# SINOTEC

# 合作务实创新卓越

COOPERATION REALIZATION INNOVATION EXCELLENCE

用我们高效、专业、创新的致诚服务 让更多人享受清洁能源技术带来的美好生活

The professional, efficient, innovative and sincere service for more people to enjoy better life by clean energy technology

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#### •公司简介

#### COMPANY PROFILE

中电国际技术股份有限公司是集技术和服务于一体的国际工程总承包公司,一直致力于为全球客户在能源、水利、工业、交通领域提供更多有效、可靠的解决方案和技术服务。历经10多年的发展,我们的业务范围已覆盖亚洲、拉丁美洲和非洲,包括巴基斯坦、孟加拉国、菲律宾、印度尼西亚、伊拉克、阿富汗、巴西、阿尔及利亚、尼日利亚、加纳、肯尼亚、坦桑尼亚、乌干达、南非等国家和地区。

公司是以国际工程总承包为主业,新型高科技成套产品、技术服务和投资为配套。现已发展成一个以人为核心、市场为导向、时代创新为推动力、多资本架构和科学管理的跨国公司。

公司总部位于中国首都一北京,公司具有专业的项目团队及行之有效的管理服务体系,为客户提供项目前期可研、投融资方案、设计、勘测、建设、运行和维护等一站式服务。项目可以EPC、BOT、BOO、IPP、PPP等模式,全方位满足客户各类需求。

公司执行国际认可的行业标准,并按照当地实际情况提供最为先进的设备、专业的方案和优质的服务,以满足IEC、ASTM、ASME、BS、DIN等国际标准。我们独一无二的能力使项目的质量、安全、工期和解决方案值得信赖。

多年以来,公司参与了可再生能源和环境保护的投资,诸如太阳能、风能、污水处理和供水系统,同时我们也把目光关注到环境、人道主义和社会公益中去,从而达到经济和社会效益的最大化。

基于可靠的国际EPC项目执行能力和良好的公司信誉,公司已经获得了诸多荣誉,并获得了多家政府权 威机构以及实力雄厚的金融机构的支持和信任,"合作、务实、创新、卓越",是中电国际技术股份有限公司 一直以来努力追求的理念,并将它们分享给我们国内外的合作伙伴。

致力于发展高效清洁的能源技术,创造美好生活!中电国际技术股份有限公司以先进的技术和产品、卓越的经营理念和优质的服务为社会创造更大的价值。

SINOTEC CO., LTD. (SINOTEC) is a multinational integrated technology and service provider for delivering more efficient & reliable solutions to global customers in various fields such as energy, water resource, industry and transportation etc. With more than a decade of development, our business have covered Asian, Latin American and African countries, including Pakistan, Bangladesh, Philippines, Indonesia, Iraq, Afghanistan, Brazil, Algeria, Nigeria, Ghana, Kenya, Tanzania, Uganda, Rwanda and South Africa.

With vast experience in global engineering contracts as its core business along with high-tech products & services and investment portfolio, the Company has become a strong multinational group dealing with variety of capital structures and state of the art project management practices, relying on the philosophy i.e. more human centered, market oriented and innovation as it driving force.

We are located in the capital city of China i.e. Beijing. We have a repute of delivering the Integrated and holistic package of services in terms of Engineering/Design, Procurement, Construction, Operation and maintenance utilizing the best skill of our highly professional teams and most efficient management systems. We value our clients and find the best solutions that suit the needs of our clients such as BOT, BOOT, IPP, PPP etc.

