulties in key and core technologies, leading the rapid growth of China's energy industry. We have established a system for rewarding advanced technologies and outstanding individuals on science and technology. This has stimulated the enthusiasm and creativity of all departments and science and technology professionals.



创新高混凝土坝快速施工和大体积混凝土温度智能控 制及防裂技术,引领我国高坝施工技术发展

Innovating technologies in high concrete dam rapid construction, mass concrete temperature intelligent control and crack prevention, leading the development of high dam construction technology in China

攻克三峡 3.000 吨级齿轮齿条爬升式垂直升船机施工技术 Tackling problems in the construction technology of the 3,000 ton class rack and pinion climbing vertical ship lifter in the Three Gorges.



8

承担国家科技计划项目(项) 省部级科技计划项目(项) Provincial projects undertaken National science and technology projects undertaken

State Science and Tech-

2 获得国家科学技术奖(项) 一等奖(项) Special prizes

> 二等奖(项) Second prizes

# 4

编制并发布国际标准(项) And published 4 international standards

国家标准(项) National standards 219 行业标准(项) Industry standards

27 个信息系统,成立能源规划 大数据平台 Information systems and set up a big data platform for energy



### 砥砺前行 迈向全新征程 **Unity and Strength for** Party Leadership

站在历史征程的新起点,中国能建认真总结"十三五"奋斗 历程经验,系统科学谋划"十四五"发展布局。

# 01 Following the Party's leadership

强根铸魂 深化党建引领 Unity and Strength for Party Leadership .

45

中国能建始终将党的建设摆在首位,把坚持党的领导贯穿始 终, 树牢"四个意识", 坚定"四个自信", 做到"两个维护" 切实将学习习近平总书记重要讲话、指示批示精神和贯彻党 中央的重大决策部署落实到推动企业改革与高质量发展的生 动实践中,在大战大考中淬炼过硬品格,彰显顶梁柱、稳定器、 压舱石、排头兵的政治担当。

Energy China Group always prioritizes Party building and follow the Party leadership. We strengthen our consciousness of the need to maintain political integrity, think in big-picture terms, follow the leadership core, and keep in alignment with the central Party leadership; stay confident in the path, theory, system, and culture of socialism with Chinese characteristics; and uphold General Secretary Xi Jinping's core position on the Party Central Committee and in the Party as a whole, and uphold the Party Central Committee's authority and its centralized, unified leadership. We study General Secretary Xi Jinping's speeches and instructions and the CPC Central Committee's major decisions, and put them into practice to accelerate our reform and development. As an anchor and leader, we shape our excellent character in trials.



06 防范化解重大风险是企业做强做优做 大的重要保障 Preventing and resolving major risks Q 05 提升科学管理水平是企业做强做优做 大的有效途径

Improving scientific management

04

名"能建工匠" Energy China Craftsmen selected

个标杆班组 Leading teams

个先进班组 Advanced teams

党员 (名) Party members



Standing at a new historical starting point, Energy China Group has summarized the experience of the 13th Five-Year Plan and made sound plans for the 14th Five-Year Plan period.

全面加强党的领导是企业做强做优做大的根本遵循



02

坚持发展第一要务是企业做强做优做 大的必然要求 Prioritizing development

03

全面深化系统改革是企业做强做优做 大的强大动力 Intensifying systematic reform

坚持创新驱动发展是企业做强做优做大的战略支撑 Pursuing innovation-driven development

## 谋划"五篇大文章"

#### Formulating five ambitious plans

着眼解决影响发展的"方向性、根本性、全局性、长期性、 创新性、风险性"六大问题,做好"十四五"发展规划,深 化系统改革,加强科学管理,做好党的全面领导、党的建设、 班子建设、人才队伍建设、适应性组织建设和谋划好2021 年工作思路、目标与任务"五篇大文章",高眼光、高目标、 高起点、高标准谋划能建未来发展。 We strive to develop a sound plan for the 14th Five-Year period with an aim to solve six fundamental problems that may bring risks and affect future directions, long-term development and innovation. We ramp up efforts to deepen system reforms, strengthen management, follow the overall Party leadership, and enhance Party building while nurturing team, personnel and an adaptive organization. Besides, we think over plans, goals, and tasks for 2021, in hope of shaping a bright future with high standards.

### 绘就发展新蓝图

### Drawing a new blueprint

召开务虚会,出台《关于全面加强党的领导、加快高质量发展、 深化系统改革和加强科学管理的若干意见》,明确"一个愿景、 四个前列、六个一流、六个重大突破"的"1466"战略,形 成公司发展改革管理党建总蓝图,回答了公司要实现什么样 的发展和如何实现高质量发展的关键问题。 We hold the meeting on theoretical matters, and have introduced the Directives on Strengthening Overall Party Leadership, Accelerating High-quality Development, Deepening Systematic Reform and Ensuring Efficient Management, drawn up the "1466" strategy of "one vision, four leading areas, six first-class areas and six major breakthroughs". A blueprint for our development, reform, management and Party building has been formed to answere the key questions of what kind of development we should achieve and how we can pursue high-quality development.



### 明晰发展新路径 Defining a new path

以《关于全面加强党的领导、加快高质量发展、深化系统改 革和加强科学管理的若干意见》为指引,广泛开展调研、专 题研究和研讨,编制公司"十四五"总体规划纲要。抓好分 领域专项规划和所属企业子规划编制,为科学做好"十四五" 时期各项工作打下坚实基础。

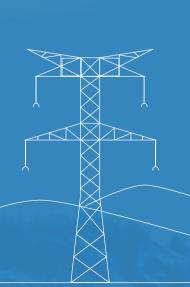


公司党委书记、董事长宋海良在务虚会上讲话 Company Party Committee Secretary and chairman Song Hailiang speaks at the meeting on theoretical matters

### 激发发展新动能 Creating new momentum

制定公司改革三年行动实施方案,稳步推进回归 A 股,加快 推动混改试点、"双百行动"和"科改示范行动"等国企改 革专项工程。深化供给侧结构性改革,深入实施三项制度改 革。平稳移交退休人员,完成率达 99.53%,在中央企业位 居前列。 Guided by the Directives on Strengthening Overall Party Leadership, Accelerating High-quality Development, Deepening Systematic Reform and Ensuring Efficient Management, we carry out extensive surveys, studies and discussions to formulate the outline of our 14th Five-Year Plan. We have drawn up special plans for sub-fields and affiliated enterprises. All of our work will lay a solid foundation for all tasks during the 14th Five-Year Plan period.

We have formulated a three-year action plan for corporate reform, made solid progress towards the return to the A-share market and accelerated the special projects for the reform of SOEs, such as the pilot project of mixed ownership reform, the Double Hundred Action and Demonstration Action on Market-oriented Reform for Science and Technology Enterprises. We have deepened supplyside structural reform and fully implemented reform of our labor, personnel and distribution systems. Up to 99.53% of retirees were properly handled, ranking among the top central SOEs.



专 题 Feature N

Responsibility in Winning the Decisive Victory in the Battle against Poverty

**....** 335 3 <sup>良好</sup> 健康与福祉 -/4/÷ ▲ 优质教育 6 清洁饮水和 卫生设施 U 8 体面工作科 经济增长 Ĩ 10 **∢**Ê⊁

"十三五"期间,中国能建始终秉承"真扶贫、扶真贫"的宗旨, 以定点帮扶和驻村联户为抓手,从解决群众最关心、最直接、 最现实的利益问题入手,想群众之所想、急群众之所急、解 群众之所困,持续在发展特色产业、完善基础设施、推动教 育发展、改善公共卫生等方面下功夫,为高质量完成脱贫攻 坚目标任务、奋力夺取脱贫攻坚战全面胜利作出了能建贡献。

2016年至2020年,在定点扶贫的广西西林县和陕西镇巴县: From 2016 to 2020, in the two targeted poverty alleviation counties of Xilin County in Guangxi Province and Zhenba County in Shaanxi Province, we:

4,888.51 直接投入帮扶资金(万元) Invested assistance funds (RMB 10,000)

5,338.77 购买贫困地区农产品(万元) Purchased agricultural products from poor areas (RMB 10,000)

56.73 帮助销售贫困地区农产品(万元) Helped sell agricultural products in poor areas (RMB 10,000)



中国能建始终把精准扶贫工作作为重中之重,构建了"党委 统一领导、总部统筹协调、子分公司主责、挂职干部落实" 的管理机制,推动扶贫工作高起点规划、高效率实施、高质 量落地。

During the 13th Five-Year Plan period, guided by the principle of helping those in need and delivering genuine outcomes, Energy China Group offered targeted assistance and had team members stationed in villages for group alleviation by starting from solving people's most concerned, most direct and most realistic challenges of interests. We worked to develop characteristic industries, and improve infrastructure, education, and public health system, contributing to the complete victory in the fight against poverty.

## 10

选派挂职干部(人) Temporary officials selected

# 83

培训基层干部(人) Grassroots officials trained 选派第一书记(人) First secretaries selected



9

培训技术人员(人) Technicians trained

2019年4月24日,定点扶贫县广西西林县脱贫摘帽, 成为广西西北五县第一个脱贫摘帽县 On April 24, 2019, Xilin County was lifted out of poverty, becoming the first in the five counties in northwest Guangxi to shake off poverty

2020年2月27日,定点扶贫县陕西镇巴县脱贫摘帽 On February 27, 2020, Zhenba County was lifted out of poverty

Energy China Group always prioritizes targeted poverty alleviation. We have established a management system featuring unified leadership of the Party Committee, overall coordination by the headquarters, main responsibility for subsidiaries and branches, and implementation by temporary officials, which allowed the anti-poverty work to be carefully planned, and implemented with efficiency and quality.

### 加强组织领导 Stronger organizational leadership

公司党委深入贯彻落实习近平总书记重要指示批示精神,坚 持高位推动,成立由党委书记、董事长和党委副书记、总经 理任双组长的定点扶贫工作领导小组。领导小组下设工作小 组,由总部相关职能部门负责人作为成员,负责定点帮扶具 体工作。结合定点帮扶对象,专门成立了陕西扶贫工作组和 广西扶贫工作组,由驻陕、驻桂骨干企业担任组长、副组长 单位,具体落实定点帮扶各项任务。

Under the guidance of the spirit of the important instructions by President Xi Jinping, the Party Committee of Energy China Group underscores high-level facilitation of work by setting up a leading group with two team directors of the chairman (also Party secretary) and general manager (also Party deputy secretary). Under it, working groups with leaders of relevant departments in the headquarters as members, are responsible for specific poverty alleviation work. Considering local realities, we have established Shaanxi and Guangxi poverty alleviation teams headed by key enterprises based in the two provinces to carry out specific tasks.

### 加强规划实施 Better planning and implementation

我们结合定点帮扶对象镇巴县、西林县具体情况,先后制定 了中国能建驻陕企业、驻桂企业《"十三五"定点扶贫工作 规划》。公司领导每年到定点扶贫县实地调研,召开专题工 作会议,部署安排定点扶贫工作,推进目标任务落实落地。

Based on the conditions of Zhenba County and Xilin County, we have successively formulated the 13th Five-Year Work Plan for Targeted Poverty Alleviation for our enterprises in Shaanxi and Guangxi. Our leaders pay visits to the counties for field investigation every year and hold special working conferences to arrange related work for the implementation of specific tasks.



镇巴定点扶贫工作座谈会 Symposium on targeted poverty alleviation in Zhenba County



两个扶贫工作组每年制定详细的工作计划,明确帮扶项目、 资金和用途,落实各项定点帮扶工作。主动与定点帮扶对象 所属村党支部开展"爱心助学联建""村企携手共建"等主 题活动,持续推动扶贫工作走深走实、见行见效。

### 加强队伍建设 **Team building**

我们倾力打造最精锐、最担当、最过硬的挂职干部队伍,投 身脱贫攻坚一线战场。2016年至2020年,共向定点帮扶县 派驻一线扶贫干部 14 人。其中,先后选派市场开发业务能 力强、视野宽广、组织协调力强的6名优秀干部到扶贫县挂 职,担任县委常委、副县长和驻村第一书记等职务。挂职干 部用真心驻村,用真情扶贫,为当地谋出路、引项目、克难题、 献爱心,赢得广大干部群众一致好评。

开展"村企携手共建"主题党日活动 Photo of "Village-Enterprise Collaboration for Development"

The two working groups produce detailed annual plans to specify key projects, funds and their uses, and ensure the progress of work. We carry out theme activities such as "Educational Support" and "Village-Enterprise Collaboration for Development" with their village Party branches to promote poverty alleviation work effectively.

We select the most competent and responsible personnel as the temporary officials for frontline work. From 2016 to 2020, a total of 14 frontline officials were sent to work in targeted counties. Among them, six who showed strong market development, organizing and coordination capabilities and broad vision worked as members of the County Party Committee, deputy county mayors or first secretaries. Their sincere poverty alleviation efforts, including seeking ways for development, launching projects and offering assistance, won unanimous praise from local residents and officials.



李俊峰与公司党委书记、董事长宋海良在全国脱贫攻坚总结表彰大 会现场合影留念

Li Junfeng (first from the left) with Company Party Committee Secretary and chairman Song Hailiang at the National Poverty Alleviation Summary and Commendation Conference

自 2017 年起,李杰同志担任西林县央龙村第一书记,期 间获得西林县"最美扶贫干部"和百色市"群众最满意第 一书记"荣誉称号。

Since 2017, Li Jie has served as the first secretary of Yanglong Village, Xilin County. He won the honorary titles of Outstanding Poverty Alleviation Official in Xilin and People's Most Satisfied First Secretary in Baise

自 2017 年起,李峻峰同志担任镇巴县蒿坪子村第一书记, 期间获得陕西省"助力脱贫攻坚竞赛先进个人"、汉中市"脱 贫攻坚先进个人"称号。2021年荣获党中央、国务院授予 的"全国脱贫攻坚先进个人"称号。

Since 2017, Li Junfeng has served as the first secretary of Haopingzi Village, Zhenba County, and won the honorary titles of Outstanding Individual for Contribution to Poverty Alleviation granted in Shanxi and Outstanding Individual in Poverty Alleviation granted by Hanzhong City of the province. In 2021, he was awarded the title of National Outstanding Individual in Poverty Alleviation granted by the CPC Central Committee and the State Council.





自 2019 年起,李贤楚同志担任西林县央龙村第一书记,期 间获得广西壮族自治区全区脱贫攻坚优秀第一书记荣誉称 号。

Since 2019, Li Xianchu has served as the first secretary of Yanglong Village, Xilin County, and won the honorary title of Excellent First Secretary of Poverty Alleviation in Guangxi Zhuang Autonomous Region.

## 多措并举战脱贫 **Multiple Measures to Fight** Against Poverty \_\_\_\_\_

中国能建始终保持帮扶的定力、韧劲和耐性,充分发挥在能源电力和基础设施领域 的投建营一体化优势,聚焦就业帮扶、产业帮扶、消费帮扶、智力帮扶"四大帮扶" 重点,精准施策、多措并举,出实招、求实效,有力地推动了帮扶地区经济社会发展。

Energy China Group is committed to poverty alleviation by leveraging its advantage of the integration of "investment-construction-operation" in energy, power and infrastructure. We focus on four main aspects of assistance, namely, employment, industry, consumption and education through a package of targeted policies and measures to deliver genuine outcomes, thus promoting the economic and social development of the targeted poor areas.

### 全力抓好就业帮扶 **On employment assistance**



"促就业助脱贫"西林县足别乡专场招聘会 "Poverty Alleviation through Employment" Special Job Fair in Zubie Township, Xilin County

2020年 In 2020

1,355.3 投入帮扶资金(万元) Assistance funds (RMB 10,000)

50 引进帮扶资金(万元) Attracted funds (RMB 10,000)

51 培训基层干部人数(名) Grassroots officials trained

141 培训技术人员人数(名) Technicians trained

## 2,579.2

购买贫困地区农产品(万元) Purchased agricultural products from poor areas (RMB 10,000)

## 42.63

帮助销售贫困地区农产 品(万元) Helped sell agricultural products in poor areas (RMB 10,000)

充分利用新能源发电领域的技术优势,在镇巴县投资 450 万参与建设镇巴县草坝村 5MW 光伏扶贫电站,项目利润全部用于帮扶全县 10 个深度贫困村、716 户贫困户,带动 2,864人脱贫摘帽。

Making full use of our technological advantages in new energy power generation, we invested RMB 4.5 million in the construction of 5 MW photovoltaic power plant in Caoba Village, Zhenba County. All profits were used to help 2,864 people from 716 households in 10 poverty-stricken villages of the County shake off poverty.

通过 PPP 方式,在西林县投资 280.60 亿元建设田林(潞城)
 至西林(滇桂界)高速公路,聘用广西壮族自治区当地劳务
 工的就业扶贫总人数达 2,738 人,其中聘用西林县内劳务工
 635 人,用实际行动带动了当地人民就业。

We also invested RMB 28.06 billion in the expressway project from Tianlin (Lucheng) to Xilin (the border between Yunnan and Guangxi) through PPP mode. We promoted employment in Guangxi Zhuang Autonomous Region by recruiting a total of 2,738 local villagers, among whom 635 were from Xilin County.



援建镇巴县 5MW 光伏扶贫电站 5MW photovoltaic power plant in Zhenba County



田西高速丰厚隧道实现全幅贯通 Fenghou Tunnel of Tianlin-Xilin Highway is completed

### 全力抓好产业帮扶 On industrial assistance

我们牢牢扭住产业扶贫"牛鼻子",为定点帮扶县援建了一 批路、桥、产业基地,有效地改善了贫困群众生产生活条件。



为央龙村扩建改造牛舍 Renovated cowshed in Yanglong Village



扶持砂糖橘产业、打造高山有机茶园,助力产业扶贫 Support the sugar orange industry, create organic tea gardens in the mountains, to help alleviate poverty

We have boosted industrial development through key projects for the construction of roads, bridges and industrial bases, improving the production and living conditions for the local people.



充分发挥本地产业优势,培育建设了一批本地产品品牌。在 西林县和镇巴县投入帮扶资金近千万元,扶持茶园与沙糖桔 等经济林产品、石斛和天麻等中药材种植、黄牛和山羊养殖 等特色经济产业,不断完善和推进科学立体的"种养—加工— 产销"一体化循环经济发展新模式,增强当地造血功能,促 进村集体和贫困户双赢。 We help establish a group of local brands based on local advantages. Nearly RMB 10 million of assistance funds went to Xilin County and Zhenba County to support the tea gardens and economic forest products such as sugar oranges, the cultivation of Chinese herbal medicines such as Dendrobium and Gastrodia elata, and the breeding of yellow cattle and goats. We keep improving the science-based and integrated circular economy development model of "planting – processing – marketing" to enhance self-sufficient ability and produce win-win results for village collectives and poor households.

### 全力抓好消费帮扶

#### On consumption assistance

依托"能建商城"电商平台,将贫困县优质农特产上架商城, 并鼓励公司总部及所属企业积极采购。通过消费帮扶建档立 卡贫困户增收的方式,让特色农产品搭上电商快车。2016年 至今,中国能建所属企业在西林县累计采购农副产品1,551 万元;在镇巴县累计采购农副产品1,028万元。 We help poor counties sell their quality agricultural specialties on the e-commerce platform of "Energy China Store" (http://njsc365. com) and encourage the headquarters and affiliated enterprises to purchase them. This platform enables households to increase their income by selling agricultural products online. Since 2016, the total purchase amount of agricultural and sideline products in Xilin County have totaled RMB 15.51 million, and that in Zhenba County was RMB 10.28 million.



"暖南行动"直播带货活动 A live streaming sales activity

积极帮助央龙村打造足龙有机生态茶品牌,帮助足龙茶顺利 通过无公害农产品认定和有机茶认定,目前足龙茶已成为央 龙村富民主导产业,先后带动百余户贫困户脱贫致富。

### 全力抓好智力帮扶 On education assistance

开展"圆梦基金"助学系列活动,向西林县贫困学子捐助近 30万元,并改扩建了央龙村小学。向镇巴县捐赠 200万元纳 入"教育救助专项资金"统筹使用,实施镇巴中学"人人技 能工程"项目。

We have launched a series of "Dream Fund" activities. We have donated nearly RMB 300,000 to poor students in Xilin County, and extended the Yanglong Village Primary School. During the same period, our donation to the Zhenba County Special Fund for Education Assistance reached RMB 2 million, and the "Skills for All" project in Zhenba Secondary School was also in place.



