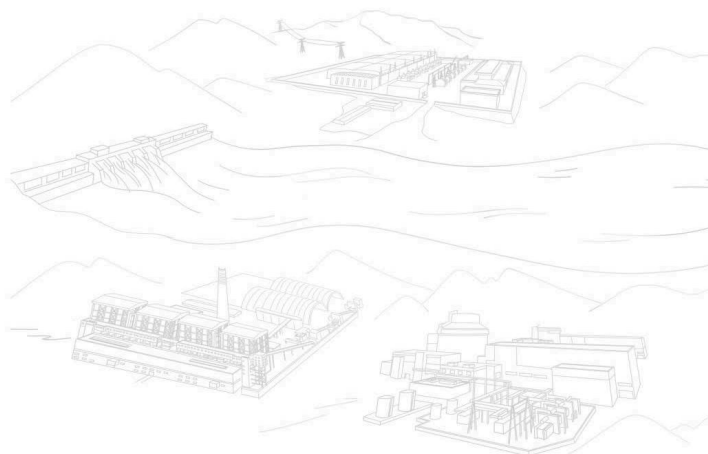


ENERGY CHINA

NATURAL GAS POWER GENERATION
HYDROPOWER
POWER TRANSMISSION AND TRANSFORMATION
NUCLEAR POWER



Energy China Official WeChat Account 中国能建 微信公众号
Energy China Official Weibo Account 中国能建 微博账号
Energy China Official X Account 中国能建 X账号
Energy China Global Official Website 中国能建 国际网首页

Company Address

Building 1, No. 26, Xidawang Road, Chaoyang District, Beijing, China
Postal Code: 100022 Tel: +8610 59099999 Fax: +8610 59098888

公司地址

中国北京市朝阳区西大望路26号1号楼
邮编: 100022 电话: (010)59099999 传真: (010)59098888

CONTENTS 目录

OVERVIEW 企业概况 P2

 P6
NATURAL GAS POWER GENERATION
天然气发电

 P20
HYDROPOWER
水电

 P30
POWER TRANSMISSION AND TRANSFORMATION
输变电

 P42
NUCLEAR POWER
核电

SCHEDULE: KEY TRADITIONAL ENERGY PROJECTS OF ENERGY CHINA
附录: 中国能建传统能源重点项目一览表 P48

OVERVIEW

企业概况

China Energy Engineering Group Co., Ltd. (Energy China) is a comprehensive, large-scale conglomerate that provides integrated solutions and full-industry chain services for global energy, power, and infrastructure sectors. Being a dual-listed company on A-share and H-share exchanges, the company has been ranked among the Fortune Global 500 Companies for multiple consecutive years. China Energy International Group Co., Ltd. (Energy China International), a wholly-owned subsidiary of Energy China, spearheads and coordinates the international business development initiatives of its parent company.

As an innovation-led and technology-driven enterprise specializing in integrated energy solutions and comprehensive infrastructure development, we are committed to fostering technological innovation and leading the modernization of industrial chains. Guided by our core development concepts of "innovation, sustainability, digital intelligence, and integration", we strategically position ourselves in emerging and future industries. We will spare no effort to accelerate the development of advanced productive capabilities, contribute to the global prosperity, and build a sustainable future for humanity.

中国能源建设集团有限公司（简称中国能建）是一家为全球能源电力、基础设施等行业提供整体解决方案和全产业链服务的综合性特大型集团公司，连续多年入选《财富》世界500强，是“A+H”股上市公司。中能建国际建设集团有限公司（简称中国能建国际集团）是中国能建的全资子公司，引领统筹中国能建国际业务发展。

作为以创新为引领的科技创新型、一体化能源型、综合基建型、融合发展型企业，我们积极打造原创技术策源地，争当现代产业链链长，紧紧围绕“创新、绿色、数智、融合”核心理念，布局战略性新兴产业和未来产业，加快形成新质生产力，为推动世界繁荣发展、共建人类美好家园贡献能建之智、发挥能建之力、展现能建之为。



147

Businesses spanning 147 countries and regions across the globe
业务遍布全球147个国家和地区



256

256 international branches
在全球设有256个分支机构

8 core advantages

<p>Preeminent vantage in national think-tanks, top-tier design, and high-end planning consulting 强大的国家智库、顶层设计与规划咨询的高端优势</p>	<p>Significant edge in industrial clusters and new quality productive forces 强大的产业集群与新质生产力优势</p>
<p>Powerful advantage in energy technology, standards, and integration and innovation systems 强大的能源技术、标准、集成与创新的系统技术优势</p>	<p>Substantial superiority in global reach and internationalization 强大的国际化优势</p>
<p>Outstanding capacity in full industry chain and systemic problem-solving 强大的全产业链与系统解决能力的一体化优势</p>	<p>Exceptional ability in to integrated domestic and international resources 强大的国内外资源整合优势</p>
<p>Notable prowess in integration and infusion 强大的综合化与融合化优势</p>	<p>Robust strength in a composite, comprehensive, and specialized talent force 强大的各类复合型、综合性与专业化人才队伍优势</p>

Four Alliances

Energy China has taken a leading role in establishing and participating in "Four Alliances", accelerating the development of innovation hubs and new growth engines that drive the advancement of green energy.
中国能建牵头组建“四大联盟”，加快打造绿色能源发展的科创策源地和发展新高地。

<p>International Investment Alliance for Renewable Energy 新能源国际投资联盟</p>	<p>China Energy Storage Industry Innovation Alliance 中国新型储能产业创新联盟</p>
<p>New Energy, New Infrastructure & New Industry Alliance (NE2IA) 新能源、新基建、新产业联盟</p>	<p>China Construction Supply Chain Cooperation and Development Alliance 中国建筑业供应链合作发展联盟</p>

TRADITIONAL ENERGY
传统能源

TRADITIONAL ENERGY

传统能源

Energy China boasts robust technical expertise and extensive project experience across various energy and power sectors, including gas turbines, hydropower, clean transformation of thermal power plants, and power transmission & transformation. The company has successfully invested in and constructed numerous globally recognized benchmark projects. Dedicated to safeguarding global energy security, Energy China is at the forefront of driving the transformation and upgrading of the global energy structure.