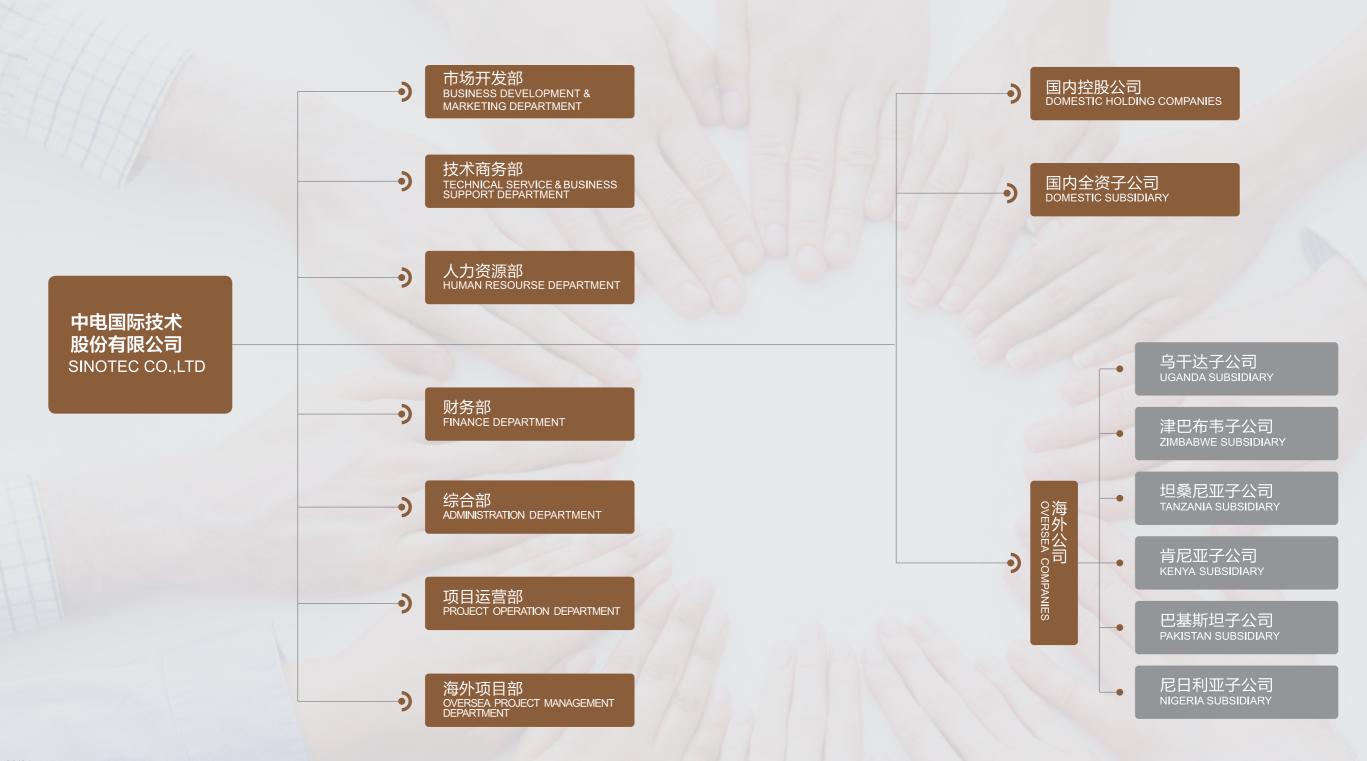
Our compliance compatibility model enables us to deliver against any globally recognized standard such as ACI, ASME, BS, ASTM, DIN etc. We are fully committed to achieve the best standards of Quality, Health, Safety, Environment and Community and on-time delivery to increase the global customer satisfaction. We carry a legacy of successful investment in renewable energy, environmental protection projects such as hydel, solar and wind, also water supply and sewage treatment plants adhering to the applicable best international practice Health, Safety, Environment and Community (HSEC) standards and believing that Corporate Social Responsibility (CSR) is an integral part of the operations of our business.

We take pride in delivering numerous EPC projects because of our well-respected reputation and capabilities, nationally and internationally, both in public and private sector, we take our greatest satisfaction from our clients who continue to entrust us. We also take pride in winning the trust and confidence of many Government Organizations and Financial Institutes.

We are proud of our core values i.e. Cooperation, Realization, Innovation and Excellence and aspire to uphold these with the support of our global business partners.

We endeavor to make every effort to develop sustainable clean energy technology for betterment of life on earth. Sinotec Co. Ltd. is committed to contribute towards greater value to societies with modern technology, advance products, spectacular ideas and highly commendable services.