参加"走出大山看世界"公益游学的学生 Students in the study tour themed "World beyond My Hometown"

加强基层干部和技术人员培训,举办业务能力和技能技术培 训,帮助基层干部、农业技术员和致富带头人储备种养技术 专业知识,更好地助力贫困村、贫困户脱贫致富。

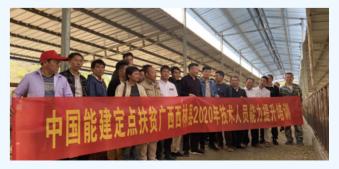
By providing training courses for grassroots officials and technical professionals, we help grassroots officials, agricultural technicians and business leaders gain knowledge about planting and breeding technologies, so that they could better help poor villages and households out of poverty. We guide Yanglong Village in the branding of its Zulong organic tea and the certification of pollution-free agricultural product and organic tea. Zulong Tea has become the leading lucrative industry in Yanglong, lifting more than 100 households out of poverty.



央龙村小学教学楼 Teaching building of Yanglong Village Primary School

推进"金秋助学""青春力量 温暖童心""暖冬行动""筑 梦阅读""走出大山看世界"公益游学等一系列教育帮扶活动。

Our educational assistance activities cover a wide range of themes, such as Scholarship Program, "Warm Winter Action", "Reading for a Bright Future" and "World beyond My Hometown".



在西林县开展技术人员能力提升培训班 Training courses for technicians in Xilin County

### ▲ 接续奋斗固脱贫 Hard Work for Greater Development

"十四五"期间,中国能建将大力巩固拓展脱贫攻坚成果, 全面接续乡村振兴,续写中国能建支持"农业强、农村美、 农民富"的新篇章。 During the 14th Five-Year Plan period, Energy China Group will consolidate our achievements in poverty alleviation, and continue to work towards rural vitalization, making our contribution to "strong agriculture, beautiful rural areas and well-off farmers".



#### 发展规划有效衔接 Development planning

科学谋划脱贫攻坚与乡村振兴有效衔接的顶层设计,根据 属地发展实际进一步完善相对贫困的指标体系、评价体系, 制定更加具体、更有针对性、更有成效的措施。 It is essential to coordinate the top-level design of poverty alleviation and rural vitalization, which requires us to further improve the indicator and evaluation systems of relative poverty on the basis of local realities, and to formulate more specific, targeted and effective measures.



#### 工作机制有效衔接 Working mechanisms

做好定点扶贫与乡村振兴工作接续,延续打赢脱贫攻坚战 的好经验、好做法、好机制、好措施,更好地运用到乡村 振兴上来。成立乡村振兴及定点帮扶工作领导小组,遴选 优秀干部持续驻村帮扶,全力投身乡村振兴建设。 It is important to shift our work focus from targeted poverty alleviation to rural vitalization. We need to follow our triedand-true practices, mechanisms, and measures from the fight against poverty, such as setting up leading groups to offer targeted assistance, and selecting and sending outstanding officials to work in villages.

#### ☐\_\_\_\_ ☐\_\_\_\_ 产业帮扶有效衔接 Industrial assistance

持续加大基础设施建设、地方产业发展、教育专项救助、 实用技术培训等投入力度,带动定点帮扶县、村、户,增 强自我发展意识,提升自我发展能力,提高属地群众持续 增收、不断致富的发展后劲。

### 消费帮扶有效衔接 Consumption assistance

继续依托"能建商城"电子商务平台,引导各所属企业 广泛参与消费扶贫,加大定点帮扶地区农副产品销售力 度,使能建关爱帮扶常态化、长效化、机制化。



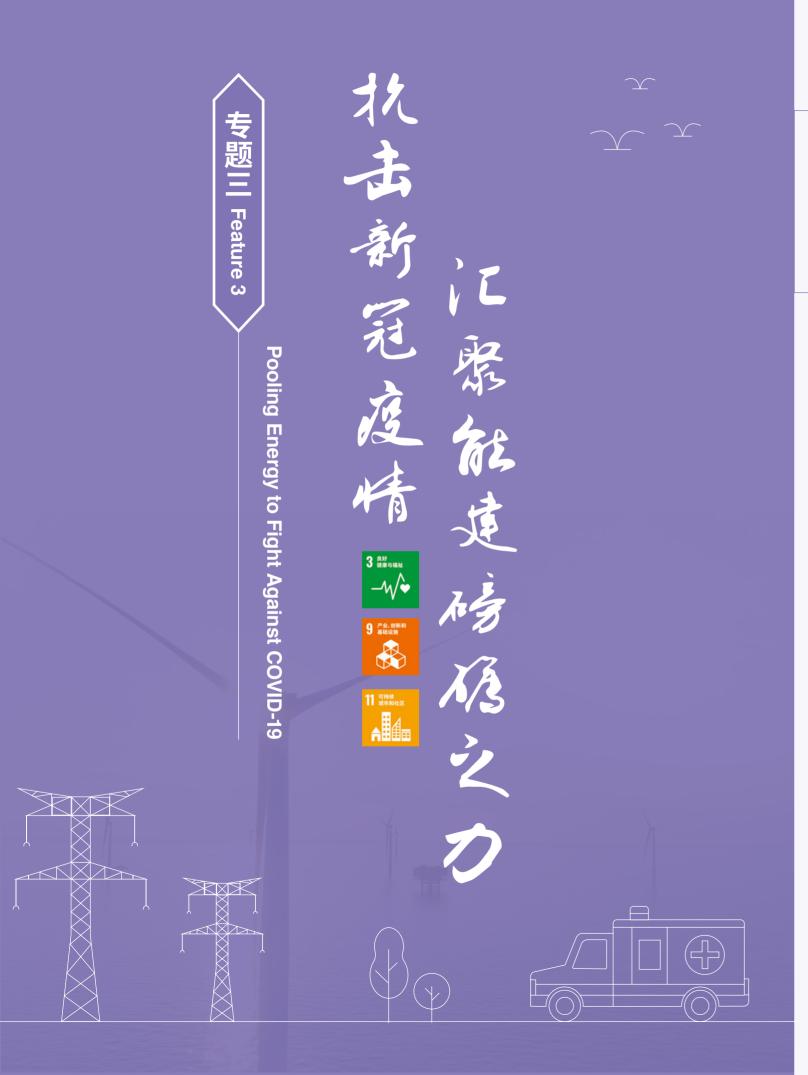
发挥属地企业党组织优势,主动与贫困村党支部围绕乡村 振兴等主题,开展联建共建活动,切实为定点帮扶地区群 众多办实事、多办好事、多解难事,不断提升帮扶地区人 民幸福指数。



We will increase input in infrastructure, local industries, education assistance and practical technology training. We will help targeted counties, villages and households to raise awareness and sharpen self-sufficient abilities, thus contributing to the increase of local people's income.

We will encourage all affiliated enterprises to join us in poverty alleviation by purchasing more agricultural and sideline products from targeted areas on the "Energy China Store". Our goal is to offer sustained assistance and care to those in need.

The Party organizations of local companies should take the initiative to carry out Party building activities on rural vitalization with Party branches in poverty-stricken villages. It is important to do more practical things and solve problems for the local people who, as a result, will enjoy real benefits in this process.



2020 年新冠肺炎疫情全球肆虐,作为受疫情影响最为 严重的企业之一,中国能建各级企业和广大干部职工 上下一心、众志成城,付出了艰苦努力,经受住严峻 考验,在疫情防控斗争中发挥央企顶梁柱作用,在推 动经济社会发展中发挥央企主力军作用,全方位贡献 了"能建之力"、展现了"能建之为"。



疫情突如其来,蔓延范围之广、速度之快、影响之大 百年未有。中国能建在鄂企业多、在鄂员工多、境外 项目多、在鄂业务和国际业务占比大,疫情对公司及 所属企业造成的冲击前所未有。中国能建坚决贯彻习 近平总书记重要讲话和指示批示精神,坚决扛起疫情 防控重大政治责任,坚持把广大干部职工生命安全和 身体健康放在首位,迅速吹响了抗疫"集结号"。各 级企业火速响应,快速形成了全面动员、全面部署、 全面防控的战疫格局,全力以赴支撑服务全国疫情防 控大局,凝聚起同心抗疫、共克时艰的磅礴力量。

## 10+

召开抗疫专题会和党委常委会(次) Special meetings on COVID-19 response and meetings by the standing committee of the Party Committee

## 130,000+

累计投入超过(人次)下沉社区 People offered assistance to communities In 2020, COVID-19 raged all over the world. Although being one of the enterprises hardest hit by the virus, Energy China Group and all our employees forged ahead as one and withstood the test. We played a pivotal role as a central SOE in fighting against the epidemic, and in promoting economic and social development. This demonstrated our power and contribution.

Facing the once-in-a-century epidemic with wide and fast spread and significant impact, Energy China Group and our affiliated enterprises were under tremendous pressure as we had many Hubei-based enterprises and employees as well as overseas projects, and a large proportion of business came from Hubei and the international market. Guided by the principles of President Xi Jinping's speeches and instructions, Energy China Group shouldered the political responsibility of epidemic prevention and control. We put the safety and health of our employees first. Enterprises at all levels responded swiftly, forming a comprehensive response system in short time. They went all out to support the national COVID-19 fight, and gathered strength to overcome this difficult moment.

> 完成了对 88 个国家 (地区) 503 个境外项目(机构)的全面排查和 200 个项目(机构)的视频巡检 Comprehensive investigation into 503 overseas projects (organizations) in 88 countries (regions); video inspection into 200 projects (organizations)



#### 建立防控机制 Prevention and control mechanisms

建立领导指挥体系,在集团和所属企业成立疫情防控小组,各级领导坚守岗位、靠前指挥,层层落实防控责任。建 立运转高效的"战时"应急机制,联防联控,安排专人24小时值班。召开专题会和党委常委会10余次,统筹部 署疫情防控和生产经营工作。

We established a leadership system and set up prevention and control teams in the Group and affiliated enterprises. Leaders at all levels assumed their due responsibilities in the process. An efficient "wartime" emergency mechanism was in place, which ensured 24-hour on duty. We also held special meetings and meetings by the Standing Committee of the Party Committee for more than 10 times to make overall plans for epidemic prevention and control, production and operations.



#### 筑牢疫情防线 Strong defense against the virus

作为在鄂企业众多、员工众多的央企,我们迅速反应、精心组织,采取网格化管理、健康监测、防疫物资配备、消杀、 线上办公等举措,指导葛洲坝集团、中南院等在鄂企业抗疫。架设境外项目远程医疗平台,24小时指导境外防疫。 持续开展常态化疫情防控,确保思想不松、责任不松、措施不松、工作不松。

As a central SOE with many affiliate enterprises and employees in Hubei, we responded rapidly by organizing grid-based management, health monitoring, supply allocation, disinfection, and remote work to guide China Gezhouba Group, Central Southern China Electric Power Design Institute and other enterprises there in combating the virus. We set up a telemedicine platform for overseas projects and provided all-day guidance on anti-epidemic work. The work was carried out on an ongoing basis to maintain our right attitude, due responsibilities, and rigorous measures.



#### 加强人文关怀 Human touch

深入开展职工关爱和人文关怀"六个一"行动(建好一条职工热线,送去一片爱心问候,聚焦一批帮扶重点,倡 导一种健康生活,宣传一批先进典型,强化一套工作机制),开通微信群、QQ群1200多个,慰问职工和家属5.7 万余人次,职工关爱热线累计接听电话 2.7 万余人次,制作播出人文关怀大讲堂视频 30 余部,为打赢武汉保卫战、 湖北保卫战和海外项目疫情防控战注入强大精神动力。

We focused on six "A"s (an employee hotline, a habit of caring greetings, support for a target group, advocate for a healthy lifestyle, a number of role models, and a set of working mechanisms) to show our care for employees. We established more than 1,200 WeChat and QQ groups, and sent greetings to more than 57,000 employees and their families. The hotline answered more than 27,000 calls, and 30 videos were produced and broadcast. They provided strong mental support to win the battle against the virus in Wuhan, in Hubei and in overseas branches.

### 守土有责 共克时艰 **Concerted Efforts to Brave** Difficulties \_

在这场没有硝烟的斗争中,中国能建上下自觉服从疫情防控大局需要,积极驰援抗 疫前线,全力做好支持配合工作,彰显了中华民族同舟共济、守望相助的家国情怀。 广大党员干部冲锋奋战在最前沿,让党旗高高飘扬在第一线,彰显了关键时刻冲得 上去、危难关头豁得出来的担当奉献精神。葛洲坝集团、中南院和公司其他在鄂企 业组建应急突击队、党员先锋队、志愿服务队,坚决打赢武汉保卫战、湖北保卫战, 得到了属地政府的充分肯定。

In this fight without smoke, Energy China Group subordinated our needs to the overall interests of epidemic control and did our best to support the frontline work, which demonstrated the Chinese people's unity in the trying times. Many of our Party members fought at the forefront, showing the spirit of commitment and dedication at critical moments. China Gezhouba Group, Central Southern China Electric Power Design Institute Co., Ltd. of China Power Engineering Consulting Group and other enterprises in Hubei Province set up emergency teams led by Party members to provide volunteer services. Our contribution that helped Wuhan and the whole Hubei Province won the battle against COVID-19 was fully recognized by the local government.



### 一些企业积极参与定点救治医院、方舱医院建设和医疗污废 水处理任务,向疫区提供电抗器、电热水机组等设备。

Some enterprises participated in the construction of designated hospitals, temporary treatment centers, and the treatment of medical sewage. They also provided reactors, electric water heating units, and other equipment.

#### 一些企业积极提供酒店、养老院为援鄂医疗队接待单位和救 治隔离场所,全力做好服务保障工作。

Some enterprises provided hotels and nursing homes, which were used to accommodate medical teams assisting Hubei or for treatment and guarantine purposes.



#### 一些参股医疗机构积极派出医护人员支援定点医院救治工作, 配合政府部门和社区开展预防、筛查和集中观察区疫情防治 工作。

Some medical institutions sent health workers to support treatment in designated hospitals and cooperated with government departments and communities in prevention and screening as well as epidemic work in centralized observation areas.



获评"全国抗击新冠肺炎疫 情先进个人(人)

One person was awarded the title of National Outstanding Individual in the COVID-19 Fight

获国资委党委表彰团队(个)

## 3

获国资委党委表彰个人(人)

One team and three individuals were commended by the Party Committee of the SASAC



我的2020 | 能建人难忘的 战疫记忆 My 2020 | Unforgettable Memories During COVID-19 Fight



暖心! 中国能建"战"疫路 上的十个难忘瞬间 Heartwarming! Our Ten Unforgettable Moments During COVID-19 Fight

#### 参与疫情救治 Treatment

国药葛洲坝中心医院、润能医疗等下属医院和参股医疗机构大力参与疫情救治。

Sinopharm Gezhouba Central Hospital, the Medical Investment Platform of CR Medical and China Energy Engineering Group Assets Administration and other subordinate hospitals or medical institutions participated in the treatment.



北京洛斯达公司员工奔赴抗疫一线参与志愿服务 Beijing North-Star's employees provide volunteer services in the front line

#### 提供酒店服务 Accommodation

葛洲坝美爵酒店、葛洲坝宾馆、宜昌葛洲坝颐福 乐园(养老院)、葛洲坝平湖大酒店用作武汉、 宜昌指定支援医院人员接待酒店和疫情防控隔离 观察点,葛洲坝文旅公司和国药葛洲坝中心医院 全力做好场所保障和人员物资设备及病人管理。

Grand Mercure Wuhan Gezhouba, Imperial Court Hotel, Gezhouba Yichang Yifu Paradise Branch (nursing home) and Gezhouba Pinghu Hotel were used to accommodate medical teams assisting designated hospitals in Wuhan and Yichang or as isolation and observation places. Gezhouba Culture and Tourism Development Co. and Sinopharm Gezhouba Central Hospital did their best to manage places, personnel, supplies, equipment and patients.



葛洲坝文旅公司员工为密切接触者送餐 Zhou Yue, an employee from China Gezhouba Group Culture and Tourism Development Co., Ltd., delivers food to close contacts

#### 参与医院建设 Hospital construction

葛洲坝三公司、葛洲坝水务公司、葛洲坝装备公司等捐赠、安装、维修医院供热、排水等设施设备,保障医院正常运转。 China Gezhouba Group No.3 Engineering Co.,Ltd., Gezhouba Water Operation and CGGC Equipment Industry donated, installed and maintained facilities such as heating and drainage in hospitals to ensure their normal operations.

北京设备、天津电建、湖南火电等公司坚守岗位,保障武汉、孝感尤其火神山、雷神山安全稳定供电。

Beijing Power Equipment Group, Tianjin Electric Power Construction, Hunan Power Construction ensured safe and stable power supply in Wuhan and Xiaogan, especially in Huoshenshan and Leishenshan hospitals.

#### 做好基地防疫 Prevention

## 消毒工作专班,保障宜昌基地居民基本所需,协助开展人员排查、防疫物资发放、防疫宣传、环境卫生整治等工作。

All units of CGGC in Yichang implemented the "re-quarantine" measures of the Yichang Government by managing staff in an enclosed way, setting up a special team for spraying disinfectant in the city, and guaranteeing the basic needs of residents. They also assisted in screening, distribution of supplies, prevention communication, and environmental hygiene management.



湖南火电汉川项目部积极检修,保障供电 Hunan Power Construction's Hanchuan Project team checks power supply

葛洲坝集团驻宜昌各单位全力支持、坚决执行宜昌市政府"再隔离"措施,全封闭管理工作人员,组建宜昌市全域喷洒

## 科学复工 勇担重任 **Science-based Resumption of Work**

在抓紧抓实抓细常态化疫情防控的同时,中国能建上下主动作为、迎难而上,顶压 前行、负重奋进,按照"目标不动摇、标准不降低、工作不松劲"的总体要求,采 取积极有效的"硬核"举措,有力有序推进复工复产、达产达效,全力稳定生产运 营,努力把疫情造成的损失降到最低。截至 2020 年底,除部分境外项目外,生产 经营全面恢复正常水平。

On the premise of regular COVID-19 response, Energy China Group rose to the challenges, taking effective and rigorous measures to orderly resume economic activities in accordance with the overall requirement of "no change of goals, no lowering of standards, and no slackness in work". Production and operations were gradually stabilized to minimize losses caused by the epidemic. By the end of 2020, we had fully returned to a normal level, except for some of projects overseas.

截至 2020 年底 By the end of 2020

96.3% 在建工程项目达产率

Projects under construction had achieved the designed capacity

### 100%

生产型企业达产率 Production-oriented enterprises had achieved the designed capacity

#### 严抓疫情防控 Epidemic prevention and control

印发《关于做好新型冠状病毒疫 情防控期间复工复产有关工作的 通知》,全面评估复工复产条件, 明确各项目各生产单元复工复产 责任人,守牢不发生疫情的底线。 We issued the Notice on Resuming Work and Production during the Prevention and Control of COVID-19, evaluated the conditions for resumption, and specified the people in charge in each project and production unit, with the goal of no cases.

#### 加速复工复产 Resumption of work and production

严格按照分区分级分类分时的原 则,科学谋划复工复产方案,梳 理跟踪排查项目进展、人员组织、 资源保障等情况,加强复工物资 保障,推动各生产单元"应复尽 复""稳产高产"。

We strictly followed relevant principles to make resumption plans, and tracked project progress, personnel organization, and resource guarantee to strengthen supply support, promoting "stable and efficient production" of each production unit.