中国能建在燃机、水电、火电站清洁改造、输变电等能源电力领域拥有强大的技术积累和丰富的项目经验，投资建设了一大批全球示范性标杆项目。致力于为全球能源安全提供坚实保障，推动全球能源结构转型升级。

Successfully engineered and developed over **1,000** hydropower projects of diverse types, accumulating a total installed capacity of approximately **2,600GW**
参与设计、建设超过**1000**座各类型水电工程，总装机容量超过**2600GW**

Undertaken the survey, engineering design, and EPC contracting for power transmission line projects above 220kV, with a cumulative length exceeding **180,000km**
勘察设计和总承包电压等级为220kV以上的输电工程超过**18万公里**

Spearheaded or contributed to the construction of over **100** thermal power units, each with a single-unit capacity of 1,000MW or above
主导或参与建设的单机容量为1000MW及以上的火电机组超过**100台**

NATURAL GAS POWER GENERATION

天然气发电

Energy China boasts a complete industrial chain in natural gas power generation, supported by extensive project experience and advanced technology. The company has achieved full-cycle technical mastery in gas turbine projects across all capacity classes, encompassing design, construction, commissioning, operation, and maintenance. With a dominant market share of nearly 80% in China's gas turbine sector, Energy China maintains an unparalleled leadership position in the industry. As of 2024, Energy China has been involved in over 390 gas turbine power plant projects through various service models, including EPC, survey and design, consulting, and construction, with a total number of gas turbine units of 597, and an aggregate installed capacity exceeding 201.2GW.

中国能建拥有完整的天然气发电业务产业链，项目业绩丰富、技术先进，掌握各级别燃气发电设计、施工、调试及运行维护技术，占据国内燃机市场份额近80%，在行业处于绝对领先的地位。截至2024年，中国能建参与总承包、勘察设计、咨询和建设的燃机电站项目超过390个，合计597台（套），总装机容量超过201.2GW。

Syr Darya 1,500MW Gas-fired Combined Cycle Power Plant in Uzbekistan (EPC)

乌兹别克斯坦阿姆河1500MW燃气联合循环电站（工程总承包）

With an installed capacity of 1,500MW, the Project adopts the world's most advanced gas turbine technologies, featuring the highest combustion temperature, largest single-unit power output, and optimal thermal efficiency, and integrates comprehensive "zero liquid discharge" design, which makes it a world-class benchmark project with high-efficiency, eco-friendly power generation, energy conservation and environmental sustainability. Gas turbine: Mitsubishi M701JAC

1500MW，采用目前世界上燃烧温度最高、单体功率最大、效率最高的燃气轮机“废水零排放”设计方案，世界领先的绿色节能环保工程。主机：三菱M701JAC

天然气发电
NATURAL GAS POWER GENERATION

全产业链
FULL-CHAIN INDUSTRIAL

设计建造
DESIGN-BUILD

运营
OPERATION

Taiba2 and Qassim2 Gas-Fired Combined Cycle Power Plant Project in Saudi Arabia (EPC)
沙特 Taiba2、Qassim2 燃气联合循环电站项目（工程总承包）

With a total installed capacity of 3.6GW, the Project is engineered with cutting-edge efficiency optimization and advanced environmental protection systems, incorporating H-class heavy-duty gas turbine combined cycle units designed for dual-fuel operation. Gas turbine: Siemens SGT6-9000HL

总规模 3.6GW，设计以高效、环保为理念，采用 H 级重型燃机联合循环机组，适应双燃料运行。主机：西门子 SGT6-9000HL

El Wadah 2x450MW Gas Turbine Project in Morocco (EPC, Joint Venture with Mitsubishi Power)
摩洛哥艾勒瓦达 2x450MW 燃气项目（工程总承包，与三菱动力联合体）

With a total installed capacity of 2x450MW, the Project is currently the largest power plant in Morocco. Gas turbine: Mitsubishi M701J

2x450MW，目前摩洛哥最大的电站。主机：三菱 M701J



Zhujiang LNG Power Plant Phase II Backbone Support and Peak-Regulating Power Project in Guangzhou, China (EPC)
中国广州珠江 LNG 电厂二期骨干支撑调峰电源项目 (工程总承包)

With a total installed capacity of 2x600MW, the Project sets the benchmark for 600MW-class combined cycle power generation units in China. It pioneers the high-level water collection mechanical draft cooling tower technology, achieving exceptional energy efficiency and environmental performance. Gas turbine: Mitsubishi M70J 2x600MW, 中国 600 兆瓦级联合循环发电机组最高水平, 首创高位收水机械通风冷却塔技术, 节能环保效果显著。主机: 三菱 M70J



Huizhou Daya Bay Petrochemical Zone Comprehensive Energy Station Project Unit 1 in China (Survey and Design)
中国惠州大亚湾石化区综合能源站项目 1 号机组项目 (勘察设计)

With a total installed capacity of 1x650MW, the Project marks the first deployment of 9HA.01 gas turbine in China, and serves as a national demonstration project for energy conservation and emission reduction. Gas turbine: GE 9HA.01

1x650MW, 中国首次采用 9HA.01 型燃气轮机, 节能减排示范引领项目。主机: 通用电气公司 9HA.01

Tianjin Junliangcheng 650MW Combined Cycle Power Plant Project in China (EPC)
中国天津军粮城 650MW 联合循环电站项目 (工程总承包)

With a total installed capacity of 650MW, the Project achieves a record-breaking thermal efficiency of 63.36% and a combined cycle output of 672.859MW, establishing itself as the most efficient operational gas-fired combined cycle unit in China. Gas turbine: GE 9HA.01

650MW, 机组热效率高达 63.36%, 联合循环功率达 672.859MW, 中国已投运效率最高的燃气联合循环机组。主机: 通用电气公司 9HA.01

Songon Gas-Fired Combined Cycle Power Plant Project in Côte d'Ivoire (Investment)
科特迪瓦松贡燃气联合循环电站项目 (投资)

Total Installed Capacity: 372MW. Designed with high efficiency and environmental protection as the concept, it adopts E-class heavy-duty gas turbines in combined cycle unit, which is suitable for dual-fuel operation. Gas turbine: General Electric (GE) 9E.03

总规模 372MW, 设计以高效、环保为理念, 采用 E 级重型燃气联合循环机组, 适应双燃料运行。主机: 通用电气 (GE) 9E.03

Johor 1440MW Combined Cycle Power Plant Project in Malaysia (Construction and Installation)
马来西亚柔佛州 1440MW 联合循环电站项目 (施工、安装)

With a total installed capacity of 2x720MW, the Project is the world's first GE 9HA.02 combined cycle gas power plant to achieve commercial operation. Gas turbine: GE 9HA.02

2x720MW, 全球首套实现商业运行的 GE 9HA.02 联合循环发电厂。主机: 通用电气公司 9HA.02



List of Representative Gas Turbine Projects of Energy China

中国能建燃机典型项目清单

Project 项目	Installed Capacity 装机容量	Installed Model 装机型号	Nationality 国别	Model 实施模式
Gazlan I Combined Cycle Gas Power Plant Expansion Project in Saudi Arabia 沙特加兹兰 I 联合循环燃气电站扩建项目	3200MW	7E.05	Saudi Arabia 沙特	EPC 工程总承包
Ningzhou Power Station Site Replacement Project in Dongguan, China 中国东莞宁洲厂址替代电源项目	3x840MW	9H	China 中国	Survey and design 勘察设计
Taiba II 1,800MW Gas-Fired Combined Cycle Independent Power Producer Project in Saudi Arabia 沙特泰巴 II 1800MW 燃气联合循环独立发电项目	1800MW	SGT6-9000HL	Saudi Arabia 沙特	EPC 工程总承包
Qassim II 1,800MW Gas-Fired Combined Cycle Independent Power Producer Project in Saudi Arabia 沙特凯西姆 II 1800MW 燃气联合循环独立发电项目	1800MW	SGT6-9000HL	Saudi Arabia 沙特	EPC 工程总承包
Syr Darya 1,500MW Gas-fired Combined Cycle Power Plant in Uzbekistan 乌兹别克斯坦锡尔河 1500MW 燃气联合循环电站	1500MW	9H	Uzbekistan 乌兹别克斯坦	EPC 工程总承包
Johor 1,440MW Combined Cycle Power Plant Project in Malaysia 马来西亚柔佛州 1440MW 联合循环电站项目	1440MW	9H	Malaysia 马来西亚	Construction general contracting 施工总承包
Beijing Northwest Thermal Power Center Jingheng Gas-Fired Cogeneration Project in China 中国北京西北热电厂中心京能燃气热电项目	1350MW	9F	China 中国	Construction general contracting 施工总承包
Jhang 1,263MW Combined Cycle Power Plant Project in Pakistan 巴基斯坦吉航 1263MW 联合循环电站项目	1263MW	9H	Pakistan 巴基斯坦	Design and construction 设计建设
Balloki Combined Cycle Power Plant in Pakistan 巴基斯坦百路凯联合循环电站	1223MW	9HA	Pakistan 巴基斯坦	Design and construction 设计建设
Bhikki Combined Cycle Power Plant in Pakistan 巴基斯坦必凯联合循环电站	1180MW	9H	Pakistan 巴基斯坦	Design and construction 设计建设
Tianjin Junliangcheng Cogeneration Project in China 中国天津军粮城热电联产项目	650MW (Gas) + 350MW (Coal) 650MW (燃气) + 350MW (燃煤)	9HA	China 中国	Design and construction 设计建设
El Vigia 570MW Combined Cycle Power Plant Project in Venezuela 委内瑞拉比亚 570MW 联合循环电站项目	570MW	7F	Venezuela 委内瑞拉	Construction general contracting 施工总承包
CHN Energy Zhejiang Main Construction Works for Anji 2x9H-Class New Gas Turbine Project, Nanxun Power Plant 中国能建浙江公司南浔电厂安吉 2x9H 级燃机新建工程主体施工项目	2x780MW	9H.02	China 中国	Construction and installation works of units 1 & 2, utility system 1号、2号机组及公用系统建筑和安装工程
China Sichuan Provincial Investment Ziyang Gas-fired Power Plant New Construction Project 中国四川投资阳燃气电站新建工程	2x750MW	9H	China 中国	EPC 工程总承包
Sichuan Energy Investment Survey and Design Works for Guangyuan Gas Turbine Power Plant Project 中国四川能投广元燃机工程项目勘察设计项目	2x700MW	9H	China 中国	Survey and design 勘察设计
China Huadian Zengcheng Gas-fired Combined Cooling, Heating, and Power Project in Guangzhou 中国华电广州增城燃气冷热电三联供工程	2x670MW	9H	China 中国	Survey and design 勘察设计
China Huadian Chongqing Tongnan Phase 1 2x500MW Gas-Fired Power Plant Project 中国重庆华电通南一期 2x500MW 气电项目	2x500MW	9F	China 中国	Survey and design 勘察设计
2x475MW Gas-Steam Combined Cycle Power Generation Units of Jiangsu Guoxin Huanan Second Gas Turbine Project in China 中国江苏国信淮安第二燃机项目 2x475MW 级燃气-蒸汽联合循环发电机组	2x475MW	9F	China 中国	Construction general contracting 施工总承包
2x475MW F-Class Gas Turbine Unit Phase II Expansion Project of Qishuyan Power Generation Co., Ltd., China Huadian Jiangsu 中国江苏华电戚墅堰发电有限公司 F 级 2x475MW 燃机二期扩建工程	2x475MW	9F	China 中国	Construction general contracting 施工总承包