中国能建积极推动科学复工复产,通过包机 复工等有力保障,全力守护员工安全返岗、 健康上岗 Energy China Group ensures employees' safe return to work through chartered planes

葛洲坝集团跑出复工复产"加速度" China Gezhouba Group's swift resumption of work and production

2020年3月,随着疫情形势逐步好转,葛洲坝集团统筹谋划、 精准施策,争分夺秒推动湖北省汉江雅口航运枢纽工程、恩 施水布垭机组改造工程等重点项目和业务能复尽复。

截至 2020 年 3 月 20 日, 葛洲坝集团在湖北省内的 122 个重 点项目生产单元,100个已经复工或做好复工准备。昌泰民 爆公司、葛洲坝水泥公司等工业生产单位快速复工、稳定高 产,为汉江雅口航运枢纽工程等国家重点工程项目顺利施工 提供保障。在鄂高速、水务等服务保障迅速恢复。



襄阳汉江雅口航运枢纽主体工程项目 Han River Yakou Navigation Complex Project in Xiangyang

In March 2020 when the epidemic situation gradually improved, China Gezhouba Group introduced overall plans and targeted policies to restart some of the key projects and businesses, such as the Han River Yakou Navigation Complex Project in Hubei Province and the generator unit renovation of Shuibuya Hydroelectric Project in Enshi Tujia and Miao autonomous prefecture.

As of March 20, 2020, 100 out of the 122 key project production units of the Group in Hubei Province had resumed work or were ready to do so. Industrial units such as Changtai Commercial Explosive and China Gezhouba Group Cement Co., Ltd. quickly achieved stable and high yield after resumption of production, which provided guarantee for the construction of key national projects such as the Han River Yakou Navigation Complex Project. Services on expressway and water affairs in Hubei were also restored quickly.

### 中国能建助力湖北疫后重振发展

Energy China Group supports Hubei's post-COVID development



2020年6月3日,中国能建参加国务院国资委、湖北省委省政府召开的中央企业助力湖北疫后重振发展视频会议。中国能建 与武汉市政府签订葛洲坝城市创新项目合作协议,开展武汉市地铁、隧道等基础设施建设、旧城及老旧小区改造、生态环境综 合治理等项目合作。葛洲坝集团与宜昌城建、湖北省宏泰集团签署战略合作框架协议。这些项目为湖北疫后重振提供有力支撑, 彰显了中国能建与湖北省血脉相连的深厚情谊。

On June 3, 2020, Energy China Group joined the video conference held by the SASAC and the Hubei Provincial Party Committee and Government on central SOEs helping Hubei's post-epidemic development. We signed a cooperation agreement with Wuhan Municipal People's Government on Gezhouba City Innovation Project, which involves cooperation in the construction of metro, tunnels and other infrastructure, renovation of old urban areas and residential communities, and comprehensive environmental management in Wuhan. China Gezhouba Group signed a strategic cooperation framework agreement with Yichang Urban Construction Investment Holding Group and Hubei Hongtai State-owned Capital Investment Operation Group Co., Ltd. These projects provided strong support for Hubei, demonstrating the strong bonds between Energy China Group and Hubei Province.





中国能建全力支援境内外疫情防控,捐赠爱心款、防疫和生活物资,分享中国抗疫经验,传递社会温暖,彰显大爱无疆 情怀,助力构建人类命运共同体。所属企业积极开展防疫物 资采购捐赠、捐款捐物等工作,主动减免商户、中小企业租金, 捐赠了大量米面粮油、蔬菜水果、酒店客房洗漱用品等物资, 彰显了央企责任担当。中国能建积极稳妥推进"带疫解封" 下的国际化经营,全力做好部分境外项目员工包机返岗、回 国,全力做好员工心理疏导和人文关怀,保持了境外员工队 伍的稳定。



Energy China Group fully supported COVID-19 control at home and abroad by donating money, medical supplies and daily necessities, and shared China's experience. This showed our heartwarming and borderless love, and our contribution to building a community of shared future for humankind. Our affiliated enterprises organized the procurement and donation of anti-epidemic materials, reduced or exempted the rent of merchants and SMEs, and donated a large amount of rice, flour, grain, oil, vegetables and fruits, as well as toiletries used in hotel rooms. This demonstrated our responsibility as a central SOE. We also cautiously restarted some international businesses while the epidemic persisted. For example, we sent some employees back to their overseas posts or helped them return to China by chartered flights. We provided psychological counseling and care for employees, thus maintaining a strong overseas team.



减免武汉、宜昌等地商业门面、场馆、 仓库租金 426 万余元,帮助租户渡过 难关。

We reduced the rent of commercial venues and warehouses in Wuhan and Yichang by RMB 4.26 million to help tenants pull through.

#### 经验分享 Sharing experience

(Q)

举办国有企业境外机构(项目)疫情 防控视频直播专题讲座,依托海外项 目在巴基斯坦、阿根廷、马来西亚、 乌兹别克斯坦、厄瓜多尔等多个国家 举办交流会、印发宣传册,分享抗疫 经验。

We held live lectures on prevention and control for overseas institutions (projects) of SOEs. We also had exchange meetings and issued brochures in Pakistan, Argentina, Malaysia, Uzbekistan, Ecuador and other countries through overseas projects to share our anti-epidemic experience.

### 爱心捐赠 Making donations

向国内外社会各界捐款3700万余元, 捐赠口罩约90万只,捐赠医用防护服、 防护镜和手套 3900 套。

We donated about RMB 37 million at home and abroad, as well as 900,000 masks. 3,900 sets of medical protective suits, goggles, and gloves.



葛洲坝集团在全力保障境外员工生命安全和身体健康、有序 推进海外生产经营的同时,依托巴基斯坦、阿根廷、马来西 亚等国家和地区的 36 个海外分支机构开展医疗服务和防疫 捐赠,向世界传递"葛洲坝温度",用行动构筑人类命运共 同体。

• 在阿根廷举办防治新冠肺炎经验 交流会 Held an exchange meeting on the experience of COVID-19 prevention

and treatment in Argentina

乌尔都语等防疫知识手册 versions in Pakistan



#### • 成立国内防疫物资采购小组专为海 外采购医疗物资 Set up a domestic procurement

team to purchase overseas-oriented medical supplies



葛洲坝集团捐助巴基斯坦防疫物资 China Gezhouba Group's donations to Pakistan



葛洲坝集团捐赠物资,支持湖北武汉抗疫 China Gezhouba Group donates supplies to support Wuhan's anti-epidemic work

While ensuring the safety and health of overseas employees and resuming production and operations, China Gezhouba Group offered medical services and donations in virtue of its 36 branches in Pakistan, Argentina, Malaysia and other countries and regions, conveying warmth to the rest of world and building a community of shared future for humanity through actions.

- 在巴基斯坦制作中文、英语、 Prepared anti-COVID brochures with Chinese, English and Urdu
- 上线"中国葛洲坝微医" (海 外版)小程序解决海外员工就 医难题

Launched "China Gezhouba Online Medicine" (Overseas Edition) app for overseas employees to receive medical treatment

 $\gtrsim$ 

• 向当地政府、医疗机构、村庄居民 捐赠医用口罩、手套等防疫物资超 过14.6万只 Donated more than 146,000 medical masks, gloves and other preventive supplies to local governments, medical institutions and village residents

\$



葛洲坝在巴机构相关负责人为记者介绍相关防疫情况 Employees in Gezhouba Pakistan Branch introduce preventive measures to the reporter

管理绩效 **Management Performance** 

## 13.9%

在粤港澳大湾区、长三角一体化及海南自贸港 等6个战略市场新签合同额同比增长

Year-on-year increase of new contract volume in 6 strategic markets such as the GBA, the Yangtze River Delta and Hainan Free Trade Port

1,164.93 在"一带一路"倡议沿线国家新签合同(亿元) New contract volume in countries and regions along the Belt and Road (RMB 100 million)

### 265

• 在 89 个国家和地区设立各类驻外机构(个) Overseas institutions established in 89 countries and regions

41.74 境外投资(亿元) Overseas investment (RMB 100 million)

### 5.20 环保总投资(亿元) Total investment in environmental protection (RMB 100 million)

Part One





### 关键议题 **Key Topics**

• 践行国家战略 Implementing national strategies

• 国际合作 International cooperation

#### 行动策略 **Action Strategies**

乌东德水电站等重大项目。

and other major projects.

- 资金融通、民心相通。

# 实干报国 践行国家发展新战略

Working Hard to Serve the Country and Implementing the Country's New **Development Strategies** 



- 绿色发展 Green development
- 应对气候变化 Addressing climate change

• 全面参与京津冀协同发展、长江经济带发展、粤港澳大湾区建设、海南自贸港建设、 长江大保护、军民融合发展等国家重大战略。

Participating in the implementation of major national strategies, including the coordinated development of the Beijing-Tianjin-Hebei region, the development of the Yangtze River Economic Belt, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), and Hainan Free Trade Port, the well-coordinated environmental conservation of the Yangtze River, and the military-civilian integration strategy, etc.

•利用自身规划、设计、咨询的前端引领优势,有序推进阿里与藏中电网联网工程、

Leveraging our own front-end advantages of planning, design and consultation to promote Ngari-Central Tibet Interconnection Project, Wudongde Hydropower Station

• 深入参与"一带一路"建设,推动与沿线国家政策沟通、设施联通、贸易畅通、

Furthering efforts to achieve policy, infrastructure, trade, financial, and people-to-people connectivity through the Belt and Road Initiative.

• 锚定"碳达峰、碳中和"目标,贡献生态文明建设,积极应对气候变化等全球问题。 Aiming at achieving the goals of "carbon peak and carbon neutrality", promoting ecological civilization, and addressing climate change and other global concerns.

### 践行区域发展战略 Implementing Regional **Development Strategies**

中国能建作为一家"老企业、新集团",毫不动摇、旗帜鲜明践行国家战略, 瞄准全电力、全城市、全交通、全水、全生态环保"五全"领域,主动融入、 提前策划、优先布局,精准对接京津冀协同发展(雄安新区)、长江经济带发 展(长三角一体化)、粤港澳大湾区建设、海南自贸港建设、长江大保护等重 大战略实施,为全面建设社会主义现代化国家筑牢央企之魂、贡献能建之智、 发挥能建之力、展现能建之为。

### 13.9%

2020年,在粤港澳大湾区、长三 角一体化及海南自贸港等6个战略 市场新签合同额同比增长

In 2020, year-on-year increase of new contract volume in 6 strategic markets such as the GBA, the Yangtze River Delta and Hainan Free Trade Port.

As a long-established enterprise directly under the central government, Energy China Group fully implements national strategies. We aim to make contribution in the five areas of power supply, urban development, transportation networks, water affairs and ecological and environmental protection projects in all aspects. We actively draw up plans and prioritize the these areas. Our business is aligned with major national strategies, including the coordinated development of Beijing-Tianjin-Hebei region (Xiong'an New Area), the development of Yangtze River Economic Belt (the integrated development of the Yangtze River Delta), the Guangdong-Hong Kong-Macao Greater Bay Area, and Hainan Free Trade Port, as well as the well-coordinated environmental conservation of the Yangtze River. As a central SOE, we contribute our wisdom and strength and shoulder our responsibility in building a modern socialist country.

### 长江大保护

Well-coordinated Environmental Conservation of the Yangtze River

• 乌东德水电站 14 标段建设项目、白鹤滩水电站百万千瓦水电机组等 28 项能源和设施建设项目

28 energy and facility construction projects such as the construction project of No.14 section of Wudongde Hydropower Station and the 1000MW hydropower unit of Baihetan Hydropower Station

#### 长江经济带

#### Yangtze River Economic Belt

• 苏州 1000 千伏特高压变电站扩建工程、华东区域"十四五"电力协 调发展重大问题研究项目等 207 项能源保障重点项目

207 key energy security projects such as the expansion project of Suzhou 1000kV UHV Substation and the research project on major issues of coordinated power development in East China during the 14th Five-Year Plan period

• 四川成都熊猫古镇、安徽合肥高新区综合管廊一期 PPP 项目等 174 项基础设施项目

174 infrastructure projects such as Panda Ancient Town in Chengdu, Sichuan, and Utility Tunnel Phase I PPP Project in Hefei High-tech Zone, Anhui

#### 海南自贸港

Hainan Free Trade Port

• 基础设施领域投资运营及国际结算中心等金融保障项目 Infrastructure investment and operation, the International Settlement Center and other financial security projects



#### 京津冀协同发展

#### The Coordinated Development of the Beijing-Tianjin-Hebei region

• 雄安新区供电公司电网技术研究项目、雄安新区综合管廊(一期)

外部电源线路工程、雄安新区雄东--昝西 220 千伏电缆工程土建项 目等 15 项能源和设施建设项目

15 energy and facility construction projects including the power grid technology research project of Xiong'an New Area Power Supply Company, the external power line project of the Xiong'an New Area Utility Tunnel (Phase I), and the civil construction project of the Xiongdong-Zanxi 220kV cable project in the Xiong'an New Area, etc.

#### 粤港澳大湾区建设

#### The Development of the GBA

• 深圳抽水蓄能电站 4 号机组、乌东德电站送电广东广西特高压多端

直流示范工程等5项能源保障重点项目

5 key energy security projects such as Unit 4 of Shenzhen Pumped Storage Power Station and the UHV multi-terminal DC project transmitting power from Wudongde Hydropower Station to Guangxi Zhuang Autonomous Region and Guangdong Province

• 港珠澳大桥等 10 项基础设施重点项目

10 key infrastructure projects such as the Hong Kong-Zhuhai-Macao



## 参与国家重大项目 **Participating in Major National Projects**

作为能源电力和基础设施建设领域的"国家队",中国能建坚持战略眼光、系统思维、历史角度、专业维度,利用自身规划设 计咨询的前端引领优势,整合全产业链资源,积极参与能源电力、交通物流、城市建设等领域国家重大项目,推动经济社会持 续、健康和共同发展,全力打造中央企业建设世界一流企业的新样本、新标杆、新典范。

As a national team with strategic vision, systematic thinking, long history and professional advantages in energy, power and infrastructure construction, Energy China Group leverages our leading strength in planning, design and consultation to integrate resources in the entire industrial chain. We play an active part in energy, power, transportation, logistics, urban construction and other major national projects to promote sustainable, healthy and coordinated development of the economy and society. We are working all out to set a new example of how a central SOE can grow into a world-class enterprise.

### 引领能源电力发展 Pioneering energy and power development

2020年,我们有序推进一批超级工程、"大国重器"项目建设,建成投产世界首 个 1240 兆瓦高效超超临界燃煤发电工程、世界首座六缸六排汽百万千瓦燃煤机组、 世界首台汽轮机高位布置发电机组,持续引领我国能源电力高质量发展。

In 2020, we promoted the construction of a group of mega projects and projects as the Pillars of a Great Power, and built and put into operation the world's first 1240MW highefficiency ultra-supercritical coal-fired power unit project, the world's first six-cylinder sixexhaust coal-fired generating unit, and the world's first highly-arranged steam turbine generating unit, maintaining the leading role in the high-quality development of China's energy and power sector.

广东火电承建的港珠澳大桥珠海 110 千伏人工岛输变电工程 The HZMB 110kV artificial island power transmission and conversion project in Zhuhai undertaken by Guangdong Power Engineering Co., Ltd.

广东院参与设计的台山核电1号机组 Unit 1 of Taishan Nuclear Power Plant designed by Guangdong Electric Power Design Institute and other institutions

浙江火电承建的华能浙江玉环电厂 Huaneng Yuhuan Power Plant undertaken by Zhejiang Thermal Power Construction

安徽电建一公司总承包的绍兴越东路智慧快速路 PPP 项目现场 Project site of the EPC PPP project of the Smart Expressway of Yuedong Road in Shaoxing undertaken by Anhui No.1 Electric Power Construction Co., Ltd.



#### 2020年 In 2020

## 29

国家优质工程奖(项) Prizes of National Excellent Project Award

### 8

其中金奖(项) Gold Prizes

### 2

鲁班奖(项) Luban Prizes

### 2

詹天佑奖(项) Tien-yow Jeme Civil Engineering Prizes

#### 世界首个 1240 兆瓦高效超超临界燃煤发电工程建成投产

The world's 1240MW high-efficiency ultra-supercritical coal-fired power unit project completed and put into production



2020 年 7 月 17 日,广东院设计的广东华夏阳西电厂 5、6 号机组(2 台 1240 兆瓦)工程全面建成投产。该项目是目前国内已 投产机组中单轴全速单机容量最大、蒸汽参数最高、单位发电煤耗最低、单位污染排放量最少的高效 1240 兆瓦超超临界燃煤 机组,也是绿色火电标杆示范工程项目。项目在参数、容量、模块化设计等多方面拥有完全自主知识产权,获得专利授权 28 项, 整体国产化率达 90% 以上,对促进广东省东西两翼协调发展、带动国产装备制造产业升级具有重要意义。

On July 17, 2020, Guangdong Huaxia Yangxi Power Plant Unit 5 and 6 (2×1240 MW), designed by Guangdong Electric Power Design Institute, were completed and put into operation. The project is a 1240MW highefficiency ultra-supercritical coal-fired power unit with the largest single-shaft full-speed single-unit capacity, the highest steam parameters, the lowest coal consumption for unit power generation, and the lowest unit pollution emissions among domestic units that have been put into operation. It is a model and demonstration project in green thermal power . The project has completely independent intellectual property rights in terms of parameters, capacity, and modular design, etc. It has obtained 28 granted patents, with over 90% of overall localization rate. The successful implementation of the project is of vital importance to the coordinated development of western and eastern parts of Guangdong Province and the upgrade of the domestic equipment manufacturing sector.



### 打造综合交通体系

#### Building a comprehensive transportation system

我们聚焦铁路公路、港口航道、城市轨道等领域,参与建设 四川巴万高速公路、山东枣菏高速公路等系列交通基础设施 重大项目,以至臻专业优势贡献我国交通网络发展升级。 Focusing on railways, highways, ports, waterways, urban rails and other fields, we have participated in the construction of major transportation infrastructure projects such as Bazhong-Wanyuan Expressway in Sichuan and Zaozhuang-Heze Expressway in Shandong, contributing to the upgrade of China's transportation network with professionalism and strength in the industry.



葛洲坝集团投资承建的巴中至万源高速公路是四川省高速公路网规划中新增7条东西横线之一,也是当地脱贫攻坚关键性的民生工程、民心工程。线路全长约120公里,桥隧比高达64.7%,2020年120座桥梁全部贯通,向实现通车目标迈出决定性一步, 对完善四川省高速公路网、加快建设西部综合交通枢纽、实现川渝交通一体化、增强成渝经济区辐射起到带动作用。

Bazhong-Wanyuan Expressway, Sichuan, invested and constructed by China Gezhouba Group, is one of the seven east-west horizontal lines in Sichuan's expressway network scheme, and also a key livelihood improvement project in local fight against poverty. The expressway is about 120 km in length and the bridge-to-tunnel ratio reaches 64.7%. In 2020, all the 120 bridges were connected, signifying a decisive step to achieving the goal of open to traffic. The completion of the expressway has played a part in improving Sichuan's expressway network, accelerating the construction of a comprehensive transportation hub in Western China, realizing Sichuan-Chongqing traffic integration, and amplifying the influence of Chengdu-Chongqing Economic Zone.



巴万高速清江互通 Bazhong-Wanyuan Expressway Qingjiang Interchange

## 推动城乡融合发展

#### Promoting integrated urban-rural development

我们以人民美好生活向往为追求,在水利水务、市政工程、 房屋建筑等基础设施领域持续发力,承建大藤峡水利枢纽工 程等系列国家重大项目,夯实城乡发展基础,推动城乡高质 量融合发展。

#### 例 大藤峡水利枢纽工程船闸试通航成功 <sup>ase</sup> The successful trial navigation of Dateng Gorge Hydraulic Complex ship locks

葛洲坝集团承建的大藤峡水利枢纽工程是国务院确定的172 项节水供水重大水利工程标志性工程和珠江流域关键性控制 性工程,集防洪、航运、发电、补水压咸、灌溉等综合效益 于一体。大藤峡船闸是目前国内水头最高的单级船闸,单扇 重达1,295吨,堪称"天下第一门"。

2020年,我们攻克大型人字门吊装与焊接、人字门背拉杆预 应力施工、世界最大的反弧门吊、0.05毫米门叶轴线精度安 装等关键技术难题,推动船闸试通航成功、进入试运行阶段, 将有效提高黔江通航运力,开启西江亿吨黄金水道新征程。



大藤峡水利枢纽工程 Symposium on designated poverty alleviation work of Zhenba

To fulfill the people's desire for a better life, we make efforts to improve water conservancy, municipal engineering, housing construction and other infrastructure. We have undertaken a series of national major projects, such as the Dateng Gorge Water Conservancy Project, to consolidate the foundation of urban and rural development and promote the integrated development of urban and rural areas.