Project 项目	Installed Capacity 装机容量	Installed Model 装机型号	Nationality 国别	Model 实施模式
China Huadian Jiangsu Yangzhou 2x400MW Gas Turbine Project 中国江苏华电扬州2x400MW 燃气轮机项目	2x475MW	9F	China 中国	Construction general contracting 施工总承包
China Huadian 2x460MW Gas-Fired Cogeneration Project Unit 1 in Shunde Qingyuan (Yingde) Economic Cooperation Zone 中国华电顺德清远(英德)经济合作区2x460MW 燃气热电联产项目1#机组	2x460MW	9F	China 中国	Construction general contracting 施工总承包
Bin Qasim 900MW Gas-Steam Combined Cycle Power Plant Project in Pakistan 巴基斯坦滨佳佳 900MW 燃气-蒸汽联合循环电站项目	900MW	9F	Pakistan 巴基斯坦	Construction general contracting 施工总承包
China Huadian Jiangsu Kunshan Gas-Fired Cogeneration Project 2x450MW Units 中国江苏华电昆山燃气热电联产工程2x450MW 机组	2x450MW	9F	China 中国	Construction general contracting 施工总承包
Missan 800MW Combined Cycle Power Plant Project in Iraq 伊拉克米桑 800MW 联合循环电厂项目	800MW	9F	Iraq 伊拉克	Construction general contracting 施工总承包
CLP Sihui 2x400MW Gas-Fired Combined Cooling, Heating, and Power Project 中国中电四会2x400MW 级燃气热电冷联产项目	2x400MW	Improved F-class 改进型F级	China 中国	Construction general contracting 施工总承包
Jiangsu Guoxin Xielian 2x400MW Gas-Fired Cogeneration Project 中国江苏国信宜兴联 2x400MW 级燃气热电联产项目	2x400MW	9F	China 中国	Construction general contracting 施工总承包
Datang Gaoyao Jintao Gas-fired Combined Cooling, Heating, and Power Project 2x400MW 9F-Class Units Works 中国大唐高要金陶天然气热电冷联产项目 9F 级 2x400MW 机组工程	2x400MW	9F	China 中国	Construction non construction and installation works 建筑安装工程
China Qishuyan Power Plant 2x390MW Gas-Steam Combined Cycle Units Project 中国戚墅堰发电厂 2x390 级燃气-蒸汽联合循环机组工程	2x390MW	9F	China 中国	Construction general contracting 施工总承包
SOYO 1 Combined Cycle Power Plant Project in Angola 安哥拉 SOYO 1 联合循环电站工程	2x375MW	9E	Angola 安哥拉	Survey and design 勘察设计
EPC Contract for Fujian Jinjiang Natural Gas Power Plant 4x350MW Gas-Steam Combined Cycle Unit 中国福建晋江天然气发电厂 4x350MW 级燃气-蒸汽联合循环发电机组施工总承包	4x350MW	9F	China 中国	Construction general contracting 施工总承包
Zhenhai 2x390MW Power Plant Oil-to-Gas Conversion Project in China 中国镇海 2x390MW 电厂燃油改建燃气发电工程	3x390MW	9F	China 中国	Civil construction and installation engineering of plant 全场土建及安装工程
2x220MW Gas-Fired Cogeneration Project of Qishuyan Thermal Power Co., Ltd., China 中国江苏华电戚墅堰热电有限公司 2x220MW 燃气热电联产项目	2x220MW	9E	China 中国	Construction general contracting 施工总承包
Zhejiang Energy Installation Works of Zhenhai Gas Turbine Relocation and Upgrade Project 中国浙能镇海燃气轮机异地迁建改造项目全厂安装工程	490MW	AE94.3A	China 中国	Installation engineering of plant 全厂安装工程
Lukoml 430MW Combined Cycle Power Plant Project in Belarus 白俄罗斯卢克米里 430MW 联合循环电站项目	430MW	9F	Belarus 白俄罗斯	Construction general contracting 施工总承包
Lukoml State District Power Plant 400MW Combined Cycle Gas Turbine Project in Belarus 白俄罗斯卢克米里国营地区电站 400MW 联合循环燃气项目	1x400MW	9F	Belarus 白俄罗斯	Survey and design 勘察设计
Berezov State District Power Plant 400MW Combined Cycle Gas Turbine Project in Belarus 白俄罗斯别列佐夫国营地区电站 400MW 联合循环燃气项目	1x400MW	9F	Belarus 白俄罗斯	Survey and design 勘察设计
Guddu 747MW Combined Cycle Power Plant Project in Pakistan 巴基斯坦古杜 747MW 联合循环电站项目	747MW	9F	Pakistan 巴基斯坦	Construction general contracting 施工总承包
SAHIWAL Gas-Fired Combined Cycle Power Plant in Pakistan 巴基斯坦 SAHIWAL 燃气联合循环电站	1320MW	6F	Pakistan 巴基斯坦	Survey and design 勘察设计
China Guoxin Gaoyou 2x100MW Gas-Fired Cogeneration Project 中国信高邮 2x100MW 燃气热电联产工程	2x100MW	6F	China 中国	Construction general contracting 施工总承包
Ahlonge Gas-Fired Combined Cycle Power Plant in Myanmar 缅甸 Ahlonge 阿弄燃气联合循环机组	183MW	9E	Myanmar 缅甸	EPC 工程总承包
Pančevo 160MW Combined Cycle Power Plant Project in Serbia 塞尔维亚潘切沃 160MW 联合循环电站项目	160MW	6F	Serbia 塞尔维亚	Construction general contracting 施工总承包
China Huadian Guangdong Gas-Fired Distributed Energy Station Project in Qingyuan Overseas Chinese Industrial Park 中国广东华电清远华侨城燃气分布式能源站项目	2x50MW	F-class F级	China 中国	EPC 工程总承包

HYDROPOWER 水电

Three Gorges Hydroelectric Power Station on China's Yangtze River (Construction)
中国长江三峡水利枢纽工程 (承建)

With a total installed capacity of 22,500MW, the Project is the world's largest hydropower station in term of installed capacity, and honored with the 2013 EIDIC Centennial Outstanding Civil Engineering Project Award.
22500MW, 世界装机容量最大水电站, 获 2013 年菲迪克百年重大土木工程杰出项目奖。

Energy China has established a complete industrial chain in hydropower sector, integrating planning, consulting, survey, design, construction, investment, and operation. The company has successfully delivered over 1,000 hydropower projects worldwide, including five of the world's top ten hydropower stations and all of China's top ten hydropower stations, with a total installed capacity exceeding 2,600GW. Having set over 100 world records in hydropower construction, Energy China is globally recognized as the "No. 1 Hydropower Brand Worldwide", and holds an unparalleled leadership position in the international hydropower sector.

中国能建拥有集规划咨询、勘察设计、工程建设、投融资于一体的水电业务完整产业链, 在全球承建了包括世界十大水电站中的五座、中国十大水电站在内的各类水电工程 1000 余座, 总装机容量超过 2600GW, 创造 100 多项世界之最, 被誉为全球水电“第一品牌”, 在行业处于绝对领先地位。





中国能建
ENERGY CHINA
水电
HYDROPOWER

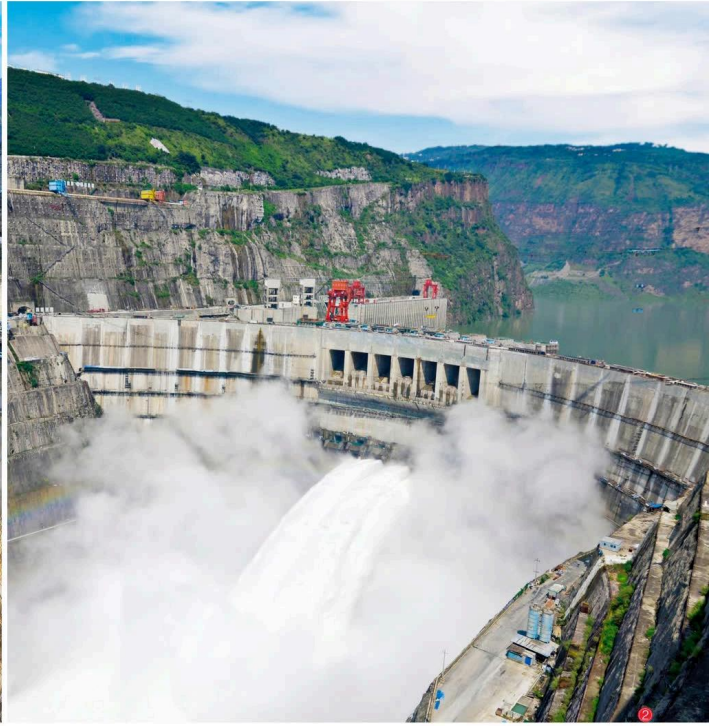


Baihetan Hydropower Station in China (Participation in construction)

中国白鹤滩水电站 (参建)

1 With a total installed capacity of 16,000MW, the Project is the world's second -largest hydropower station, and honored withawarded the 2023 FIDIC Outstanding Engineering Project Award.