Dateng Gorge Water Conservancy Project, undertaken by China Gezhouba Group, is one of the 172 major water conservancy projects determined by the State Council and a key control project in the Pearl River basin. It integrates flood control, shipping, power generation, water replenishment, desalinization, irrigation and other functions. Dateng Gorge ship lock is the single-stage locks with the highest hydraulic head in China and the heaviest locks in the world, a single lock of which weighs 1,295 tons in total.

In 2020, we tackled key technical problems such as the hoisting and welding of large-scale herringbone gates, the pre-stressed construction of herringbone back tie rods, the world's largest arc gate crane, and the precision installation of the 0.05 mm gate leaf axis. The successful navigation and operation of the ship lock is bound to improve the shipping capacity of the Qianjiang River, embarking on a new journey of the 100-million-ton Gold Waterway - the Xijiang shipping trunk line.

### 投身"一带一路"建设 **Dedicated to the Belt and Road Development**

随着"一带一路"合作画卷渐次铺展,中国能建系统构建了"一 体两翼"的海外优先发展体系,深度融入全球产业链、价值链、 物流链,打造具有能建产业特色的中国坝、中国电、中国网、 中国城、中国路,推动"能建全球化"向"全球化能建"加 速升级,与全球伙伴一道构建人类命运共同体、共筑携手发 展之路。

As the Belt and Road cooperation is implemented in full swing. Energy China Group has established a two-pronged development system, which prioritizes overseas business and deeply integrates ourselves into the global industrial chain, value chain, and logistics chain with an aim to build dams, electricity, networks, towns and roads with our characteristics around the world. We are expanding our global presence and working with global partners to build a community with a shared future for mankind and follow the path towards joint development.

### 促进合作共赢

#### Facilitating win-win cooperation

我们协助国家能源局启动中欧能源技术创新合作工作,务实 推动中芬、中德等双边合作,积极推动"一带一路"能源合 作伙伴关系、国际能源署中国联络办公室、中东欧17+1平台、 中芬能源合作平台、中德能源转型合作平台等国际交流合作 平台建设。

We help the National Energy Administration launch China-EU cooperation on energy technology innovation, earnestly promotes bilateral cooperation between China and Finland, China and Germany, and actively facilitates the international exchange and cooperation platforms, such as the Belt and Road Energy Partnership, the Liaison Office of International Energy Agency in China, "17+1" energy cooperation between China and Central and Eastern European countries, Sino-Finnish energy cooperation platform, and Sino-German energy transition cooperation platform.

我们积极参与"一带一路"沿线国家行业和科技交流活动, 围绕清洁能源发电、综合能源利用、水电站智能建造、装配式 建筑等领域深入交流研讨,推动全球能源转型与可持续发展。

We actively engage in industry and science & technology exchanges of countries along the Belt and Road, and have conducted in-depth exchanges and discussions on clean energy power generation, comprehensive energy utilization, intelligent construction of hydropower stations, prefabricated buildings and other fields to promote global energy transition and sustainable development.



2020年9月24日,电规总院发布《中国-中东欧能源合作报告》,系统梳理分析中国及中 东欧地区能源发展现状、未来趋势、合作机遇,为进一步深化中国与中东欧能源合作提出建议, 推动双方优势对接和务实合作。

On September 24, 2020, China Electric Power Planning & Engineering Institute issued the Report on Energy Cooperation between China and Central & Eastern European Countries, which systematically analyzed the current situation, future trends and cooperation opportunities of energy development between China and Central & Eastern European countries, and put forward suggestions for further deepening energy cooperation between China and Central & Eastern European Countries, thus promoting complementarity of strengths and pragmatic cooperation between the two sides.



#### 主办中欧能源技术创新合作论坛 Hosting the China-Europe Energy Technology Innovation Cooperation Forum

2020 年 10 月 28 日,中国能建和中国欧盟商会主办的中欧能源技术创新合作论坛在北京召开。来自中国及近 20 个欧洲国家的 能源主管部门、能源电力企业、研究院所、金融机构、媒体的 300 余名代表,围绕"中欧能源技术创新合作助力能源转型和绿 色复苏""中欧能源技术创新合作与工程实践""共同搭建中欧能源技术创新合作支撑网络"等议题进行深入研讨,加强中欧 能源技术创新合作,培育新的合作增长点,助力中欧尽快实现经济复苏。

On October 28, 2020, Energy China Group and the European Union Chamber of Commerce in China co-organized the China-Europe Energy Technology Innovation Cooperation Forum in Beijing. More than 300 representatives from energy authorities, energy and power enterprises, research institutions, financial institutions and media from China and nearly 20 European countries, had an in-depth discussion on topics such as energy transition and green recovery fueled by China-EU energy technology innovation cooperation, practice and experience sharing on China-EU energy technology innovation cooperation, building supporting networks together, aiming to enhance China-Europe energy technology innovation cooperation, cultivate new growth point of cooperation and boost economic recovery in China and Europe as soon as possible.

案例

#### 承办第二届"一带一路"能源合作伙伴关系论坛 Organizing the 2nd Belt and Road Energy Partnership Forum

2020年12月3日,中国能建承办的第二届"一带一路"能源合作伙伴关系论坛在北京召开。论坛以"绿色能源投资推动经济 包容性复苏"为主题,是大规模疫情后"一带一路"能源合作伙伴关系举办的首次大型活动,来自全球 30 多个国家的能源主 管部门、能源企业、研究院所、金融机构、国际组织、媒体等近 300 位代表参加,聚焦疫情后全球能源转型与绿色发展,推动"一 带一路"国家经济包容性复苏。

On December 3, 2020, the 2nd Belt and Road Energy Partnership Forum organized by Energy China Group was held in Beijing. The Forum, under the theme of "green energy investment promotes inclusive economic recovery", was the first major event organized by the Belt and Road Energy Partnership after the outbreak of COVDI-19, attracting nearly 300 representatives of energy authorities, energy enterprises, research institutions, financial institutions, international organizations and media from over 30 countries around the world. The Forum focused on post-COVID global energy transition and green development and aimed to promote inclusive economic recovery of the Belt and Road countries.





### 推进设施联通

#### Promoting infrastructure connectivity

我们克服疫情持续蔓延和经营环境复杂多变的不利影响,千 方百计拓展合作空间,完善海外业务结构,开拓欧洲工程设 计市场。2020年,菲律宾卡利瓦大坝、波黑图兹拉电站、越 南南定电站、巴基斯坦 SK 水电站等一批旗舰工程开工或投 产,贡献当地经济社会发展。

We overcome the negative impacts brought by the continuous spreading of the COVID-19 pandemic and the complex and volatile business environment to expand cooperation space, improve the structure of overseas business and tap the European engineering design market. In 2020, a number of flagship projects such as the Kaliwa Dam in the Philippines, the Tuzla Hydropower Station in Bosnia and Herzegovina, the Tinh Nam Dinh Hydropower Station in Vietnam and the SK Hydropower Station in Pakistan were launched or put into operation, contributing to local economic and social development.

#### 2020年 In 2020

## 16%

国际业务新签合同额同 比增长

Year-on-year increase of newly signed international business contracts

### 136.1% 37.5%

在非洲、美洲等地区新签合同额同 比分别增长

Respective year-on-year increase of the value of newly signed contracts in Africa and the Americas

在"一带一路"传统沿线国 家新签合同(亿元)

New contract volume in countries and regions along the Belt and Road (RMB 100 million)

1,164.93

## 41.74

境外投资完成(亿元) Overseas investment (RMB 100 million)

# 67.8%

在国际业务新签合同额中

占比 Accounting for the amount of newly signed international business contracts

## 265

在89个国家和地区设立各类 驻外机构(个) Overseas offices in 89 countries and regions

#### 案例 越南海阳 2×600MW 燃煤电厂 BOT 项目 case The Hai Duong 2×600MW BOT Coal-fired Thermal Power Plant Project in Vietnam

中国能建投资建设的越南海阳 2×600MW 燃煤电厂 BOT 项 目 1、2 号机组分别于 2020 年 11 月 24 日、2021 年 1 月 25 日顺利投产发电。该项目充分发挥中国能建全产业链优势, 以工程计划为牵引,以过程管控为抓手,推动中越优秀工艺 结合与创新,推进中国标准在越南落地执行,助力越南当地 经济发展,促进改善民生,是联合国内外企业机构加强合作、 互利共赢的国际投资示范项目。



越南海阳电厂外景 The exterior shot of Hai Duong Thermal Power Plant in Vietnam

巴基斯坦 SK 水电站 BOOT 项目 The BOOT Project of SK Hydropower Station in Pakistan

葛洲坝集团投资建设的巴基斯坦 SK 水电站 BOOT 项目,是 中巴经济走廊能源早期收获项目清单中的三个水电站项目之 一,是目前中国企业在巴基斯坦投资最大的项目。项目总投 资 19.626 亿美元,总装机容量为 873.5MW,建成后年发电 量可达 30.8 亿度,将有效改善巴基斯坦能源电力供应情况。

The BOOT Project of SK Hydropower Station in Pakistan invested by China Gezhouba Group is one of the three hydropower plant projects on the list of early harvest projects under the China-Pakistan Economic Corridor and the largest project invested by Chinese enterprises in Pakistan so far. With a total investment of US 1.9626 billion and a total installed capacity of 873.5MW, the project will effectively improve Pakistan's power supply with an annual power generating capacity of 3.08 TWh.

Unit 1 and Unit 2 of the 2×600MW BOT Coal-fired power plant Project in Haiyang, Vietnam invested by Energy China Group were put into operation on November 24, 2020 and January 25, 2021 respectively. The project gives full play to our advantages in the whole industrial chain. Guided by the engineering plan, and with focus on process control, we combine and innovate in excellent technologies of our two countries, and implement Chinese standards in Vietnam. This project has contributed to local economic growth and improvement of the livelihood. It is a demonstration project of international investment for enterprises and institutions at home and abroad to strengthen cooperation and reap mutual benefit.

### 推动生态文明建设 **Advancing Ecological Civilization**

### 中国能建深入贯彻习近平新时代生态文明思想, 锚定"碳达峰、碳中和"目标要求, 坚守环境保护的发展红线,持续完善环境管理,在资源利用、气候变化、污染防治、 保护生态环境等多方面系统采取措施,致力于"打造一流的生态环境综合治理商", 争当生态文明建设的引领者、推动者、实践者。

Energy China Group has earnestly implemented Xi Jinping Thought on Ecological Civilization for a New Era and acted in line with the requirements of achieving goals of carbon peak and carbon neutrality. While pursuing development, we stick to the red line of environmental protection. We continue to improve environmental management and adopt systematic measures in resource utilization, climate change, pollution prevention, and ecological protection, etc. With these efforts, we are committed to "building a worldclass ecological environment management company", striving to be a leader, promoter, and implementer of ecological civilization.

### 完善环境管理

#### Improving environmental management

我们严格遵守国家环境保护法律法规和政策要求,秉承绿色、循环、低碳发展理念, 完善环境管理体系,压实环保责任,推动环保管理规范化、常态化、长效化。

In strict accordance with national environmental protection laws, regulations and policies, we uphold the philosophy of green, recycling, and low-carbon development. We improve the environmental management system, urge the fulfillment of environmental responsibilities, and promote standardized, routine, and long-term practices of environmental management.

#### 健全组织体系 Improving the Organizational System

建立环境保护工作领导小组,与各所属企业层层签订责任书, 明确环保责任目标和要求,落实环保责任。加大环保培训, 提升组织环保能力和水平。

We have established a leading group of environmental protection, signed letters of responsibility with all subsidiaries, and clarified environmental protection targets and requirements to ensure that environmental protection responsibilities are fulfilled at all levels. Moreover, we have enhanced environmental protection training to improve the organizational capability in this aspect

### 加强环保督查 Strengthening Environmental Inspection and Supervision

#### 全力配合国资委生态环境保护工作调研检查,组织第三方机 构和专家开展环保巡查,各企业建立风险重点监控清单,逐 步形成专业化、精细化、规模化的巡查监管模式。

We have fully supported the environmental protection survey and inspection organized by the SASAC, and organized third-party agencies and experts to carry out environmental protection inspections. All subsidiaries of Energy China Group have formulated a list of key risks to be monitored. With these efforts, a specialized, refined and large-scope inspection and supervision model has been fostered gradually in environmental protection

#### 完善管理制度 Improving the Management System

制修订《环保管理规定》《环保工作考核与奖惩办法》《环 境事件报告与调查处理办法》《绿色施工示范项目指南》等 管理制度,规范环境管理。

We have formulated or revised the Regulations on Environmental Protection Management, Environmental Protection Performance Assessment, Reward and Punishment Measures, Environmental Incident Reporting, Investigation and Handling Measures. Green Construction Demonstration Project Guide and other management systems to regulate environmental management

> 打造绿色供应链 Building a Green Supply Chain

#### 将环保理念和要求融入企业采购及供应链管理全过程,推动 供应链合作伙伴保护环境。

We have incorporated the concept and requirements of environmental protection into the entire process of the Company's procurement and supply chain management so as to promote supply chain partners to protect the environment.

## 5.20

环保总投资(亿元) The total investment in environmental protection. (RMB 100 million)

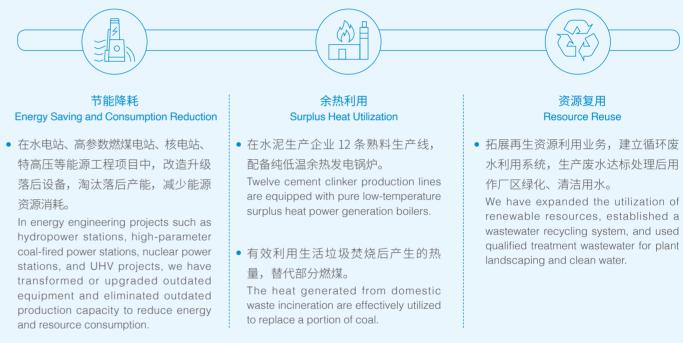
# 76,000

环保培训(人次) Participants in environmental protection trainings

### 资源节约复用

#### Resource saving and recycling

我们坚持绿色生产理念,从技术研发、设备改造、业务拓展 等方面,推动降污降耗和资源复用,负责任的处置废渣、废 水以及生活垃圾,有效减少废弃物影响、提升资源使用效率。



### 应对气候变化 Addressing climate change

我们以贡献"双碳"承诺为己任,从节能增效、绿色减排等 维度施力,控制传统火电项目碳排放,发展清洁能源业务, 最大限度控制、减少和处理生产经营过程中的碳排放。

We committed to contributing to the realization of carbon peak and carbon neutrality. To achieve this goal, we ramp up efforts in energy saving, efficiency improvementt, green development, and emission reduction, etc. We endeavor to control carbon emissions from thermal power projects, and develop clean energy business, in an effort to maximally control, reduce and deal with carbon emissions from our production and operations.

> 广东碳捕集测试平台项目 ▷ Guangdong Carbon Capture Testing Platform

Adhering to the concept of green production, we promote pollution reduction, consumption reduction and resource reuse through technology research and development, equipment transformation, business expansion, etc. Moreover, we responsibly dispose of waste residues, wastewater and domestic garbage to effectively reduce waste impact and improve resource utilization efficiency.





#### 锡林郭勒盟阿旗 225 兆瓦风电项目并网发电 Xilingol League Ar Horgin Banner 225MW Wind Power Project starts grid-connected generation



锡林郭勒盟阿旗 225 兆瓦风电项目是中国能建投资建设运营 一体化项目, 也是内蒙古锡盟特高压外送风电重点建设项目。 项目总投资 19.02 亿元, 2020 年底并网发电, 每年可提供 5.8 亿千瓦时清洁电能,节约标煤18.8万吨,减排二氧化硫1,598 吨、氮氧化物约1,391.2吨、二氧化碳50.85万吨,有效优 化地方能源结构。

Xilingol League Ar Horgin Banner 225MW Wind Power Project is an investment-construction-operation integrated project of Energy China Group and a key project of Ultra-High Voltage (UHV) wind power transmission in Xilingol League, Inner Mongolia. With a total investment of RMB 1.902 billion, the project was connected to grid for power generation at the end of 2020. Every year, the project can provide 580 GWh clean power, saving 188,000 tons of standard coal equivalent and reducing the emissions of 1,598 tons of sulfur dioxide emissions, approximately 1,391.2 tons of nitrogen oxides, and 508,500 tons of carbon dioxide. The project has effectively optimized local energy structure.



### 保护生态环境

#### Preserving ecological environment

我们坚持打造环境友好型企业,注重绿色生产,严格防治粉尘、 噪声、废渣、废水以及生活垃圾,加大矿山复绿、水环境改 善力度,举办环保公益活动,竭力保护生态平衡。

增殖放流6万尾鱼苗,改善水域生态环境 案例 Proliferating and releasing 60,000 fish fry to improve the ecological environment of the water area

2020年8月14日,广西水电工程局承建的云南回龙山水电 站工程以"增殖水生生物资源,维护自然生态平衡"为主题, 举办施工期增殖放流活动,在小黑河与曼赛河汇口段,增殖 放流6万尾鱼苗,通过"以水养鱼,以鱼净水"方式,养护 西双版纳傣族自治州猛腊县境内国家级自然保护区天然水体 种群资源,改善水域生态环境。

开展地球日环境公益活动 Holding Earth Day public welfare activity

2020年4月22日世界地球日当天,安徽电建二公司金寨 PPP 项目部组织志愿者前往当地梅山水库,清理废纸屑、饮 料瓶等生活垃圾,宣传绿色发展理念,呼吁"珍爱地球,人 与自然和谐共生"。



We committed to building an environmentally friendly enterprise. We pursue green production and strictly prevent and treat dust, noise, waste residue, wastewater and domestic garbage. At the same time, we intensify mine reforestation and water environment improvement, and organize public welfare activities on environmental protection, striving to protect the balance of the ecological environment.

On August 14, 2020, Yunnan Huilongshan Hydropower Station, undertaken by Guangxi Hydroelectric Construction Bureau Co., Ltd., launched the fish proliferation and release campaign under the theme of "Promoting aquatic biological resources to protect ecological balance". A total of 60,000 fry were released to the Xiaohei River and Mansai River confluenceThe campaign aimed to preserve the aquatic species in the national nature reserve in Mengla County, Xishuangbanna Dai Autonomous Prefecture and improve the ecological environment of local waters through the approach of "water restoration for fisheries, fisheries proliferation for water restoration".

On April 22, 2020, Earth Day, the Jinzhai PPP Project Department of Anhui No.2 Electric Power Construction Co., Ltd. organized volunteers to clean up waste paper, beverage bottles and other domestic garbage in the Meishan Reservoir area. Moreover, the volunteers disseminated the concept of green development and called for local residents to "cherish the Earth and strive for harmonious coexistence between mankind and nature"

管理绩效 Management Performance

# 29

获得国家优质工程奖(项) Prizes of National Excellent Project Award

# 2

鲁班奖(项) Luban Prizes

### 2

D

Ö

詹天佑奖(项) Tien-yow Jeme Civil **Engineering Prizes** 

Ö

m

### 74.94

研发投入(亿元) Total R&D investment (RMB 100 million)

## 89.78

新技术推广直接经济效益(亿元) Direct economic benefits generated from new technology application (RMB 100 million)

### 1.428 新增专利(项) Newly granted patents

# 专业至臻 争做能源建设排头兵 Striving to be the Leader in Energy Engineering



### 关键议题 **Key Topics**

• 转型升级 Transformation and upgrade

• 服务政府 Serving the government

### 行动策略

**Action Strategies** 

力推动高质量发展。

quality development.

精品工程和精良装备。

培养。

Improving the scientific and technological innovation system, increasing investment in scientific and technological innovation, encouraging the transfer and application of advances in science and technology, and enhancing the training of scientific and technological talents.

行业引领力。

Seizing the opportunities during the 14th Five-Year Plan period, an important period of strategic opportunity for development, to improve competitiveness, influence and leadership in the industry.



- Quality management • 行业发展

• 质量管理

Promoting industry development

• 创新发展

development

Innovation-driven

• 顺应绿色发展趋势,响应能源革命和企业转型要求,加快实现企业转型升级,努

Following the trend of green development, responding to energy revolution and enterprise transformation, and accelerating transformation and upgrade to promote high-

• 健全质量管理体系,完善质量管理措施,加强质量管理绩效,为客户提供精益设计、

Improving the systems, measures and performance of quality management, and providing customers with lean design, premium projects and advanced equipment.

• 完善科技创新体系,加大科技创新投入,促进科技成果转移转化,加强科技人才

• 紧紧抓住"十四五"重要战略机遇期,培育行业竞争力、提升行业影响力、塑造

# 引领能源转型 **Pioneering Energy Transformation**

中国能建立足新发展阶段、贯彻新发展理念、融入新发展格 局,全力贯彻落实习近平总书记"四个革命、一个合作"能 源安全新战略和"碳达峰、碳中和"目标要求,加快能源转 型和能源基础设施建设步伐,持续推动企业高质量发展。

Energy China Group ground the efforts in the new development stage, apply the new development philosophy, and integrate into the new development paradigm. Implementing the new energy security strategy of "Four Revolutions, One Cooperation" proposed by President Xi Jinping (i.e., Promoting reforms in energy supply and consumption, market building and innovation while strengthening international cooperation), we align our efforts in achieving goals of carbon peak and carbon neutrality, and have expedited energy transformation and energy infrastructure construction to advance the high-guality corporate development.

### 打造清洁能源体系

### Building a clean energy system

我们持续推动能源消费与供给改革,控制化石能源总量,构 建以新能源为主体的新型电力系统,形成绿色节约、清洁低 碳的生产生活方式。

We continue to promote reforms in energy consumption and supply, controls the total amount of fossil energy, and builds a new power system dominated by new energy, striving to form a style of production and living that prioritizes ecological protection, energy saving, clean and low-carbon development.

#### 设计参建"华龙一号"全球首堆成功投入商业运行 Energy China Group's design and co-construction project - World's first Hualong One reactor put into commercial operation

2020年1月30日,由华东院承担常规岛设计、安徽电建二 公司参建的"华龙一号"全球首堆——福建福清核电5号机 组投入商业运行,标志着我国在三代核电技术领域跻身世界 前列。

"华龙一号"是我国自主研发的第三代压水堆核电站,每台 机组装机容量 116.1 万千瓦,每年发电近 100 亿千瓦时,能 够满足中等发达国家100万人口的年度生产和生活用电需求。 相当于每年减少标准煤消耗 312 万吨、减少二氧化碳排放 816 万吨, 植树造林 7,000 多万棵。

Hualong One is China's independently developed third-generation pressurized water reactor nuclear power plant. The installed capacity of each Hualong One unit reaches 1,161 MW, and each unit is able to generate nearly 10TWh of electricity annually, meeting the demand of one million population in a moderately developed country. It is equivalent to reducing the consumption of 3.12 million tons of standard coal and emission of 8.16 million tons of carbon dioxide annually, equivalent to planting over 70 million trees annually.

On January 30, 2020, the Unit 5 of China's Fuging Nuclear Power Plant, the world's first Hualong One reactor (HPR1000), was put into commercial operation, symbolizing that China has ranked top in global third-generation nuclear power technology field. In the project, East China Electric Power Design Institute Co., Ltd. (ECEPDI) designed the conventional island of the Unit 5 and Anhui No.2 Electric Power Construction Co., Ltd. participated in the construction.



"华龙一号"全球首堆——福建福清核电5号机组俯瞰图 The vertical view of the Unit 5 of Fuging Nuclear Power Plant, the world's first Hualong One reactor

### 建设资源节约、环境友好型抽水蓄能电站 Building a resource-saving and environmentally friendly pumped storage power station

2020年9月,中国能建参建的深圳抽水蓄能电站工程顺利通 过竣工验收。在建设过程中,我们尽可能减少占用林地,最 大限度保护原生态环境,追求以基于自然的解决方案建设环 境友好的抽水蓄能电站。该电站工程兼具抽水发电、城市供 水等功能,投产后将有效提升水资源综合利用效率,每年可 节约标准煤 15.8 万吨、节省天然气 1.83 万吨、减排温室气 体总量约 2.717.28 吨。



深圳抽水蓄能电站总装机容量 120 万千瓦, 是粤港澳大湾区超级"充电宝" With a total installed capacity of 1,200 MW, Shenzhen Pumped Storage Power Station is a super charger in the Guangdong-Hong Kong-Macao Greater Bay Area.

## 推动能源技术发展 Advancing energy technology development

我们以技术创新推进"风光水火储一体化""源网荷储一体化" 电力改革,加速推进生物能、海洋能和氢能应用,满足市场 对清洁能源的需求。

In September 2020, Shenzhen Pumped Storage Power Station, constructed by Energy China Group and other institutions, passed the project completion acceptance. During the construction, we ramped up our efforts to minimize the occupation of forest land and maximally protect the local ecological environment, striving to build an environmentally friendly pumped storage power station with nature-based solutions. The power station integrates pumping power generation, urban water supply and other functions. After put into operation, it will effectively improve the comprehensive utilization efficiency of water resources, saving approximately 158,000 tons of standard coal, 18,300 tons of natural gas, and reducing approximately 2,717.28 tons of greenhouse gas (GHG) emissions annually.

We leverage its technological innovation to advance the power reform featuring "Integration of wind, solar, water, coal and stored energy" and "Integration of source, grid load and storage", and expedites the application of bio-energy, marine energy and hydrogen energy to meet the market demand for clean energy.

#### 张北柔性直流工程服务清洁低碳奥运

Zhangbei Flexible DC Power Grid Project contributes to a clean and low-carbon Olympic Games



2020年6月25日,中国能建参与设计承建的世界首个柔性 直流电网工程——张北柔性直流电网试验示范工程的四端带 电组网新能源成功接入北京电网,并送至2022年北京冬奥 场馆。

张北柔性直流工程是世界首个实现直流电网构造的重大科技 示范工程,工程汇集了大规模风电、光伏、储能、抽蓄等多 种形态能源输送方式。项目投产后,每年最多可为北京电网 注入100亿千瓦时的清洁能源,相当于北京全社会年用电量 的1/10。对于推动能源转型与绿色发展、服务北京低碳绿色 冬奥具有重大价值。 On June 25, 2020, Zhangbei Flexible DC Power Grid Pilot Demonstration Project, the world's first flexible DC power grid project, was successfully connected to grid at all four terminals. The project is designed and constructed by Energy China Group and other institutions. After grid connection, it would deliver new energy power to the venues of Beijing 2022Winter Olympic Games.

Zhangbei Flexible DC Power Grid Project is the world's first major technology demonstration project of direct current grid construction, integrating large-scale wind power, PV, stored energy, pumped storage and other energy transmission ways. After put into operation, the project can provide 10 TWh of clean energy for the Beijing power grid, which is equivalent to one tenth of total electricity consumption in Beijing. The project is of vital importance to supporting energy transformation, green development, and a low-carbon and green Beijing Winter Olympic Games.



张北柔直电网试验示范工程 Zhangbei Flexible DC Power Grid Pilot and Demonstration Project

## 例 盐穴压缩空气储能发电,促进能源结构清洁化转型 Se The power generation of compressed air energy storage in salt caverns advances the transformation of a clean energy structure

江苏院设计的盐穴压缩空气储能发电系统是目前空气储能领域唯一一个国家示范项目,也是国内首次利用盐穴资源的发电项目, 建成后将成为世界首座非补燃式压缩空气储能商业电站。该项目创新非补燃压缩空气储能发电技术,创建具有完全自主知识产 权的压缩空气储能技术体系,将推动储能产业自主创新水平提升,促进我国能源结构清洁化转型,引领智能电网向低碳、绿色 方向发展。

The power generation system of compressed air energy storage in salt caverns, designed by Jiangsu Electric Power Design Institute, is the only national demonstration project in the field of air energy storage, and also the first power generation project in China deploying salt cavern resources. After completion, it will become the world's first commercial power station of nonafterburning compressed air energy storage. It innovates in the non-afterburning compressed air energy storage power generation technology and establishes the independently developed compressed air energy storage technology system. The project will promote the independent innovation of the energy storage sector and the transformation of China's clean energy structure, and pioneer the low-carbon and green development of smart grids.

列 参与设计全球单机容量最大塔式光热电站 Participating in the design of the tower-type solar power station with world's largest single-unit capacity

中国能建在摩洛哥努奥三期 150 兆瓦塔式光热电站勘察设计 项目推进过程中,建立实时、平行、完整的跨地域三维设计 模型,首次与西班牙公司共同使用同一套管道等级库及元件 库,实现全球协同设计。项目设计全球首座钢砼混合结构吸 热塔,开创该类结构设计先河,结构高度创造世界纪录。

Energy China Group built a real-time, parallel, and complete cross-regional three-dimensional design model during the survey and design of the Noor III 150 MW Tower CSP Plant in Morocco. For the first time, we realized global collaborative design by collaborating with a Spanish company to use a shared pipeline library and component library. The project developed the world's first steel-concrete hybrid structure heat-absorbing tower, making world records in terms of structure design novelty and structure height.



盐穴压缩空气储能发电系统国家示范项目开工仪式 The kick-off ceremony of the national demonstration project "Power Generation System of Compressed Air Energy Storage in Salt Caverns"





摩洛哥努奥三期 150 兆瓦塔式光热电站全景图 The panorama of the Noor III 150 MW Tower CSP Plant in Morocco

# 打造精品工程 **Building Premium Engineering Projects**

中国能建瞄准高质量发展目标,不断完善质量发展制度体系, 完善工程项目管理制度,提升质量意识,强化质量监督,以 高品质产品和高水准服务筑牢发展根基。

Aiming at the goal of high-guality development, Energy China Group continue to improve the quality development system and the engineering project management system, and raise quality awareness and supervision, laying a foundation for development with high-quality products and services.

### 加强质量管理

### Enhancing guality management

我们严格遵守《中华人民共和国产品质量法》《建设工程质 量管理条例》《建设工程勘察设计管理条例》等国家和行业 相关规定及标准,制定年度质量工作计划,持续深入开展"质 量三基"建设,夯实质量管理根基,不断提升服务国家战略 与满足市场需求的能力。2020年未发生较大及以上质量责任 事故,勘测设计成品合格率、在建项目单元(分项)工程合 格率、工程总承包项目单位工程合格率、工业和装备产品出 厂合格率均为100%。

### 注重能力建设

### Prioritizing capacity building

我们将"质量是我们的自尊心"作为企业信条,建立健全质 量培训机制,制定专门的质量培训师、质量教育制度,组织 策划"质量月"、QC 小组等能力建设培训活动,做到人人 受到教育,全员重视质量。

In strict accordance with Product Quality Law of the People's Republic of China, Regulation on the Quality Management of Construction Projects, Regulation on the Administration of Survey and Design of Construction Projects, and other national and industrial regulations and standards, we have formulated the guality management plan of the year, proceeded the campaign to enhance "Three foundations of quality" (Responsibility of primary-level units, basic capability of quality management, quality of primary-level employees), and improved the capability of supporting national strategies and meeting market demand. In 2020, there was no major quality accident or above; the qualification rate of survey and design finished products, project units (sub-units) under construction, general contracting engineering projects, and exfactory industrial products and equipment all reached 100%.

Upholding "Quality is our self-esteem" as corporate creed, we have established a sound quality training mechanism and special systems for quality trainers and quality training. Moreover, we have organized Quality Month, QC team capacity building and other activities to ensure that quality awareness is improved and quality is valued by everyone at Energy China Group.

#### OC 成果荣获中建协优秀质量管理奖 QC achievement wins Outstanding Quality Management Award of China Construction Industry Association

2020年10月,天津电建申报的2项QC成果——《提高高 填方路基压实度一次验收合格率》《降低空冷柱施工缝质量 通病发生率》,在2020年度中国建筑业协会举办的"工程 建设质量管理小组活动成果大赛"中荣获 II 类成果奖项。

In October 2020, the two QC achievements of Tianjin Electric Power Construction Co., Ltd. (TEPC) - Improving the First-time Acceptance Rate of High-fill Subgrade Compaction and Reducing the Occurrence of Common Quality Defects in Construction Joints of Air-conditioning Columns - won Category II Achievement Award in the Project Construction Quality Management Team Achievement Competition held by China Construction Industry Association.



### 提升属地员工质量意识与能力 Improving the quality awareness and capability of local employees

在越南海阳投建2×60万千瓦燃煤电厂1号机组建设过程中, 安徽电建一公司专门设置了各类课程与活动,帮助属地员工 提升质量意识与能力,提高技术质量管理水平。

### 为属地员工配备导师,全程跟 讲质量要求落实情况

We have assigned mentors for local employees follow up the implementation of quality requirements in the entire process

开展"专项业务培训""技能 比武"等活动,赋能属地员工 质量能力 We have carried out Specialized Business Training, Skills Competition and other activities to empower local employees





组织中越员工开展技能比武 Organizing Chinese and Vietnam employees to participate in the skills competition

During the construction of Unit 1 of the 2×600 MW coal-fired power plant in Hai Duong, Vietnam, Anhui No.1 Electric Power Construction Co., Ltd. launched various courses and organized a host of activities to improve the quality awareness and capability of local employees and their technology quality management.

> 常态化推进项目周技术质量例 会,形成"实施-评估-复盘-改进"的质量管控机制 We have regularly promoted the weekly technical quality meetings of the project and formed a quality control mechanism featuring "Implementation, evaluation, review and improvement"



## 赢得客户满意 Winning customer satisfaction

我们坚持诚信守约、追求卓越的服务理念,不断提升项目品质、精益履约流 程,致力于为客户提供高品质服务,与客户建立可持续的互惠共赢关系。

We adhere to the service philosophy of honesty, compliance and pursuit of excellence, constantly improve project quality and lean contract performance, and strive to provide customers with high-quality services, establishing sustainable and win-win relationships with customers.

2020年,中国能建 29项工程获评国家优质工程奖,部分获奖工程如图示例: In 2020, 29 projects of Energy China Group won the National Quality Project Award.



The Noor III 150 MW Tower CSP Plant in Morocco

国电舟山普陀6号海上风电场2区工程 Guodian Zhoushan Putuo No.6 Offshore Wind Farm No. 2 Zone Project

制度保障

快速响应



### 集中督导 Centralized Supervision

• 要求投诉较多的企业发布《关于加强项目履约 管理的通知》,按周报送受投诉项目履约进展

We have urged companies receiving more complaints to issue the Notification on Enhancing Project Performance Management and report the progress of complained projects on a weekly basis

• 对重点投诉项目现场督导,主动与业主沟通, 协商解决方案

We have conducted onsite supervision of complained projects and actively communicated with proprietors to negotiate solutions

• 组织召开业主投诉项目履约专题会议,及时响应

We have held special meetings on the performance of projects with proprietor complaints to give prompt response

• 研究制定应对措施和解决方案,妥善处理投诉 We have developed countermeasures and solutions to properly handle complaints

快速响应 Quick Response

#### 主动排查 Active Inspection

• 组织开展质量排查整治,督促项目质量问题整 改、复盘,形成闭环

We have organized quality inspection and control, and urged the rectification and review of project quality problems to form a closed-loop system

- 上报排查治理、质量提升、现状调查等情况报告 We have submitted reports on quality inspection and treatment, quality improvement, and status investigation, etc
- 发挥集团平台优势,与业主高层对接,将所属 单位诉求及时向业主反馈,加强与业主单位沟 通协调,促进相互信任、理解和支持

We have leveraged the Company's platform advantages, interacted with senior management of the proprietors, and reported the feedback of our affiliates to proprietors. Through enhanced communication with proprietors, we promote mutual trust, understanding and support

沟通协调

Communication and Coordination

### 及时响应、按期交付,获得客户信任与肯定 Prompt response and punctual delivery wins customer trust and recognition

北京设备公司克服新冠肺炎疫情等诸多不利影响,不断提升 响应客户诉求能力,按期交付各项特高压工程产品,先后收 到中国电力技术装备有限公司、南方电网公司、国家电网公 司等业主单位发来的感谢信,肯定该公司过硬的产品质量和 高水准的现场服务。

### 中国电力技术装备有限公司

### 感谢信

### 北京电力设备总厂有限公司:

上半年,新冠肺炎疫情在全球肆虐,给我们共同合作的巴基 斯坦默蒂亚里-拉合尔±660kV直流输电项目建设带来了严峻挑

百分来教徒使的终情, 专公司官局终情不利影响, 严密组织, 积极配合。对数校直流项目执行工作给予了专业高效支持、贵公 司张坤、生恭鹏、岳树腾等同志坚守现场, 克服各种不利因素, 出色完成了电抗器设备的安装指导工作,对此,我们对费公司的 精诚合作表示感谢,对坚守一线的同志们致以最崇高的极意! 当前,已基斯坦疫情形势仍不容乐观,就拉直流项目建设处 子关键阶段,履约工作和疫情防控压力巨大。我们将继续加强管 现,严密协调,为项目前方参虑者提供力所能及的支持,坚决打 赢项目一线疫情防控保卫線,高质量完成建设任务,全力服务"--带一路"建设。

### 感谢信

致北京电力设备总厂有限公司: 在乌东德电站送电广东广西(昆柳龙直流)给电工程(特高压多 端直流示范工程)乌东德士800KV 昆北换流站建设中,贵公司全力配 合我方保质保量完成了项目任务。在此,特向贵公司各级领导的大力 支持和有力协调表示感谢! 对现场技术指导人员提出表扬,其积极向 上、认真负责的精神也高度体现出北电总厂高技术、高水准的优秀品 牌实力。

产品和服务。



衷心感谢贵公司对中电装备公司国际业务的大力支持











Despite COVID-19 and other adverse factors, Beijing Power Equipment Group (BPEG) continued to develop its capability to meet customer demand and deliver UHV engineering products on schedule. Thank you letters were received from China Electric Power Equipment and Technology Co., Ltd. (CET), China Southern Power Grid (CSG), State Grid Corporation of China (SGCC) and other proprietors, praising the high-quality products and onsite services of BPEG.

对此,望贵公司继续保持品牌实力,为特态压建设提供更优质的



#### 国网冀北电力 ±500kV康保换流站工程 业主项目部 有限公司

#### 卖场值

致全立电力设备总厂有限公司; 在北可再生脸颈歪性直流电网示范工程是世界首个具有网络特性的直 液电网示范工程 是世界首个应用柔性直流技术进行陆地可再生能源大规模

非网的示范工程,是目前世界上电压等级最高,输送客量最大的柔性直流工 程,建设张北梁推直流工程,对于推动能源转型与绿色发展、服务北京低碳 现色冬寒态、引领科林刻彩、推动装备制造业转型升级等具有最著的综合效 益和战略意义 直流斯路器作为康保换流站工程的核心设备之一,由炭公司提供,在

工程建设过程中,北电团队;孝惠实,王红斌,石江浩,韩迪,王冲,张代, 师完检答词走乘乘着北电总厂"想客户所想,急客户所急,干客户所需"的 企业宗旨, 体现出专业精湛的技术水平和精益求精的工作作风, 高效和高质 量的完成两台直流顺路器的安装词试工作,为康保换流站的顺利投运奠定了 坚实基础。

在此,转向委公司及责公司团队成员的辛勤劳作和愤出的突出资献于 支心的感觉和表扬。



#### 兼顾效率与质量,高水准履约 Performing contracts with high efficiency and quality

葛洲坝三峡建设公司克服疫情影响,稳健实施乌东德水电站 6 台机组安装任务,快速响应和满足客户需求,保障效率和 质量双重目标,较目标工期提前11天完成建设,实现品质 与效率兼顾的优质履约。



Amid the pandemic, China Gezhouba Group Three Gorges Construction Engineering Co., Ltd. completed the installation of six units of Wudongde Hydropower Station 11 days ahead of the project deadline, ensuring fast response to customer demand and achieving efficiency and quality goals for high-quality contract performance.