16000MW，世界第二大水电站，获 2023 年度菲迪克卓越工程项目奖。

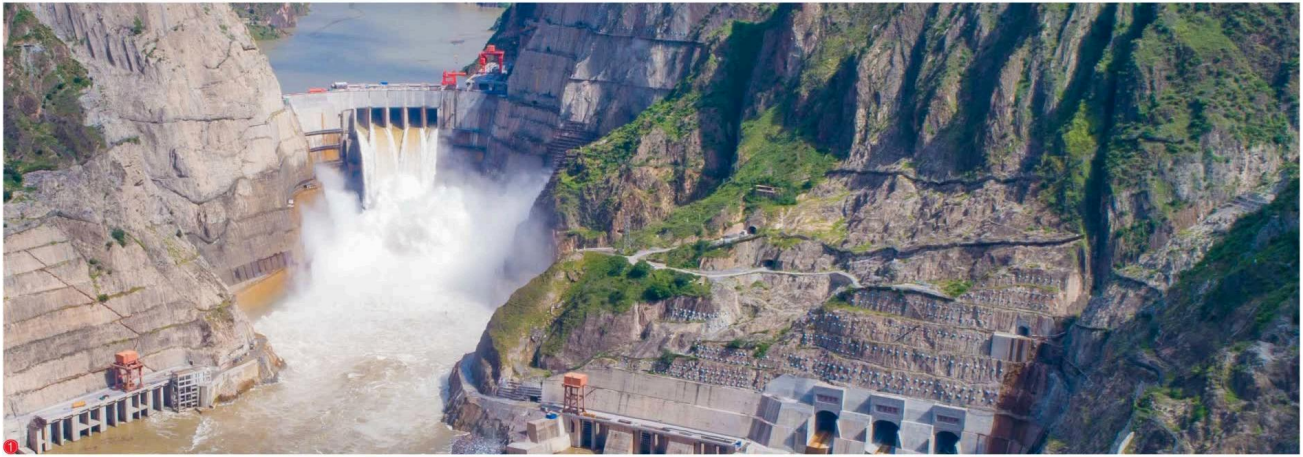


Xiluodu Hydropower Station in China (Construction)

中国溪洛渡水电站 (承建)

2 With a total installed capacity of 13,860MW, the project is the world's fourth largest hydropower station, and honored with the 2016 FIDIC Outstanding Engineering Project Award.

13860MW，世界第四大水电站，获 2016 年菲迪克工程项目杰出奖。



Wudongde Hydropower Station in China (Construction)

中国乌东德水电站 (承建)

1 With a total installed capacity of 10,200MW, the Project is the world's seventh largest hydropower station, and honored with the 2022 FIDIC Engineering Project Award.

10200MW，世界第七大水电站，获 2022 年度菲迪克工程项目奖。

Xiangjiaba Hydropower Station in China (Construction)

中国向家坝水电站 (承建)

2 With a total installed capacity of 7,750MW, the Project is the world's eighth largest hydropower station.

7750MW，世界第八大水电站。





Kirchner-Cepernic Hydropower Station in Argentina (EPC + F + O&M)
阿根廷吉赛水电站 (工程总承包 + 融资 + 运维)

1 With a total installed capacity of 5x190MW + 3x120MW, the Project is the largest China-Argentina cooperation project signed in the presence of the two countries' heads of state, comprising a 173km 500kV UHV transmission line (including 5 substations).

5x190MW+3x120MW, 以及一条 173KM 500KV 超高压输电线路 (含 5 个变电站), 两国元首见证的中阿最大合作项目。

Caculo Cabeca Hydropower Station in Angola (EPC + F)
安哥拉凯普水电站 (工程总承包 + 融资)

2 With a total installed capacity of 4 x 530MW + 1 x 52MW, the Project is the largest hydropower station constructed by a Chinese enterprise in Africa.

4x530MW+1x52MW, 中资企业在非洲承建的最大规模水电站。

Dasu Hydropower Station in Pakistan (Civil Works + Steel Structure EPC)
巴基斯坦达苏水电站 (土建 + 钢结构 EPC)

3 With a total installed capacity of 5,400MW, the Project ranks among the most technically challenging projects in Pakistan, with largest installed capacity and highest total investment.

5400MW, 目前巴基斯坦技术最艰、总装机容量最大、总投资最大的项目之一。



Dabar Hydropower Station in Bosnia and Herzegovina (EPC + F)
波斯尼亚巴尔水电站 (工程总承包 + 融资)

1 With a total installed capacity of 159.15MW, the Project is the largest hydropower station in Central and Eastern Europe.

159.15MW, 中东欧地区最大水电站。



Tekeze Hydropower Station in Ethiopia (Construction General Contracting)
埃塞俄比亚特泽水电站 (施工总承包)

2 With a total installed capacity of 300MW, the Project is the largest hydropower station in Ethiopia, and the first overseas hydropower project to be honored with the most prestigious construction industry accolade in China - Luban Prize.

300MW, 埃塞俄比亚最大水电站, 获海外水电站项目首个中国建筑领域最高奖项鲁班奖。

POWER TRANSMISSION AND TRANSFORMATION

输变电

Energy China demonstrates world-class expertise in power transmission and transformation services, encompassing consulting, survey, and design. The company maintains comprehensive technical proficiency in advanced engineering technologies for UHV AC/DC systems, flexible DC solutions, and GIL corridors. Energy China sustains a globally leading position in the industry, by virtue of its complete capabilities in planning, consulting, survey, design, and EPC contracting for power transmission and transformation projects across all voltage classifications. As of 2024, Energy China holds nearly 60% of the China's market share in transmission and transformation design services. In addition, Energy China has delivered numerous power transmission projects (with a cumulative contract value exceeding 10 billion US dollars) and substation projects (with a cumulative contract value exceeding 5 billion US dollars) through EPC, survey, design, consulting, and construction.

中国能建拥有世界一流的输变电咨询、勘察、设计实力，全面掌握特高压交流、柔性直流、GIL 管廊等输电工程设计技术，可承担全部电压等级输变电工程的规划咨询、勘察设计及总承包业务，处于国际领先水平。截止 2024 年，中国能建在国内输变电设计市场份额接近 60%，参与总承包、勘察设计、咨询和建设的输变电工程累计完成合同金额超 100 亿美元，变电工程累计完成合同金额超 50 亿美元。

Changji-Guquan $\pm 1100\text{kV}$ UHVDC Transmission Project in China (Design)

中国昌吉-古泉 $\pm 1100\text{kV}$ 特高压直流输电工程 (设计)

With a transmission line spanning 3,293km, a capacity of 12,000MW, and a voltage of 1100kV, the Project is currently the world most technologically advanced transmission system, featuring the highest voltage level, largest transmission capacity, and longest transmission distance.