坚持开展"每日碰头会",对质量、安 全等工作进行安排部署 We have held Daily Meeting to make arrangements of quality and safety work



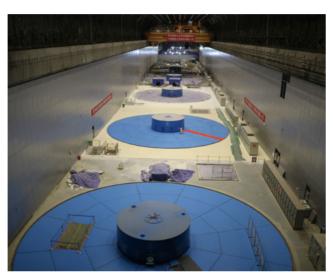
### 成立"精品机组"攻关小组,加强质量 和工艺控制

We have established Premium Unit Teams to work on quality and process control



### 坚持现场三级质检,技术员、技术负责 人直接参与现场一线质量管理控制 We have insisted on the three-level quality inspection and engaged technicians

and technical heads in onsite quality management and control



乌东德水电站厂房内景 The interior view of Wudongde Hydropower Station

# 实施创新驱动 **Promoting Innovation-driven Development**

中国能建聚焦创新驱动,围绕基础研究、技术攻关、成果产 业化、科技金融体系、人才支撑、全面数字化转型驱动、一 体化重构与协同"七大领域",打造企业全过程创新生态链, 增添高质量发展动力。

## 提升创新能力

### Improving innovation competency

我们始终以科技创新为先导,立足自主研发,加强新技术研 究,强化创新能力建设,持之以恒锻造核心竞争力,形成较 为成熟的科技创新研发体系。

To achieve innovation-driven development, Energy China Group has built a whole-process innovation ecological chain covering basic research, technological research, industrial application of technological achievements, technology and finance system, talent support, digital transformation drive, and integrated reconstruction and coordination, injecting new impetus into the high-quality development of the Company.

Scientific and technological innovation is high on our agenda. Based on independent research and development, we are working harder to develop new technologies, improve our innovation capability and forge our core competitiveness. A relatively full-fledged scientific and technological innovation R&D system has taken into shape.

### 2020年 In 2020

74.94

研发经费支出约(亿元) Total R&D investment (RMB 100 million)

17.8%

同比增长 Year-on-year increase



科技创新研发体系 Scientific and technological innovation R&D system

### 开展技术攻关 Making technological breakthrough

我们深入实施创新驱动发展战略,开展能源建设领域重大科学技术攻关,完成了"海上风电机组导管架基础设计施工关键技 术""大型电网输电工程结构关键技术"等一批关键核心技术的研发和应用,取得多项科研成果。2020年,中国能建共获得 省部级科技奖14项,行业级科技奖176项。

To implement the innovation-driven development strategy, we focus on achieving the major breakthrough of science and technology in the energy engineering sector. Specifically, we have completed the R&D and application of a batch of core technologies such as the Key Technology of Design and Construction of Offshore Wind Turbine Jacket Foundations and the Key Technology of Large-scale Grid Power Transmission Structure Engineering, and achieved several scientific and technological results. In 2020, we won 14 science and technology awards at provincial/ministerial level and 176 at industrial level.



2.75%

研发投入比 R&D investment ratio

96 高新技术企业(家) High-tech companies

"观音岩水电工程设计施工关键技术与应用"成果获云南省科技进步一等奖 Key Technology and Application of Design and Construction of Guanyinyan Hydropower Project wins the First Prize of Yunnan Science and Technology Progress Award.

### 推动成果转化

### Promoting the application of technological advances

我们大力推进新技术、新成果在电力设计、勘测设计、工程 建设、装备制造等领域的应用落地。2020年组织开展 352 项 科技成果转化项目,取得直接经济效益 89.78 亿元,助力新 签合同金额 30.35 亿元。 We have vigorously promoted the application of new technologies and new achievement in power design, survey and design, engineering construction, equipment manufacturing, and other fields. In 2020, we promoted the application of 352 scientific and technological advances, achieving direct economic benefits of RMB 8.978 billion and new contracts worth RMB 3.035 billion.

### 海上风电机组让电更"绿色"

Offshore wind turbines make electricity "greener".

2020年7月,中国能建自主研发的首台10兆瓦海上风电机 组在福建福清市成功并网发电。该海上风电机组容量目前居 亚洲首位、全球第二,轮毂中心高度距海平面约115米,风 轮扫风面积相当于3.7个标准足球场,在年平均10米/秒的 风速下,单台机组每年输送的清洁电能可满足2万个三口之 家的用电需求,减少燃煤消耗1.28万吨、二氧化碳排放3.35 万吨。

### 加快数字化转型 Expediting digital transformation

我们加速信息化建设步伐,组织编制"十四五"信息化规划, 描绘"一张网、一朵云、一个大平台"的宏伟蓝图,通过数 字化能力建设助推公司转型升级和提质增效。 power generation in Fuqing City, Fujian. It boasts the largest unit capacity for offshore wind turbines in Asia and second-largest in the world. The turbine hub height is approximately 115 meters above sea level and the swept area of the turbine is equivalent to 3.7 standard football fields. If the annual average wind speed reaches 10 m per second, a single unit can deliver clean power to meet the electricity demand of 20,000 three-member families, reducing coal consumption by 12,800 tons and carbon dioxide emissions by 33,500 tons.

In July 2020, the first 10MW offshore wind turbine independently

developed by Energy China Group was connected to the grid for

We have accelerated the process of informatization and organized the preparation of the informatization plan for the 14th Five-Year period, mapping out a grand blueprint featuring "A network, a cloud and a big platform". Through digital capacity building, we manage to promote the transformation, upgrade, and quality & efficiency improvement of the Company.

### 加快推进数字化与生产经营管理深度融合 Accelerating the deep integration of

digitalization and production & management

以财务一体化平台为核心,建设战略财务、业务财务、共享财务的三分财务体系

Taking the financial affairs integration platform as the core, we have built a three-pronged finance system covering strategic finance, business finance and sharing finance.

We have enhanced the application of BIM technology in the entire life cycle of the project, advanced the design and construction of the integrated platform, and promoted the application of project management and smart construction site platforms, to expedite the process of digitalization, industrialization and industrial development.

#### 加快创新数字化产品和服务 Accelerating Digital Product and Service Innovation

 从设计、建设、制造等全生命周期着眼,打造智慧 电厂、智慧电网、智慧能源、智慧城市,发掘能源 大数据、通道大数据、资源大数据等数据价值,促 进产信融合,形成数字新模式、新业态、新产业。
 In the entire life cycle covering design, construction and design, etc., we have built smart power plants, smart grids, smart energy projects, and smart cities; we have explored the values of energy, channels, resources, and other big data, promoted the industry-information integration, and formed a new model, new form, and new sector of digitalization.



中国能建秉承和平合作、开放包容、互利共赢的理念,致力于构建和谐伙伴关系,为合作伙伴和中国能建自身拓展更多合作空间,为助力行业提升发展、带动价值链 共赢贡献力量。

Following the principles of peaceful cooperation, openness and inclusiveness, and mutual benefit, Energy China Group is committed to building a harmonious partnership so that we can expand more cooperation space for our partners and ourselves, and contribute to industry development and win-win outcomes in the value chain.

## 助推行业发展 Facilitating industry development

我们充分发挥政府智库助手作用,统筹推进《"十四五"能源发展规划》《"十四五" 电力发展规划》等一批"十四五"规划和重点课题研究。积极组织、参与国际、国 家和行业标准制定,参与编制的 ISO 国际标准《工业阀门电动执行机构一般要求》 2020 年正式发布,是中国阀门行业首个起草制定的国际标准。

Giving full play to its role as an assistant of government think tank,we coordinates and promotes the research on key research topics, such as the 14th Five-Year Plan for Energy Development, the 14th Five-Year Plan for Power Development, We actively organize or participate in the development of international, national and industry standards. The international standard General Requirements for Industrial Valve Electric Actuators launched by ISO, the first international standard drafted and developed in China's valve industry, was officially released in 2020. We contributed our share to its preparation.



2020年,我们统筹推进《"十四五"能源发展规划》《"十四五"电力发展规划》 《能源技术创新"十四五"规划》三大国家级规划研究工作,完成电力、能源领域 一系列"十四五"规划研究课题,取得24项重要阶段性研究成果。在《中国能源报》 发布"十四五"规划研究成果8篇,形成《能源决策参考》专刊,在"智慧能源构建""新 一代电力系统构建""电力中长期经济性""2060碳中和问题""综合智慧能源 技术与产业发展"等专题发表专业观点。

In 2020, we coordinated and promoted the research of three national plans, namely the 14th Five-Year Plan for Energy Development, the 14th Five-Year Plan for Power Development, and the 14th Five-Year Plan for Energy Technology Innovation, completed a series of 14th Five-Year Plan research topics in fields of power and energy, and achieved 24 significant phased research results. We published 8 research reports on the 14th Five-Year Plan on China Energy News, developed a special issue of Energy Decision Reference, and published professional views on topics such as smart energy construction, development of a new generation power system, medium- and long-term economy of power, carbon neutrality by 2060, and comprehensive smart energy technology and industry development, etc.





#### 2020年 In 2020

# 1

编制完成并发布国际标准(项) International standard complied and published

# 13

国家标准 ( 项 ) National standards complied

# 2

其中主编 ( 项 ) Developed under our leadership

# 27

行业标准 ( 项 ) Industry standards complied

# 17

其中主编 ( 项 ) Developed under our leadership

电规总院位列 CTTI 来源智库能源领域第1位 China Electric Power Planning & Engineering Institute ranks 1st in the energy field of CTTI

电规总院在 2020 新型智库治理暨思想理论传播论坛发布的 《2020 CTTI 智库报告》中, 位列 CTTI 来源智库能源与基 础设施领域智库前8强、能源领域第1位,牵头完成的全国 "十四五"能源规划研究项目荣获 CTTI 来源智库年度精品 成果奖。



In the 2020 CTTI Think Tank Report released on the 2020 New Think Tank Governance and Ideological and Theoretical Communication Forum, China Electric Power Planning & Engineering Institute was among the top 8 CTTI Source Think Tank in the field of energy and infrastructure and ranks first in the field of energy. The research project, the Energy Planning During the 14th Five-Year Plan Period completed under China Electric Power Planning & Engineering Institute's leadership, was selected into the annual excellent works of CTTI Source Think Tank.

### 加强技术交流

### Enhancing technical exchanges

Source Think Tank

我们关注行业发展动向,积极参加行业技术交流活动,致力 于培育行业竞争力、提升行业影响力、塑造行业引领力,推 动行业创新发展。2020年,我们组织所属企业技术人员参加 中国电机工程学会、中国水力发电学会、中国施工企业管理 协会等学协会主办的技术交流研讨会 10 余次。

We pay close attention to the development of the industry, and actively participates in technical exchanges. We are committed to fostering industry competitiveness, enhancing industry influence, shaping industry leading force, and promoting industry innovation and development. In 2020, we organized technical personnel from our subsidiaries to participate in more than 10 technical exchange seminars hosted by Chinese Society for Electrical Engineering, China Society for Hydropower Engineering, China Association of Construction Enterprise Management, and so on.



### 赋能供应链伙伴

### Empowering supply chain partners

我们秉承开放包容、互利共赢的经营理念,坚持"有效竞争、 互惠共赢"的公平竞争理念,将社会责任理念与要求融入企 业采购及供应链管理全过程,追求与供应链伙伴的价值认同 和协同发展。

Adhering to the business philosophy of openness, inclusiveness, mutual benefit, and the fair competition concept of effective competition and win-win outcomes, we integrates the concept and requirements of social responsibility into the whole process of corporate procurement and supply chain management, and pursues value identification and coordinated development with its supply chain partners.

• 建立《采购管理规定》等9项采购及供应商管理相关制度,将"公平公正、科学择优" 作为采购寻源、遴选合作伙伴的基本原则

We have established the Procurement Management Regulations and eight other systems of procurement and supplier management, clarifying "Fair, just, scientific, and meritbased" as the basic principles for sourcing and partner selection.

### • 编制《供应商管理办法》,推进采购平台供应商共享资源及信息化建设,明确供应 商外部寻源方式与准入机制

We have developed the Supplier Management Measures, promoted procurement platform suppliers to share resources and informatization progress, and clarified the methods and access mechanisms of external supplier sourcing.



供应商管理体系 Supplier Management System

### 打造负责任的优质供应商 / 分包商 Building responsible high-quality suppliers/subcontractors

suppliers into four categories: excellent, good,

fair and unqualified, and conducted classified

supplier management.

2020年,山西电建进一步加大对供应商/分包商的质量管控, 在合同范本中增加质量协议,明确质量责任和义务,明确规 定一般、重大质量缺陷及质量事故的考核标准,对供应商 / 分包商实行按月动态考核、次月回头复查、工程完工时累计 考核的方式,督促和帮助分包质量管理提升,有效赋能供应 商 / 分包商质量管理水平提升。

2020年 In 2020

# 90,574

总供应商(家) Total suppliers

# 991

责任采购比率(%) Responsible procurement ratio

# 21.8

诵过质量、环境和职业健康 安全管理体系认证的供应商 比例 (%)

Proportion of suppliers with quality, environment and occupational health and safety management system certification



In 2020, to further strengthen quality control of suppliers/ subcontractors, Shanxi Electric Power Construction Co., Ltd. added quality agreements in model contracts to clarify their guality responsibilities and obligations and specify assessment criteria for minor, major quality defects and quality accidents. It adopts the accumulative assessment method of monthly dynamic assessment, recheck in the following month, project completion time for suppliers/subcontractors to improve subcontract quality management and effectively empower suppliers/subcontractors to improve their quality management level.

### 管理绩效 **Management Performance**

11.2% 新签合同额同比增长 Year-on-year increase of newly signed contracts

5.5% 营业收入同比增长 Year-on-year increase of operating income

120,963 在职员工(人)

On-the-job employees

## 28.38 安全生产投入(亿元) Investment in work safety (RMB100million)

4,281.66 捐赠总额(万元) Total donations (RMB10,000) Part Three





### 关键议题 **Key Topics**

• 党建引领 Leading role of Party building

• 深化改革 Deepening reform

### 行动策略 **Action Strategies**

体系,注重人文关怀。

humanistic care.

改善,与社区和谐共融、共同发展。

# 价值共享 服务美好生活新向往 **Sharing Value and Serving People's Aspiration**



 合规经营 Compliance operation

 员工权益 Employee rights and interests

• 社区发展 Community development

• 全面加强党的领导,将党的领导与企业治理有机统一,研究制定改革三年行动实 施方案,大力推进依法合规经营,全面深化风险管理。

Enhancing Party leadership in all respects, aligning corporate governance with Party leadership, developing a three-year action plan for reforms, vigorously promoting compliance operation, and comprehensively intensifying risk management.

• 实施"人才强企"战略,加强员工基本权益保护,建立健全职业健康和安全管理

Implementing the strategy of "Making Energy China Group a talent-strong company", enhancing the protection of employee rights and interests, building a well-developed occupational health and safety management system, and valuing the provision of

• 积极融入国内外业务所在地社区,主动承担企业社会责任,支持公益慈善和民生

Actively integrating into domestic and overseas communities where our businesses are operated, taking the initiative to shoulder social responsibilities, supporting public welfare and people's livelihood improvement, and promoting harmonious coexistence and shared development with local communities.

# ▲ 筑牢发展基础 Cementing the Foundation of Development

中国能建始终坚持以高质量党建引领企业高质量发展,持续深化系统改革,大力推 进依法合规经营,防范化解重大风险,制定出台了《关于全面加强党的领导、加快 高质量发展、深化系统改革和加强科学管理的若干意见》,全力打造中央企业建设 世界一流企业的新样本、新标杆、新典范。

Energy China Group has always driven the high-quality development of the Company through high-quality Party building. While continuing to deepen system reforms, we have vigorously promoted compliance operation to prevent and resolve major risks, and formulated and issued *Directives on Comprehensively Enhancing Party Building, Accelerating High-quality Development, and Deepening Systematic Reforms and Scientific Management*, striving to set a new example of how a central SOE can grow into a world-class enterprise

# 全面加强党的领导

### Enhancing Party leadership in all respects

坚持党的领导、加强党的建设是国有企业的"根"和"魂"。我们牢牢把握"央企 姓党"政治属性,强化政治引领,推动党建工作与中心工作深度融合,将党的政治 优势、组织优势转化为治理优势、发展优势。

Adhering to the Party leadership and Party building are the root and soul of state-owned enterprises. We bear in mind that Energy China Group belongs to the Party, strengthen political guidance, deeply integrate Party building and main business, and transform the Party's political and organizational advantages into governance and development advantages.



着力党组织体系的制度化与标准化建设 Advancing the institutionalization and standardization of the Party organization system



2020年,中国能建修订了公司基层党支部管理办法、党委巡视工作管理办法等制度, 实施从公司到支部的三级党建考核,以制度形式明确"五强两到位"示范党支部创 建标准和标准化支部的基本条件,命名第二批 50 个示范党支部,广泛开展"实践 在支部"、主题党日等活动,持续激发党组织体系活力。

In 2020, we revised the Company's management methods of grassroots Party branches, the regulations on Party Committee Inspection Work, and other regulations. Moreover, we conducted the three-tier Party building assessment covering from the Company to Party branch and clarified the "5+2" basic standards for building a demonstration Party branch and the basic conditions for awarding a standardization Party branch in our regulations. Based on these standards, we determined the second batch of 50 demonstration Party branches. Besides, we organized a host of activities such as "Practice at the Party Branch" and thematic Party building day to stimulate the vitality of the Party organization system.

2020 年 In 2020

> 基层党支部被命名为中央企 业第二批示范党支部(个) Primary-level Party branch of Energy China Group was inscribed on the list of the second batch of demonstration Party branches of central SOEs.

73 "能建工匠" (名) Energy China Group Craftsmen

# 10

标杆班组 ( 个 ) Benchmarking teams

# 100

先进班组 ( 个 ) Advanced teams

# 11

12

行业优秀职工成果奖项(个) Industry-level outstanding employee achievement awards

技术创新成果(个) Technological innovation achievements



加强政治建设 Strengthening Political Construction

 始终将政治建设摆在首位,不断提高政治判断力、政治 领悟力、政治执行力。深入学习贯彻党中央决策部署和 习近平总书记重要讲话、指示批示精神。

We have always put political construction in the first place and constantly improved our political judgment, political understanding, and political execution capabilities. We have earnestly implemented the decisions and plans of the CPC Central Committee, and the important speeches and instructions made by General Secretary Xi Jinping.

 全年组织召开党委中心组理论学习6次、形势报告会1次, 读书班1期,学习重要内容44项。

Throughout the year, we held six theoretical study meetings of the Party Committee Central Teams, one situation report meeting, one reading lecture, studying 44 important contents in total.



加强统战群团建设 Strengthening the Construction of tI United Front and Mass Organizations

- 充分发挥统战和群团组织的桥梁纽带作用,求最大人心、 求最大合力、求最大公约数、画最大同心圆。
   We have given full play to the linking role of the united front and mass organizations, and sought for the greatest support, joint efforts, shared interests.
- 加强职工队伍建设,培育选树先进典型。开展特色团青工作,激发青年创新创效活力。

We have enhanced the construction of our employee team, cultivated and selected outstanding models. We have carried out featured activities of the Chinese Communist Youth League (CCYL) to stimulate the youth's vitality in innovation and efficiency improvement.



加强"三基"建设 Strengthening Three Basics

- 构建上下贯通、执行有力的组织体系,实现党组织有形 覆盖和党建工作有效覆盖。
   We have established a top-down organization system with strong execution, realizing effective coverage of Party organizations and Party building.
- 举办党支部书记集中轮训示范班、学习贯彻十九届四中 全会精神轮训班、新闻宣传培训班等,强化党建队伍建设。
   We have organized training courses such as centralized training and demonstration courses for Party branch secretaries, training courses on learning the spirit of the Fourth Plenary Session of the 19th CPC Central Committee, and news publicity training courses, to strengthen the construction of the Party building team.
- 修订完善党建工作制度,发布党支部标准化手册,广泛 开展"实践在支部"活动。
   We have revised the Party building system, issued the Party

We have revised the Party building system, issued the Party branch standardization manual, and organized the activity of "Practice at the Party Branch".



加强党风廉政建设 Improving Party Style and Clean Governance

- 深入推进内部巡视全覆盖,有效规范基础管理。
   We have promoted the full coverage of internal inspections and effectively regulated basic management
- 构建"大监督"工作体系,加强重点领域和关键环节整治。加大正风肃纪反腐力度,一体推进不敢腐、不能腐、不想腐。

We have built a supervision-based work system to strengthen the rectification of key areas and key links. We have ramped up efforts in discipline and anti-corruption to ensure that officials don't dare to, are unable to, and have no desire to commit acts of corruption.

## 持续深化系统改革 Deepening systematic reforms

我们始终坚持全面深化系统改革是企业做强做优做大的强大动力,把握社会主义市 场经济改革方向,开展对标世界一流管理提升行动,研究制定公司改革三年行动实 施方案,加快推进混改试点、"双百行动"和"科改示范行动"等国企改革专项工 程,深化供给侧结构性改革,深入实施三项制度改革,试点科技型企业股权和分红 激励等,不断激发企业发展新动能。

We believe that comprehensive, deep and systematic reform is the driving force for us to grow stronger and larger. We embrace the reform of socialist market economy and pursue world-class management. To this end, we have formulated a three-year action plan for corporate reform and advanced special national projects for the reform of SOEs, such as the pilot project of mixed ownership reform, the Double Hundred Action and Demonstration Action on Market-Oriented Reform For Science and Technology Enterprises. We have deepened supply side structural reform, fully implemented reform of our labor, personnel and distribution systems, and piloted incentive mechanisms for science and technology enterprises based on shared and dividends, so as to stimulate new growth drivers.

# 推进依法合规经营

### Advancing legal and compliance operation

我们始终坚持依法治企、合规运作,建立结构完整、权责明确、层次清晰的合规管 理制度体系,健全信用制度,加强合规审核和培训,确保依法合规经营。

We adhere to law-based corporate governance according to law and compliance operation. We have built a compliance management system with an integral and hierarchical structure and clear division of responsibilities, improved the credit system, and enhanced compliance review and training, to ensure that legal and compliance operation is in place.

#### 严防商业腐败 Strictly Preventing Business Corruption

#### 我们继续深化"大监督"工作机制,坚持中心监督、重点监督 和职能监督"三位一体"监督格局。

We have continued to deepen the supervision-based work mechanism, and adhere to the three-in-one supervision pattern featuring central supervision, key supervision and functional supervision.

注重合规审核 Valuing Compliance Review 我们持续开展"规章制度、经济合同、重要决策"三项法律审核, 推动法律审核向法律合规综合审核的职能转变。

We have continued to carry out three legal audits of "Regulations and systems, economic contracts, and important decisions" to promote the transformation of legal audits into comprehensive legal compliance audits.

境外风险管控 Preventing and Controlling Overseas Risks 我们密切关注境外风险,定期召开海外风险管理委员会会议,明确 反腐败、反贿赂、反不正当竞争作为底线,提升海外合规经营能力 和水平。

Paying close attention to overseas risks, we have regularly held the meeting of the overseas risk management committee, clarified anticorruption, anti-bribery, and anti-unfair competition as the bottom line, and improved the capability of overseas compliance operations.

合规管理机制 Compliance management mechanism 2020 年 In 2020

# 35

关闭注销企业(户) Enterprises shut down and canceled

# 5

清理职工投资企业(户) Employee-invested enterprises eliminated

# 15

campaign

推进重点亏损子企业专项治 理(户) Loss-making subsidiaries included in the rectification

3

关闭、转让"僵尸企业"(户) "Zombie enterprises" shutdown or transferred

**2,740** 清理长期不在岗员工(人)

Long- term off-duty employees dismissed

**120,000+** 平稳移交退休人员(人) Retirees assisted

# 防范化解重大风险 Preventing and resolving major risks

我们坚决贯彻落实党中央、国务院国资委关于防范化解重大 风险的战略部署,全面深化风险管理,科学组织年度风险评估, 深入开展风险排查预警,保障企业高质量可持续发展。

#### 开展年度风险评估 Carrying out Annual Risk Assessment

 开展 2020 年度风险评估,全面复评新冠疫情等风险对 公司生产经营活动的影响

We have conducted the 2020 risk assessment to comprehensively re-evaluate the impact of the COVID-19 and other risks on the Company's production and operations.

 开展重大风险季度监测跟踪,掌握所属企业重大风险 变化情况及重大经营风险事件发生及处置进度情况

We have quarterly monitored and tracked major risks to grasp the updates of major risks and changes of our affiliates and the occurrence and handling progress of major business risk incidents.

### 构建常态化风险监管机制-------Establishing a Regular Risk Supervision Mechanism

 牵头组织所属二、三级单位开展合同、财务、安全生产、 战略管控等七个方面的风险排查,汇总编写《关于全 面风险排查工作情况的报告》

We have organized second-level and third-level subsidiaries to conduct risk inspection in seven aspects including contracts, finance, work safety, and strategic management and control, etc. Based on the results, we have formulated the Report on Comprehensive Risk Inspection. Firmly implementing the strategic plans of the CPC Central Committee and the State Council for preventing and resolving major risks, we have comprehensively deepened risk management, organized the annual risk evaluation, and conducted risk inspection and early-warning, in an effort to safeguard the high-quality and sustainable development of the Company.

#### ------多措并举防范重大风险 Adopting Multiple Measures to Prevent Major Risks

- 加强国内宏观经济形势分析和政策研究
   Strengthening domestic macroeconomic situation analysis and policy research
- 持续关注国际化经营风险,克服海外疫情持续蔓延的 困难

Paying close attention to the risks of international operations and overcoming difficulties amid the continuous spread of the pandemic

- 深入开展生产经营形势分析 Carrying out in-depth analysis of production and operations
- 积极开展国内市场研究分析
   Actively conducting domestic market research and analysis

 统筹谋划、推进疫情防控和复工复产工作 Making overall plans to promote COVID-19 prevention & control and resumption of work and production

### ------着力防范疫情法律合规风险 Preventing Legal and Compliance Risks amid COVID-19

编制印发《中央政府扶持企业复工政策汇编及法律风险应对建议》《关于依法防控疫情防范法律合规风险的通知》等文件,指导企业依法合规开展风险防范

We have formulated and issued the Collection of the Central Government's Policies on Supporting Enterprise Resumption of Work & Production and Suggestions on Handling Legal Risks, the Notification on COVID-19 Prevention & Control and Legal Risks Prevention, and other documents, and guided subsidiaries to prevent risks according to laws and regulations.



# 赋能员工成长 **Empowering Employee Growth**

### 中国能建秉承"以人为本"人才理念,深入实施"人才强企"战略,不断加强员工 权益保障,重视职工职业安全健康,畅通员工晋升发展渠道,关心关爱员工生活, 为加快建设具有全球竞争力的世界一流企业提供源源不断的人才保障。

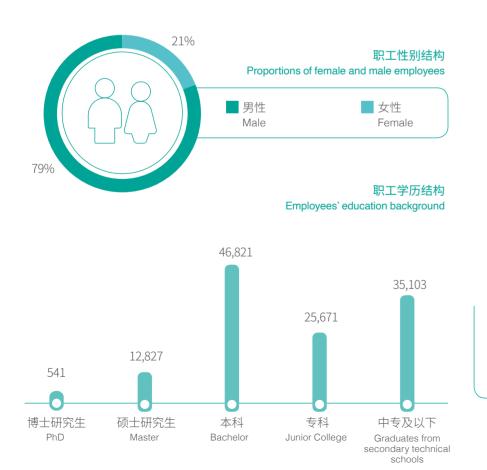
In line with the "people-oriented" talent development philosophy, Energy China Group has earnestly implemented the strategy of "Making Energy China Group a talent-strong company" and continued to safeguard the rights and interests of our employees. While prioritizing occupational health and safety, we have developed channels for employee promotion, and enhanced employee care, providing continuous talent support for building ourselves into a world-class enterprise with global competitiveness.

# 保障员工基本权益

### Safeguarding the basic rights and interests of employees

我们严格遵守《劳动合同法》等法律法规,坚持平等雇佣、同工同酬,依法合规向 员工支付劳动报酬,严格落实休息休假制度,保障员工薪酬福利和各项基本权益。

In strict accordance with Labor Contract Law of the People's Republic of China and other laws and regulations, we insist on equal employment and equal pay for equal work. Apart from paying employees in compliance with laws and regulations, we strictly implement the vacation and leave system, and guarantee the benefits and basic rights and interests of employees



2020年 In 2020

120,963 公司在职员工总数(人)

Total employees

# 1.000

解决残疾人就业近(人) Nearly 1,000 people with disabilities employed by Eastern China

3%

女性管理者比例 Proportion of female managers

4.4%

少数民族员工占全部员工比例 Proportion of minority employees

# 100%

劳动合同签订率 Labor contract signing rate

100% 社会保险覆盖率 Coverage of social insurance program



### 守护员工职业健康 Protecting the occupational health of employees

我们牢固树立"人民至上、生命至上"理念,坚持"预防为 主、防治结合"方针,严格遵守国家职业健康法律法规,全 面落实安全生产主体责任,依法防治、源头治理、综合施策, 筑牢安全防线,保护劳动者职业健康安全。

We have adhered to the philosophy of "People first, life foremost" and the policy of "Prevention first, joint prevention and control". In strict accordance with the country's occupational health laws and regulations, we have fully assumed work safety responsibilities as a major player, and taken integrated measures to enhance prevention and control from source, building a solid line of defense for work safety and occupational health of our workers

#### 及时撤离埃塞俄比亚战乱区,守护海外员工安全 案例 Promptly evacuating employees from the war zone in Ethiopia

2020年11月4日,埃塞俄比亚政府宣布对提克雷州人民解 放阵线采取军事行动,提格雷州有关中资机构400余名员工 人身安全受到严重威胁。中国能建应急管理领导小组第一时 间专题研究,启动埃塞俄比亚提格雷州武装冲突事件1级应 急响应。经过 36 小时努力,成功将公司提格雷州项目部 140 名员工和其他单位 269 名中国同胞从战乱区安全撤离至埃塞 俄比亚首都,以实际行动保障员工生命安全。





# 28.38

安全生产投入(亿元) Investment in work safety (RMB 100 million)

# 428,000

安全培训(人次) Participants in work safety trainings

On November 4, 2020, the Ethiopian government announced military operations to be undertaken against the Tigray People's Liberation Front (TPLF), posing life threats to over 400 employees from Chinese-invested institutions in Tigray. The Energy China Leading Group of Emergency Management convened an emergency meeting to discuss solutions and promptly initiated the Category I emergency response to the military conflicts in Tigray, Ethiopia. After 36 hours of our hard work, 140 employees of Energy China Tigray Project Management Department and

269 Chinese compatriots from other institutions were successfully evacuated from the war zone to the capital of Ethiopia. We thus protected the life and safety of employees with solid actions

压实安全生产责任 Ensuing the Fulfillment of Work Safety Responsibilities

• 深入开展安全生产专项整治三年行动,推动专项整 治走深走实

We have launched a a three-year action plan for work safety to ensure that work safety hazards are eliminated.

### • 加强安全生产考核,倒逼安全生产责任落实 We have enhanced work safety assessment to ensure the fulfillment of work safety responsibilities.

### 关口前移防控安全生产风险

### Preventing and Controlling Work Safety Risks from the Source

• 强化上下贯通的安全生产风 险动态分析研判,突出重点 领域、重要时段、关键环节 安全生产风险管控

We have strengthened the dynamic analysis of work safety risks, which underlines the prevention and control of work safety risks in key areas, important periods and key links.

• 开展国际业务、新业务安全管 理专项督查

We have conducted special supervision of safety management in international businesses and new businesses.

### • 加强汛期安全生产管理,积 极参与社会应急抢险 We have strengthened

work safety management during the flood season and actively participated in social emergency rescue.

### 深化生产安全事故隐患排查治理 Enhancing the Inspection and Control of Hidden Work Safety Hazards

### • 紧盯"新、远、险、重、小" 项目,常态化开展工程项目 安全生产巡查

We have made project work safety inspection a routine to ensure work safety in "New, distant, dangerous, important, and small-scale" projects.

### • 深化安全生产春秋季大检查, 严控季节性安全生产风险

We have enhanced work safety inspection in Spring and in Autumn to strictly control seasonal work safety risks.

### • 强化"四不两直"和"回头看" 检查, 严肃事故隐患督办验 证和整改闭环管理

We have enhanced inspection of Four Nos and Two Directs (i.e., no notification, no informing, no report, no accompanying, direct visit to the grassroots, direct visit to the site) and and Followup Review to strictly supervise rectification and closed-loop management of hidden hazards.

### 安全生产战略 Safety production strategy

## 赋能员工成长发展 Empowering employee development

我们以"人才为本、支撑战略、服务发展、创造价值"为宗旨, 以人才能力建设为核心,积极构建科学规范、开放包容的人 才发展体系,创新人才发展机制,拓展员工发展通道,助力 员工成就职业价值。



• 我们实施"人才强企"的发展战略,发布《员工职 业发展通道建设指导意见》,为员工的职业生涯发 展搭建平台。

We have earnestly implemented the strategy of "Making Energy China Group a talent-strong company," issued the Guiding Opinions on the Development of Employee Career Development Channels, and built a platform for employees' career development.

1.203

# 员工人均培训投入(元)

Training investment per employee (RMB)

35

享受国务院津贴专家(人) State Council special allowance experts

2

6

24 全国技术能手(人) National technical talents survey and design masters

With the mission of "putting talent first, supporting strategy, serving development, and creating values", we take talent capacity building as our core task, and have actively developed a scientific, standard, open and inclusive talent development system. In addition, we have innovated in the talent development mechanism, and expanded employee development channels to help them realize values in career



#### 员工培训体系 Employee Training System

• 我们发布了《教育培训管理暂行办法》和《职工培 训体系建设方案》,对各类别员工都作出培训内容、 方式和时间上的差异化要求。

We have issued the Interim Measures for Education and Training Management and the Employee Training System Building Plan, which clarifies the differentiated requirements on training content, methods, and durations for all types of employees.

全国工程勘察设计大师(人) National engineering survey and design masters

全国核工业工程勘察设计大师(人) National nuclear engineering

# 5

国家百千万人才工程专家(人) Experts engaged in the National Talent Project

# 2

国家有突出贡献专家(人) National experts with remarkable contributions

案例

#### 快速成长的巴基斯坦大男孩阿迪尔 The Pakistani employee Adil achieves fast growth at Energy China Group

28岁的巴基斯坦大男孩阿迪尔,是江苏电建一公司参建的巴 The 28-year-old Pakistani man Adil is a boiler technician at the power engineering site oof the 1263MW Combined-cycle 基斯坦吉航项目 1263 兆瓦联合循环电站项目动力工地一名 Power Plant Project in Jhang, Pakistan, which was constructed by Jiangsu No.1 Electric Power Construction Co., Ltd. and other institutions. After two years since joining the company, under the

锅炉专业技术员。入职两年来,在中国师父的帮助下,阿迪 尔的中文水平突飞猛进,工作技能也不断提升,在检验计划 执行,参与业主、监理、总包的联合验收等方面逐渐得心应手。 "阿迪尔做事心细、认真负责、团队意识很强。"提到阿迪尔, 同事们对他称赞有加。

吉航项目这份工作切实提升了阿迪尔家的生活水平,也让他 更有责任感、成就感和归属感。在"一带一路"系列项目中, 中国能建为许多像阿迪尔一样的外籍员工,提供了成长的机 遇和平台,在"一带一路"上共同谱写友谊赞歌。

The Jhang Project has helped Adil effectively improved the living standards of his family, and raised his sense of responsibility, achievement and belonging. In the Belt and Road series project, Energy China Group has provided development opportunities and platforms for plenty of foreign employees like Adil, presenting the friendship under the Belt and Road Initiative.



help of his Chinese mentor, Adil made considerable progress in

learning Chinese and work skills. He has gradually acquired the

skills in plan implementation, the joint acceptance of proprietors,

project supervisors and general contractors, and other aspects.

"Adil is careful and responsible at work. He has a strong sense of



天津电建企业内训师培训班 Tianjin Electric Power Construction Co., Ltd. holds the internal trainer training course.

东电三公司 EPC 项目管理培训 Northeast No.3 Electric Power Construction Co., Ltd. holds the EPC project management training.



浙江火电印尼玻雅项目部中国师傅以 "传、帮、带"模式培养当地员工

The Chinese mentors of Indonesia Boya Project Management Department of Zhejiang Thermal Power Construction Co., Ltd. pass on experience to local employees through the apprenticeship model.

## 关心关爱员工生活 Enhancing employee care

案例

我们高度重视员工的工作体验和生活质量,为员工提供多姿 多彩的人文关怀和文体活动,关爱关怀困难员工,为每一位 员工创造温暖、包容的工作氛围和生活环境。

"青年之家"——帮助青年员工成长进步的温暖港湾 Youth Home - a warm harbor enabling young employees to achieve growth

"青年之家"是安徽电建二公司创立的支持青年员工学习交 流、丰富业余生活的活动平台。在这里,党支部书记与团员 青年深入交流,倾听青年所思所想,高质量开展共青团工作。 同时,平台还支持青年员工学习各类知识,不断充实自己、 提升自我,争做学习型电建青年。



案例 关爱女性员工,汇聚巾帼力量 Caring for female employees and pooling the strength of women

疫情期间,北京电建面向全体女职工组织开展了"凝聚巾帼 力量,做好疫情防控,助力企业生产"的主题活动。通过微 信平台发布关于女性健康生活、妇女权益保护相关的系列讲 座或文章,赋能女职工职业发展。制作推出"抗击疫情巾帼 力量""女神节,瞧瞧北京电建的'她们'"等系列微信, 宣传赞扬女职工健康、积极、阳光的精神面貌和生活心态。

We attach great importance to the work experience and life quality of employees, and provides humanistic care and colorful recreational activities for employees. We care for employees in difficulties and strive to create a warm and inclusive working atmosphere and living environment for every employee.



Youth Home is an activity platform founded by Anhui No.2 Electric Power Construction Co., Ltd. for young employees to have better communication and diverse leisure time. At Youth Home, the secretary of the Party branch can have an in-depth talk with young Communist Youth League members, to listen to their thoughts and launch high-quality CYL activities. At the same time, Youth Home provides a platform for young employees to learn knowledge, improve capability, and grow to be learning-based young employees.



Amid the COVID-19, Beijing Electric Power Construction Co., Ltd.(BPCC) organized the "Gathering the strength of women to better COVID-19 response and support enterprise production" thematic activity for all its female employees. Via the WeChat platform, BPCC posted a series of lectures or articles on women's healthy life and right protection, to empower female employees for better career development. Moreover, BPCC released a series of WeChat posts under the themes of "Women in the COVID-19 fight" and "Women at BPCC on Women's Day", etc. These efforts aim to publicize and praise female workers' positive attitude towards life.



"人文能建"微信公众号,用文化的力量稳人心、暖人心、聚人心 The WeChat official account of "Caring CEEC" capitalizes on the power of culture to warm people



"人文能建"微信公众号于 2020 年上线,是公司重要的线上学习交流平台,我们 致力于将其打造为"稳人心、暖人心、聚人心"的能建人精神家园。公众号中开设 了"人文关怀大讲堂""微党课""能建纪事""能健康"等栏目,传播正能量, 推进企业文化建设。

Launched in 2020, "Caring CEEC" (RWNJ-CEEC), an WeChat official account of Energy China Group, is an important online internal learning and communication platform. We are committed to building it into a spiritual home that "Assures, warms and units our employees". The official account has set up Humanistic Care Lecture, Micro Lecture on Party Building, Energy China Moments, Energy China Health, and other columns, spreading positive power and improving enterprise culture.



#### 北方建投"喜迎中秋国庆双节携手共建东三未来"主题文体活动

China Energy Engineering Group North Construction and Investment Co., Ltd. holds the sports activity on the theme of "Celebrating the Mid-Autumn Festival and National Day, joining hands to build a better future'

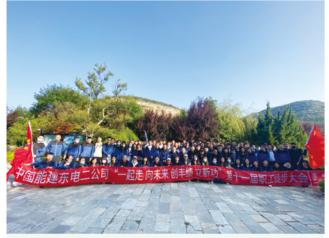


# members to visit red patriotic education bases and carry forward the immortal revolutionary spirit.



西北装备公司参观红色教育基地,弘扬不朽革命精神

Northeast Power Equipment Company of Energy China CEEEC organizes Party



东电二公司组织职工徒步大会 Northeast No.2 Electric Power Construction Co., Ltd. organizes the employee jogging activity.