线路长度 3293KM，输送容量 12000MW，电压为 $\pm 1100\text{kV}$ ，目前世界上电压等级最高、输送容量最大、输电距离最远、技术水平最先进的输电工程。

中国能建
ENERGY CHINA

中国能建
ENERGY CHINA

中国能建
ENERGY CHINA

中国能建
ENERGY CHINA

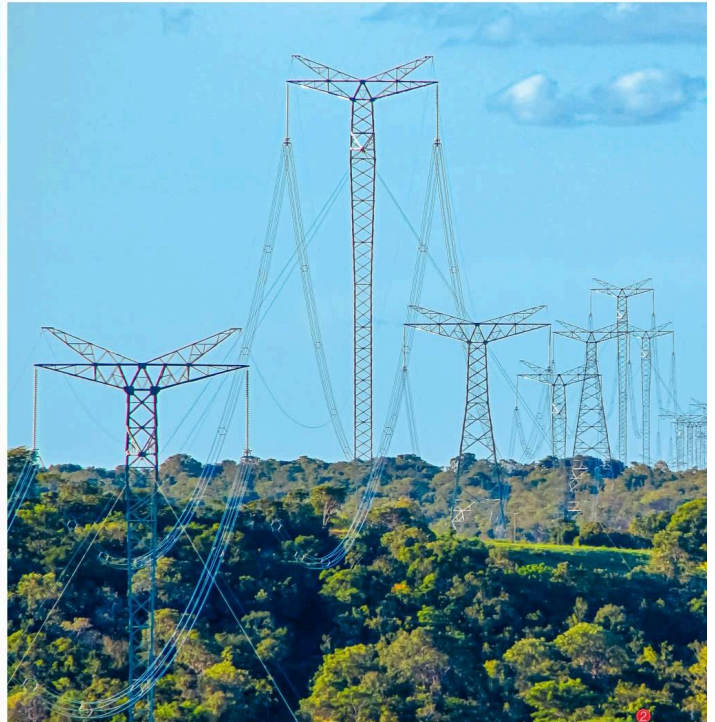


Baihetan-Jiangsu $\pm 800\text{kV}$ UHVDC Transmission Project in China (Design and Construction)

中国白鹤滩-江苏 $\pm 800\text{kV}$ 特高压直流输电工程 (设计建设)

With a total length of 2,087km, it is the first hybrid cascaded UHVDC transmission project worldwide.

线路全长 2087 公里，全球首个混合级联特高压直流工程。

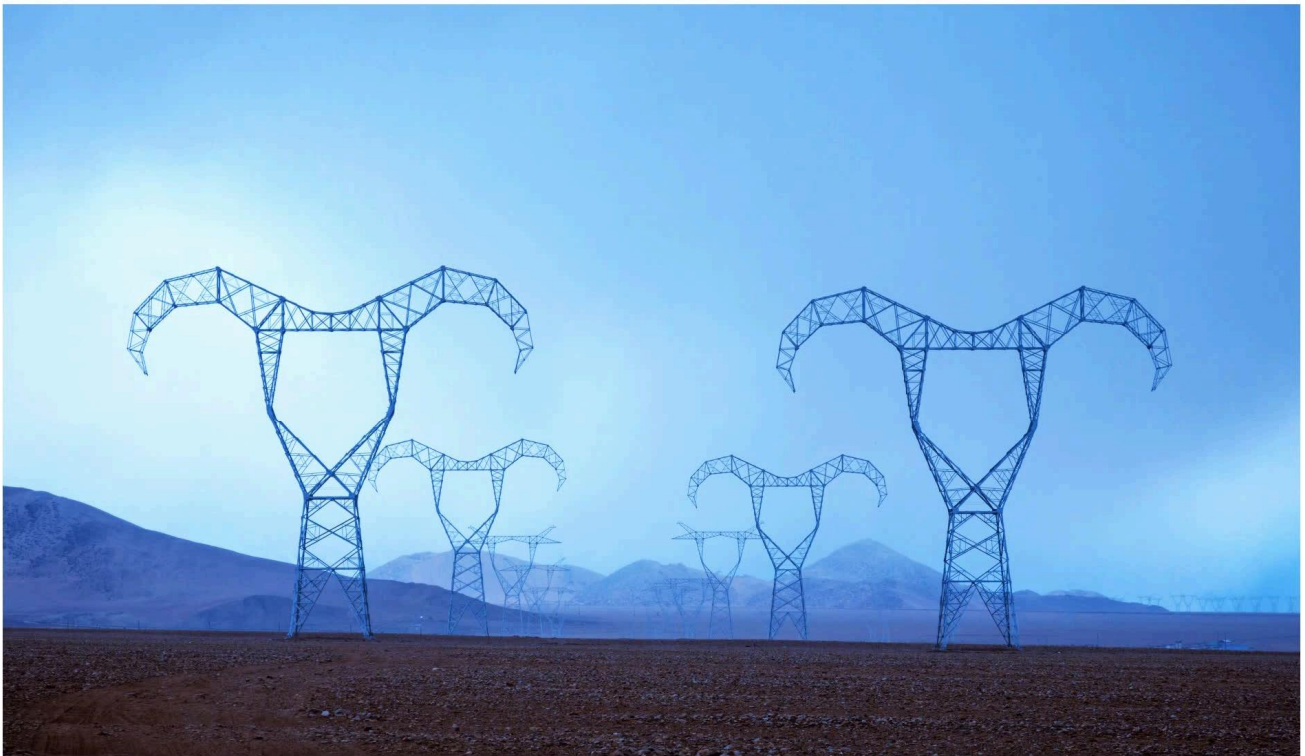


Belo Monte $\pm 800\text{kV}$ DC Transmission and Transformation Project in Brazil (Survey and Design)

巴西美丽山 $\pm 800\text{kV}$ 直流输电项目 (勘察设计)

With an operating voltage of $\pm 800\text{kV}$, the Project is China's first overseas deployment of UHV transmission technology.

$\pm 800\text{kV}$ ，中国特高压输电技术走向海外的首个工程。



Ngari-Central Tibet Power Grid Interconnection Project in China (Design)
中国阿里与藏中电网联网工程 (设计)

The power transmission and transformation project, spanning 1,689km across the world's highest altitude and most challenging natural conditions, has been awarded the First Prize for Excellent Engineering Design in the power industry. 线路全长 1689 公里，世界上海拔最高、自然条件最复杂的输变电工程，获电力行业优秀工程设计一等奖。

Zhangbei Flexible DC Power Grid Project in China (Construction)

中国张北柔性直流电网工程 (建设)
With an operating voltage of ± 500 kV, the Project is the world's first large-scale onshore renewable energy grid-connection project using flexible DC technology. It has been honored with the 2023 China Power Quality Engineering Award.

± 500 kV, 世界上首个应用柔性直流技术进行陆地可再生能源大规模并网工程，获 2023 年度中国电力优质工程。

Kunming-Liuzhou-Longmen DC Transmission Project in China (Design)

中国昆柳龙直流输电工程 (设计)
With an operating voltage of ± 800 kV, the Project is a back-to-back DC transmission project in China's Greater Bay Area, and the world's largest flexible back-to-back DC transmission project in terms of installed capacity.

± 800 kV, 中国大湾区直流背靠背工程，世界容量最大柔性直流背靠背工程。

EETC 500kV Transmission Line Project in Egypt (Design)

埃及 EETC 500kV 输电线路工程 (设计)
With an operating voltage of 500kV, the Project is the first undertaking under the China-Egypt Production Capacity Cooperation Framework, and the largest transmission line project in Egypt.