公司总经理、党委副书记孙洪水到南方建投深圳地铁项目部亲 切慰问一线干部职工

Sun Hongshui, General Manager and Deputy Party Secretary of Energy China Group, visits frontline employees of Shenzhen Metro Project Management Department, Southern Construction and Investment Co., Ltd.

# 助力民生改善 Helping Improve People's Wellbeing

中国能建深度融入业务所在地社区,主动践行社会责任,与社区和谐共荣、共享发 展成果,用实际行动为建设美好生活贡献力量。

Energy China Group deeply integrates into the communities where our businesses are operated, actively practice our social responsibilities, and share development fruits with the communities, so as to contribute to a better life with practical actions.

## 贡献社区建设 Contributing to community development

我们高度重视与所在社区的交流沟通,根据社区民生改善所需,积极组织开展公益 捐赠和志愿者活动,助力社会民生改善。

We value the communication with local communities, and actively organizes charitable donation and volunteer activities in line with local needs to help improve people's livelihood.

#### 案例 多方汇聚中国能建,共见精彩 Energy China Group gathers multiple parties to witness its splendor

2020年9月,"精彩能见国企开放日"活动在天津电建参 建的重庆市垫江县东部片区新型城镇化 PPP 项目举行。此次 活动邀请了《中国电力报》、凤凰网等媒体,以及当地居民 等百余人走进项目,共同感受中国能建助力打造"城市新高 地 市民新家园"的城市新标签,促进企业与社区顺畅、透明 沟通交流。

In September 2020, the "Splendid Energy China" SOE Open Day was held in the new-type urbanization PPP project of the eastern area of Dianjiang County, Chongging City, which was constructed with the help of Tianiin Electric Power Construction Co., Ltd. The event invited more than 100 attendees, including representatives from China Electric Power News, ifeng.com and other media, as well as local residents, to witness Energy China Group's contribution to building the new city label of "New City Highland, New Citizen Homes" on the site, and to promote smooth and transparent communication between the Group and communities.

4,281.66

捐赠总额(万元) Total donations (RMB 10.000)



### 案例 case

"葛洲坝 50 周年"走进校园 "50 years of Gezhouba" campaign held on the campus

2020 年 12 月 29 日, 葛洲坝三公司与西安理工大学联合开展"从葛洲坝的 50 年 看中国水电发展"央企进校园活动,讲述葛洲坝集团引领中国水电的传奇历程,并 围绕学生就业进行友好洽谈,共 300 余名师生参与了本次活动。此次央企进校园 活动不仅树立起企业和学子深入沟通之桥梁,还发挥了勉励学生怀揣报国之志的积 极作用。

On December 29, 2020, China Gezhouba Group No. 3 Engineering Co., Ltd. and Xi'an University of Technology jointly held the SOE activity of "Witnessing China's Hydropower Development from the 50 Years of Gezhouba" on campus. The campaign introduced the legend of China Gezhouba Group leading China's Hydropower development and launched friendly negotiations around student employment guidance. A total of more than 300 teachers and students participated in the activity. The activity not only built a bridge of in-depth communication between the company and students, but also played a positive role in encouraging students to devote themselves to their country.



为搭建多样化社会沟通渠道,中国能建开通 官方抖音号,与网友一起"抖起来" To diversify its social communication channels, Energy China Group has launched the official TikTok account to link up with the netizens.



### 开展新春送祝福志愿服务活动 The volunteer service activity during Spring Festival



2020 年 1 月 14 日,北京电建举办"联咏新时代、送福进万家"鼠年新春送祝福志愿服务活动,共有五十名志愿者参加,书写福字 300 多张、春联 300 多副,给公司职工及社区居民送去温馨祝福。

On January 14, 2020, Beijing Electric Power Construction Co., Ltd. held the volunteer service activity, sending Chinese character *Fu* (good luck) to millions of households. A total of 50 volunteers participated in the activity and they wrote more than 300 Fu and over 300 couplets, delivering blessings to employees of the company and residents of the community.



### 案例 case Helping autistic children

2020年12月4日,山西电建组织团员青年志愿者,到山西方舟自闭症康复研究院开展"蓝色行动——守护星星的孩子"志愿 者活动。活动组织孩子们进行音乐游戏、手工制作等,促进特殊儿童认知理解与感知能力的发展,帮助孩子们建立自信心,提 升社会交往能力,勇敢地走出去拥抱自然、热爱生活。

On December 4, 2020, Shanxi Electric Power Construction Co., Ltd, organized young league members to launch "Blue actions, guarding children of the stars" volunteer activity in Shanxi Ark Autism Rehabilitation Research Institute. Through organizing the children to play music games and make handcrafts, the activities aimed to promote the development of cognitive understanding and perceptual ability of special children, help them develop self-confidence, improve their social communication ability, and encourage them to embrace nature and love life.



## 加强海外履责 Enhancing CSR fulfillment overseas

在海外发展过程中,我们坚持履行属地社会责任,尊重属地 信仰和风俗,促进文化互融,搭建与社区沟通的桥梁,在基 础设施、教育、医疗及抢险救灾等领域提供必要、及时的支 持和帮扶,增进当地民生福祉。



During its development overseas, we insist on fulfilling corporate social responsibility to the local and respects local beliefs and customs to promotes cultural integration. We have built a bridge of communication with the community, and provided necessary and timely support in areas of infrastructure, education, medical care, emergency rescue and disaster relief to improve the well-being of the local people.

### 中菲两国"真心能见心诚善建"

The true friendship between China and the Philippines stands out in difficult times

2020年11月12日凌晨,22号台风"环高"在菲律宾吕宋 岛东部沿海登陆,黎刹省塔耐市 Daraitan 村遭受严重洪灾, 造成当地停水停电、通讯中断,周边村民的房子被台风掀起, 物资和生活用品十分匮乏。广西水电工程局菲律宾卡利瓦大 坝工程经理部高度重视灾情,主动承担社会责任,紧急采购 了大米、罐头、快餐面等救济物资,与项目业主、地方政府 相关人员、项目现场人员组成临时救援队,前往灾区开展救 援,为守护异国他乡的共同家园贡献了中国企业力量。



On the early morning of November 12, 2020, Typhoon No. 22, Vamco, landed on the eastern coast of Luzon Island of the Philippines. Heavy floods hit Daraitan Village in Tanai City. Rizal Province, cutting off water supply, power supply and communication in the local area, destroying the houses of surrounding villagers, and leaving people in short supply of materials and daily necessities. In response to the disaster, the Philippines Kaliwa Damn project management department of Guangxi Hydroelectric Construction Bureau Co., Ltd. took the initiative to assume its social responsibility, by urgently purchasing relief supplies such as rice, canned food, instant noodles, and associating with the project proprietors, local governments, project personnel on the site to form a temporary rescue team for the afflicted areas, thus contributing Chinese enterprises' share to safeguarding the common homeland in the foreign land.





巴勒电站项目部助力马来西亚村落村民渡过难关 The project department of Balak Power Station helped villagers in Malaysia tide over the difficulties

2020年9月10日至13日,马来西亚拉让江流域连续强降雨, 多个村庄遭受洪灾, 葛洲坝路桥公司巴勒电站项目部迅速集 结救援队伍,携带生活物资投入救援,帮助村民渡过难关。 此举受到当地村民的交口称赞,进一步增进了项目部与当地 村民的感情。

During September 10 to 13, 2020, due to continuous heavy rain in Rajang River Basin of Malaysia, a number of villages suffered floods. The Balak Power Station Project Department of China Gezhouba Group Road & Bridge Co., Ltd. guickly assembled a rescue team carrying daily supplies to help the villagers go through the difficulties. The efforts were highly praised by the local villagers, which further enhanced the relationship between the project department and the local villagers.



#### "福"送万家,海外传递中国传统习俗 案例 Sending "Fu" to households and spreading traditional Chinese culture overseas

2020年1月14日,在新春佳节即将到来之际,葛洲坝国际 公司安哥拉桑比赞加项目部组织开展了"送万福进万家"活 动。项目部员工将"福"字送到当地社区居民家中,为他们 介绍中国新年的传统习俗,以及"福"字的美好寓意,受到 社区邻居们的热烈欢迎和衷心感谢。

On January 14, 2020 when the Spring Festival drew near, the staff of the Project Department of China Gezhouba Group International Engineering Co.,Ltd in Sambizanga, Angola sent the Chinese character Fu (good luck) to the local community residents, introducing to them the traditional Chinese New Year customs and the good meaning of Fu. The employees received a warm welcome and heartfelt thanks from the residents.



东电二公司为菲律宾马斯巴特市莫博镇贫困儿童捐款捐物 Northeast No.2 Electric Power Construction CO., Ltd. donates money and materials to the poor children in Mobo Town, Masbate City, Philippines.



安徽电建一公司巴基斯坦项目部在穆斯林传统节日"开斋节"期间, 慰问当地军方、安保部队和属地劳工

During the Festival of Fast-breaking, a traditional Muslim festival, the Pakistan project department of Anhui No.1 Electric Power Construction Co., Ltd. visits about 150 people from the local military, security forces and labors in the local.





浙江火电子公司云南火电中老铁路供电项目部到所在地学校开展慰 问和助学活动

The Sino-Laos railway power supply project department of Yunnan Thermal Power, a subsidiary of Zhejiang Thermal Power Construction Co., Ltd. visits a local school to provide educational assistance.



东电三公司孟加拉库尔纳电站项目部为库尔纳电厂业主小学捐款捐物

The Bengal Khulna power plant project department of Northeast No.3 Electric Power Construction Co., Ltd. donates money and materials to the primary school of Khulna Power Plant proprietors.

# <mark>责任绩效</mark> Report Index

<b>指标大类</b> Category	<b>绩效指标</b> Performance indicators	2016	2017	2018	2019	2020
<b>市场绩效</b> 不场绩效	资产总额(亿元) Total Assets (RMB 100 million)	3,070.34	3,557.83	3,965.54	4,252.82	4,764.23
	负债总额(亿元) Total Liabilities (RMB 100 million)	2,281.87	2,697.87	2,973.33	3,093.27	3,333.70
	所有者权益(亿元) Investors Equity (RMB 100 million)	788.47	859.96	992.21	1,159.55	1,430.53
	净资产收益率(%) Return on Equity (%)	10.20	10.14	9.56	8.6	7.17
	总资产报酬率(%) Return on Assets (%)	4.10	4.25	4.11	4.06	3.55
	国有资产保值增值率(%) Rate of Value Preservation and Increment of State-owned Assets (%)	107.9	105.4	111.0	107.84	108.7
	年度科技支出总额(亿元) Total S&T Expenditures of the Year (RMB 100 million)	41.06	58.42	57.95	63.61	74.94
	技术投入比率(%) Technical Input Ratio (%)	1.82	2.47	2.56	2.55	2.75
	新增专利数(项) New Patents	1,456	1,349	1,289	1,424	1,428
Social performance	纳税总额(亿元) Total Tax Paid (RMB 100 million)	102.47	116.99	125.28	110.99	101.75
	从业人数(人) Number of Employees	149,055	139,646	137,154	121,788	121,891
	在职职工(人) Number of In-service Employees	140,150	135,929	129,929	122,560	120,963
	在岗职工(人) Number of On-the-job Employees	126,545	120,042	114,226	107,586	108,077
	新增就业人数(人) Number of New Jobs Offered	2,379	4,467	3,973	4,381	4,800

指标大类 Category	<b>绩效指标</b> Performance indicators	2016	2017	2018	2019	2020
	劳动合同签订 (%) Rate of Signing Labor Contract (%)	100	100	100	100	100
	社会保险覆盖率 (%) Coverage of Social Insurance Program (%)	100	100	100	100	100
S	女性管理者比例(领导班子)(%) Percentage of Women Leaders (%)	4	4	3	3	3
Nocial performance	员工培训投入(万元) Employee Training (RMB 10,000)	1,200	1,200	1,335	1,389	1,203
l performanc	员工流失率 (%) Employee Turnover Rate (%)	3.49	4.78	4.90	5.07	4.32
Ğ	捐赠总额(万元) Total Donations (RMB 10,000)	1,427.03	1,309.72	501.36	2,358.49	4,281.66
	安全培训人数(人次) Participants in Safety Training	384,000	391,000	404,000	425,000	428,000
	安全生产投入(亿元) Inputs in Work Safety (RMB 100 million)	23.00	15.16	20.18	24.01	28.38
	环保培训人数(人)/ 覆盖率(%) Participants in Environmental Training/ Coverage (%)	123,000/76	60,000/42	70,000/52	75,000/61	76,000/63
Enviro	环保总投资(亿元) Total Environmental Investments (RMB 100 million)	16.00	8.32	4.03	6.72	5.20
nmental Pe	二氧化硫排放量(吨) SO <sub>2</sub> Emissions (ton)	9,071	9,012	8,249	8,127	8,087
环境绩效 胚境绩效	氮氧化物排放量(吨) NO <sub>x</sub> Emissions (ton)	17,985	17,867	17,679	17,175	17,091
ance	废水排放化学需氧量(吨) COD in Waste Water (ton)	7,224	7,203	7,181	7,007	7,054
	废水排放氨氮量(吨) NH <sub>*</sub> -N Discharge in Waste Water (ton)	1,088	1,084	1,082	1,058	1,064

# 展望 2021 Outlook 2021

擎旗奋进正当时,凝心聚力再出发。2021年是党的百年华诞和"十四五"开局之年,面对中华民族伟大复兴的战略全局和世 界百年未有之大变局,中国能建将高举习近平新时代中国特色社会主义思想伟大旗帜,围绕十九届五中全会擘画的宏伟蓝图, 继续肩负起"顶梁柱""稳定器""压舱石"的责任担当,立足新发展阶段,贯彻新发展理念,融入新发展格局,大力实施"1466" 战略,全力建设"一流能建、效益能建、品质能建、效率能建、人才能建、平安能建、创新与数字能建、幸福能建",以更加 坚定坚毅的信心,更加铿锵果敢的步伐,携手各利益相关方共同创造经济、社会、环境综合价值。

A TA A INBI

The year 2021 marks the 100th anniversary of the founding of the Communist Party of China and the beginning of the 14th Five-Year Plan period. To contribute to the overall strategy of the rejuvenation of the Chinese nation and address the unprecedented changes unseen in a century in the world, Energy China Group will hold high the banner of Xi Jinping Thought on socialism with Chinese Characteristics for the New Era and continue to shoulder the responsibility as a pillar, stabilizer and anchor on the basis of the blueprint of the Fifth Plenary Session of the 19th CPC Central Committee. At China enters the new development stage, we will also follow the new development philosophy and integrate ourselves into the new development paradigm, putting our "1466" strategy fully into practice. Our goal is to build "first-class, efficient, quality, safe, innovative and digital Energy China Group that values talent and brings safety and happiness". With stronger confidence and resolution, we will work with our stakeholders to create more economic, social and environmental values.





目录 Contents	GRI Standards		
董事长致辞 Message from the Chairman	102-14/102-15/102-16/201-1/201-2/203-2		
走进中国能建 About Us	102-1/102-2/102-3/102-4/102-5/102-6/102-10/102-18/102-45/201- 1/205-1		
社会责任管理 CSR Management	102-16/102-18/102-19/102-20/102-21/102-29/102-31/102-32/102- 33/102-34/102-40/102-42/102-43/102-44/102-47/103-1/103-2		
专题一:建功"十三五"书就能建精彩答卷 Feature 1 : Contribution to the 13th Five-Year Plan	201-2/203-1/205-2		
专题二: 决胜脱贫攻坚 展现能建责任担当 Feature 2 : Responsibility in Winning the Decisive Victory in the Battle against Poverty	413-1/413-2/415-1		
专题三:抗击新冠疫情 汇聚能建磅礴之力 Feature 3 : Pooling Energy to Fight Against COVID-19	203-1/203-2/415-1		
<b>实干报国 践行国家发展新战略</b> Working Hard to Serve the Country and Implementing the Country's New Development Strategies			
践行区域发展战略 Implementing Regional Development Strategies	103-1/103-2/201-1		
参与国家重大项目 Participating in Major National Projects	103-1/103-2/201-1		
投身"一带一路"建设 Dedicated to the Belt and Road Development	413		
推动生态文明建设 Advancing Ecological Civilization	102-15/102-29/103-1/302-4/302-5/		
<b>专业至臻 争做能源建设排头兵</b> Striving to be the Leader in Energy Engineering			
引领能源转型 Pioneering Energy Transformation	102-15/102-29		

# 目录 Contents 打造精品工程 Building Premium Engineering Projects 实施创新驱动 Promoting Innovation-driven Development 携手合作共赢 Win-win Cooperation 价值共享 服务美好生活新向往 Sharing Value and Serving People's Aspiration for a Better Life 筑牢发展基础 Cementing the Foundation of Development 赋能员工成长 Empowering Employee Growth 助力民生改善 Helping Improve People's Wellbeing 责任绩效 Report Index 展望 2021 Outlook 2021

指标索引 Report Index

编制说明 About the Report

读者意见反馈表 Feedback

### **GRI Standards**

102-15/102-29

203-2

102-9/102-15/102-29/103-1

102-15/102-22/102-29/102-30/103-2/201-1/205-2

102-7/102-8/102-15/102-29/103-1/401-1/401-2/403-4/404-2/416-1

102-15/102-29/413-1/413-2

102-7/102-8/201-1/305-1/305-7/401-1

102-15/102-48

102-55

102-3/102-4/102-46/102-50/102-52/102-53/102-54

102-46

# 编制说明

本报告是中国能源建设集团有限公司发布的第九份年度社会责任报告。报告向中国能源建设集团有限公司利益相关方全面披露 公司社会责任理念、实践和成效。

### 报告范围

本报告为 2020 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) 2020 年 1 月 1 日至 2020 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。

### 编制依据

- •国务院国资委《关于中央企业履行社会责任的指导意见》(国资发研究〔2008〕1号)
- 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-CSR4.0)
- 全球可持续发展标准委员会(GSSB) 《GRI 可持续发展报告标准》(GRI Standsrds)

### 称谓说明

为便于表述和阅读,本报告"中国能建""公司""我们"指代中国能源建设集团有限公司。

### 报告获取

您可以在中国能建网站(www.ceec.net.cn)上浏览或下载报告电子文本,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。

电话: 010-59099841

传真: 010-59098888

邮箱: csr@ceec.net.cn

地址:北京市朝阳区西大望路 26 号 1 号楼 2008 室

# **About the Report**

We are now presenting the 9th social responsibility report of China Energy Engineering Group Co., Ltd. as a 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 2020 annual report covers Energy China Group and all its subsidiaries throughout the period from January 1, to December 31, 2020, and this report includes additional content and information that pre-dates the stated reporting period.

## **Compliance Conformance**

- (GZFYJ [2018] No.1) by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)
- Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises (GZFYJ [2016] No.105) by SASAC
- Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises in Construction Industry (CASS-CSR4.0) by the Chinese Academy of Social Sciences (CASS)
- GRI Sustainability Reporting Standards (GRI Standards) by Global Sustainability Standard Board (GSSB)

### References

For better expression and reading, 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:

Tel.: 010-59099841 Fax: 010-59098888 Email: csr@ceec.net.cn Address: Room 2008, Building 1, No. 26, Xidawang Road, Chaoyang District, Beijing, China

• Guiding Opinions on the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities

• Guidance on Social Responsibility Reporting (GB/T 36001-2015) by Standardization Administration of the People's Republic of China (SAC)

读者意	见反	馈表
-----	----	----

# Feedback

Dear readers,			
Thanks for taking your precious time reading this Report. We are looking for 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			
2. It responds to stakeholder concerns			
🗆 Very good 🛛 🗋 Good 🔅 🗋 Fair			
3. It contains accurate and complete data/information			
🗆 Very good 🛛 🗔 Good 🔅 🗋 Fair			
4. Its readability in terms of layout, contents, logic threads and wording			
□ Very good □ Good □ Fair			
5. What else would you like to see in the report?			
6.Do you have any suggestions on our future CSR performance and reporting			
7.Please leave your basic information, if convenient.			
Name Title Company Address			
Postcode E-mail Tel Fax			
Tel.: 010-59099841			
Fax: 010-59098888			

传真: 010-59098888

地址:北京市朝阳区西大望路26号1号楼

Address: Building 1, No. 26, Xidawang Road, Chaoyang District, Beijing, China

rward to your suggestions and opinions. Please complete the

ance

g?