500kV, 中埃产能合作首个签约项目，埃及最大输电线路工程。





330kV Nuclear Power Output Line and Power Interconnection Project in Belarus (EPC)
 白俄罗斯 330kV 核电输出线路及电力联网项目 (工程总承包)

1. Spanning 2,030km and covering over 50% of Belarus's land area, the Project ranks among the largest power grid projects under the energy cooperation framework between China and Belarus.

总长 2030 公里、覆盖白俄罗斯 50% 以上国土面积，中白两国在能源合作方面最大的电网项目之一。

SK 400kV Transmission and Transformation Project in Angola (Design)
 安哥拉 SK 400kV 输变电工程 (设计)

2. Spanning approximately 1,000km, the Project is the largest-scale power transmission and transformation project in Angola, with highest voltage level.

线路总长约 1000 公里，安哥拉电压等级最高、规模最大的输变电项目。

Fengcheng - Meili 500kV Yangtze River Crossing Project in China (Design)
 中国凤城 - 梅里 500kV 长江大跨越工程 (设计)

3. With an operating voltage of 500kV, the Project is the largest UHV transmission and transformation project crossing the Yangtze River in China.

500kV，中国规模最大超高压跨越长江输变电工程。



1,000kV Sutong GIL Comprehensive Pipe Corridor Project in Jiangsu, China (Survey and Design)
 中国江苏 1000kV 苏通 GIL 综合管廊工程 (勘察设计)

With an operating voltage of 1,000kV, the Project is currently the world's most advanced UHV integrated corridor system, setting global benchmarks for voltage level, transmission capacity, and transmission distance.

1000kV，目前世界上电压等级最高、输送容量最大、输送距离最长的特高压管廊工程。

NUCLEAR POWER

核电

As a pioneer in China's nuclear power engineering sector, Energy China boasts comprehensive capabilities in consulting, survey and design for nuclear power plants of various capacity ranges, technical routes, and reactor types. In addition, Energy China maintains world-class expertise in nuclear power construction, and has contributed to the advancement of four generations of nuclear power technology development, as well as the survey and design of over 90% of conventional island facilities in China's nuclear power infrastructure. Energy China has been honored with two Special Prizes of the National Science and Technology Progress Award of China for its groundbreaking contributions to nuclear power sector.

中国能建是中国核电领域最早起步的设计单位之一，具备各容量等级、各技术路线、各类型核电机组的咨询和勘察设计能力以及世界领先的核电建设技术，参与了四代核电建设，勘察设计了90%以上的核电常规岛，在核电领域荣获2项国家科技进步奖特等奖。

Fuqing Nuclear Power Plant in Fujian, China (Design and Construction)

中国福建福清核电站（设计建设）

With a total installed capacity of 6.678 MW, the Project represents China's most advanced domestically developed megawatt-class nuclear power plant in operation, with highest localization rate. It stands as the global demonstration project for the 'Hualong One' nuclear reactor design.

6678MW，中国已运作百万千瓦核电机组自主化、国产化程度最高的核电站，“华龙一号”全球首堆示范工程。



Sanmen Nuclear Power Station in China (Design) 中国三门核电站（设计）

- With a total installed capacity of 2,500MW, the Project represents the world's first AP1000 nuclear power plant. It has been granted the National Quality Engineering Gold Award in China.
2500MW，世界首堆 AP1000 核电站，中国国家优质工程金奖。

Qinshan Nuclear Power Plant Phase I in China (Design and operation)

中国秦山核电站一期（设计调试）

- With a total installed capacity of 300MW, the Project is the first nuclear power plant in Mainland China. It has been granted the Special Prize of the National Science and Technology Progress Award of China.
300MW，中国大陆第一个核电站，中国国家科技进步特等奖。

Taishan Nuclear Power Plant in China (Design and Construction)
中国台山核电站 (设计建设)

With a total installed capacity of 3,500MW, the Project represents the world's first nuclear power plant employing the third-generation European Pressurized Reactor (EPR) technology, and the world's largest single-unit capacity nuclear power plant.
 3500MW, 世界首座第三代 EPR(欧洲先进压水堆) 技术核电站, 世界单机容量最大的核电站。

Karachi Nuclear Power Project in Pakistan (Design and Construction)
巴基斯坦卡拉奇 K2K3 核电站项目 (设计建设)

The Project represents the largest nuclear power plant in Pakistan, and marks China's first international export of 1,100MW-class commercial pressurized water reactor nuclear power plant. As the first overseas reactor of the "Hualong One" reactor design, the Project features the third-generation nuclear power technology independently developed by China.

巴基斯坦规模最大的核电站, 中国首次成套出口的 110 万千瓦级商用压水堆核电站, 采用中国自主研发的三代核电技术路线, “华龙一号” 海外首堆。



SCHEDULE: KEY TRADITIONAL ENERGY PROJECTS OF ENERGY CHINA

附录：中国能建传统能源重点项目一览表

Hydropower 水电				
Project 项目	Parameters 参数	Nationality 国别	Model 实施模式	
Three Gorges Hydroelectric Power Station on China's Yangtze River 中国长江三峡水利枢纽工程	22500MW	China 中国	Over 65% of quantities 承担 65% 以上 工程量	
Bahetan Hydropower Station in China 中国白鹤滩水电站	16000MW	China 中国	Participation in construction 参建	
Xiluodu Hydropower Station in China 中国溪洛渡水电站	13860MW	China 中国	Construction 承建	
Wudongde Hydropower Station in China 中国乌东德水电站	10200MW	China 中国	Construction 承建	
Xiangjiaba Hydropower Station in China 中国向家坝水电站	7750MW	China 中国	Construction 承建	
Longtan Hydropower Station in China 中国龙滩水电站	6300MW	China 中国	Construction 建设	
Nuozhadu Hydropower Station in China 中国糯扎渡水电站	5850MW	China 中国	Construction 建设	
Dasu Hydropower Station in Pakistan 巴基斯坦达苏水电站	5400MW	Pakistan 巴基斯坦	Design and construction 设计建设	
Jinping II Hydropower Station in China 中国锦屏二级水电站	4800MW	China 中国	Construction 建设	
Xiaowan Hydropower Station in China 中国小湾水电站	4200MW	China 中国	Construction 建设	
Laxiwa Hydropower Station in China 中国拉西瓦水电站	4200MW	China 中国	Construction 建设	
Gezhouba Water Control Project in China 中国葛洲坝水利枢纽工程	2715MW	China 中国	EPC 工程总承包	
Caculo Cabaca Hydropower Station in Angola 安哥拉凯凯水电站	2172MW	Angola 安哥拉	EPC + F 工程总承包 + 融资	
Kirchner-Cepemic Hydropower Station in Argentina 阿根廷吉赛水电站	1310MW	Argentina 阿根廷	EPC + F + O&M 工程总承包 + 融资 + 运维	
SK Hydropower Station in Pakistan 巴基斯坦 SK 水电站	884MW	Pakistan 巴基斯坦	Investment and construction 投资建设	
Yeywa Hydropower Station in Myanmar 缅甸耶娃水电站	790MW	Myanmar 缅甸	Design and construction 设计建设	
Tekeze Hydropower Station in Ethiopia 埃塞俄比亚特克泽水电站	300MW	Ethiopia 埃塞俄比亚	Construction General Contracting 施工总承包	
Dabar Hydropower Station in Bosnia and Herzegovina 波黑达尔巴水电站	159.15MW	Bosnia and Herzegovina 波黑	EPC + F 工程总承包 + 融资	
Houay Lamphan Gnai Hydropower Station in Laos 老挝会兰茂水电站	88MW	Laos 老挝	EPC 工程总承包	
Chiem Hoa Hydropower Station in Vietnam 越南占化水电站	48MW	Vietnam 越南	EPC 工程总承包	

Power Transmission and Transformation 输变电				
Project 项目	Parameters 参数	Nationality 国别	Model 实施模式	
Changji-Guquan ±1100kV UHVDC Transmission Project in China 中国昌吉-古泉 ±1100kV 特高压直流输电工程	±1100kV	China 中国	Design 设计	
1000kV Sutong GIL Comprehensive Pipe Corridor Project in Jiangsu, China 中国江苏 1000kV 苏通 GIL 综合管廊工程	1000kV	China 中国	Survey and design 勘察设计	
Bahetan-Jiangsu, Bahetan-Zhejiang ±800kV UHVDC Transmission Project in China 中国白鹤滩-江苏、白鹤滩-浙江 ±800kV 特高压直流输电工程	±800kV	China 中国	Design and construction 设计建设	
Belo Monte ±800kV DC Transmission and Transformation Project in Brazil 巴西美丽山 ±800kV 直流输电项目	±800kV	Brazil 巴西	Survey and design 勘察设计	
Kunming-Liuzhou-Longmen DC Transmission Project in China 中国昆柳龙直流输电工程	±800kV	China 中国	Design 设计	
Jinshang-Hubei ±800kV UHVDC Transmission Project in China 中国金上-湖北 ±800kV 特高压直流输电工程	±800kV	China 中国	Design 设计	
Lahore ±660kV DC Transmission Project in Pakistan 巴基斯坦默蒂亚里-拉合尔 ±660 千伏直流输电工程	±660kV	Pakistan 巴基斯坦	Design 设计	
Taguig 500kV Substation Project in Philippines 菲律宾塔吉格 500kV 变电站工程	500kV	Philippines 菲律宾	EPC 工程总承包	
Ngari-Central Tibet Power Grid Interconnection Project in China 中国阿里与藏中电网联网工程	±500kV	China 中国	Design 设计	
Zhangbei Flexible DC Power Grid Project in China 中国张北柔性直流电网工程	±500kV	China 中国	Construction 建设	
Back-to-Back DC Transmission project in the Greater Bay Area, China 中国大湾区直流背靠背工程	±500kV	China 中国	Design and construction 设计建设	
EETC 500kV Transmission Line Project in Egypt 埃及 EETC 500kV 输电线路工程	500kV	Egypt 埃及	Design 设计	
Pakse 500kV Transmission Line Project in Laos 老挝巴色 500kV 输电线路项目	500kV	Laos 老挝	EPC 工程总承包	
Fengcheng - Meili 500kV Yangtze River Crossing Project in China 中国凤城-梅里 500kV 长江大跨越工程	500kV	China 中国	Design 设计	
Butuo ±800kV Converter Station Bipolar Low-End DC System in China 中国布托 ±800kV 换流站双极低端直流系统	2 x ±800kV Converter Stations + 1 x 500kV Substation 两个 ±800kV 换流站 和一个 500kV 变电站	China 中国	Design 设计	
Rudong Offshore Wind Farm Flexible DC Transmission Project in Jiangsu, China 中国江苏如东海上风电柔性直流输电工程	±400kV	China 中国	Design and construction 设计建设	

Caculo Cabaca Transmission and Transformation Project in Angola 安哥拉凯卡巴卡输电变电站项目	400kV	Angola 安哥拉	EPC 工程总承包
330kV Nuclear Power Output Line and Power Interconnection Project in Belarus 白俄罗斯 330kV 核电输电线路及电力联网项目	330kV	Belarus 白俄罗斯	EPC 工程总承包
Taizhou Flexible Low-Frequency Power Transmission Demonstration Project in China 中国台州柔性低频输电示范工程	35kV	China 中国	Design 设计
Botteswar 33kV Substation Project in Bangladesh 孟加拉波特瓦瓦 33kV 变电站	33kV	Bangladesh 孟加拉	EPC 工程总承包
Nuclear Power 核电			
Project 项目	Parameters 参数	Nationality 国别	Model 实施模式
Tianwan Nuclear Power Plant in China 中国田湾核电站	9000MW	China 中国	Construction 建设
Hongyanhe Nuclear Power Plant in China 中国红沿河核电站	670MW	China 中国	Design and construction 设计建设
Qinshan Nuclear Power Plant in China 中国秦山核电站	6660MW	China 中国	Design and construction 设计建设
Fuqing Nuclear Power Plant in Fujian, China 中国福建福清核电站	6678MW	China 中国	Design and construction 设计建设
Daya Bay Nuclear Power Plant in China 中国大亚湾核电站	6120MW	China 中国	Design and construction 设计建设
Yangjiang Nuclear Power Plant in China 中国阳江核电站	6000MW	China 中国	Design and construction 设计建设
Ningde Nuclear Power Plant Phase I Project in Fujian, China 中国福建宁德核电站一期工程	4356MW	China 中国	Design and construction 设计建设
Fangchenggang Nuclear Power Plant in Guangxi, China 中国广西防城港核电站	3360MW	China 中国	Design and construction 设计建设
Taishan Nuclear Power Plant Phase I Project in China 中国台山核电站一期工程	2×1750MW	China 中国	Design and construction 设计建设
Sanmen Nuclear Power Plant Phase I Project in China 中国三门核电站一期工程	2×1250MW	China 中国	Design 设计
Haiyang Nuclear Power Plant Phase I Project in Shandong, China 中国山东海阳核电站一期工程	2×1250MW	China 中国	Design and construction 设计建设
Karachi K-2/K-3 Nuclear Power Project in Pakistan 巴基斯坦卡拉奇 K2K3 核电工程	/	Pakistan 巴基斯坦	Design and construction 设计建设
Lingao Nuclear Power Plant Phase I Project in China 中国岭澳核电站一期工程	2X990MW	China 中国	Design and construction 设计建设
Changjiang Nuclear Power Plant Phase I Project in China 中国昌江核电站一期工程	2×650MW	China 中国	Design and construction 设计建设
Chashma Nuclear Power Plant in Pakistan 巴基斯坦恰希玛核电站	1300MW	Pakistan 巴基斯坦	Design 设计