#### • 组织架构 ORGANIZATION CHART





# 业务介绍

#### • 电力 POWER

#### 发电 POWER GENERATION

公司以电力板块为发展基础,坚持绿色发展理念,不断加快结构调整步伐,优化传统发电项目,大力发展水电、太阳能发电,不断拓展风电、生物发电、地热发电、抽水蓄能电站等清洁能源项目。

Based on electric power sector, we optimize traditional power projects, develop clean energy vigorously such as hydropower, wind energy, biology power, geothermal power generation, pumped-storage power station, as well as solar power and other renewable energy projects.



# • 水电 HYDRO-POWER PLANT

巴基斯坦灌流式水电站项目 HYDROPOWER PLANTS WITH KAPLAN HORIZONTAL PIT TYPE TURBINES IN PAKISTAN













巴基斯坦冲击式水电站项目 HYDROPOWER PLANT WITH PELTON TYPE TURBINES IN PAKISTAN









#### •太阳能光伏发电和清洁能源

SOLAR POWER GENERATION AND CLEAN ENERGY



肯尼亚太阳能光伏发电 KENYA SOLAR POWER PROJECT







肯尼亚太阳能预付费系统 SYSTEM

坦桑尼亚太阳能电网改造项目 KENYA SOLAR POWER PREPAID TANZANIA SOLAR POWER PROJECT FOR POWER NETWORK REINFORCEMENT

尼日利亚户用太阳能系统 NIGERIA HOUSE SOLAR POWER SUPPLY SYSTEM

#### ●电网

#### **POWER GRID**

资源整合及融资能力,能够提供超高压、高压、中压和低压 on the outstanding resource integration of power transmission projects 变电站及输变电线路的可研、勘探、设计、供货、施工、安 substations and transmission lines of extra high voltage, high voltage, 装、调试、运行、维护及培训一体化的交钥匙工程服务。公 medium voltage and low voltage including feasibility study, investigation 司先后参加、完成了巴基斯坦、尼日利亚、加纳、肯尼亚、 坦桑尼亚、乌干达、卢旺达、阿富汗、亚美尼亚、菲律宾、 莫桑比克、阿尔及利亚、叙利亚等国家的输变电线路和变电 Pakistan, Nigeria, Ghana, Kenya, Tanzania, Uganda, Rwanda, Afghanistan, 站的成套项目工程。

电网业务是公司的传统业务,公司依靠优异的输变电项目的 Power grid business is the traditional strength of SINOTEC. Relying and financing capability, SINOTEC is able to provide turnkey service for design, supply, construction, installation, commissioning, operation, maintenance and training. The company has participated and completed several EPC projects of power transmission lines and substations in Armenia, Philippine, Mozambique, Algeria, and Syria etc.





巴基斯坦 280 公里 500KV 输电线路项目 PAKISTAN 500KV TRANSMISSION LINE PROJECT





尼日利亚 330KV 和 132KV 输电线路 NIGERIA 330/132KV TRANSMISSION LINE PROJECT











巴基斯坦 500/220KV 变电站 PAKISTAN 500/220KV SUBSTATION









加纳 330KV WAPP 沿海传输主干网项目包 GHANA 330KV TRANSMISSION LINE & SUBSTATION







坦桑尼亚 132KV 变电站项目 TANZANIA 132KV SUBSTATION

#### ● 水资源 WATER RESOURCES

#### 巴基斯坦水利灌溉

PAKISTAN IRRIGATION









## ●水资源

#### WATER RESOURCES

#### **1** 城市供水系统 URBAN WATER SUPPLY SYSTEM



公司在供水系统规划和设计、调度运行、设计改造、维护养护等诸多方面,有着相当丰富的实际操作经验,我们可以针对不同的客户不同的需求,提供客户需要的解决方案。

SINOTEC has abundant practical operation experience on planning and design, operation, renovation, maintenance and other aspects of water supply system. Appropriate solutions can be provided according to different demands.





公司一直致力于水体环境保护和水治理工程技术的调查和实际操作运用,以保证用水和废水的社会循环能够顺利进行。

SINOTEC devotes to research and practice in protecting water environment and water treatment engineering to ensure smooth social cycle of water and waste water.



公司可根据客户的不同需求提供水泥厂、糖厂、化肥厂、炼油厂等工业设施建设。

According to various demands, SINOTEC provides solutions of industrial facilities such as cement plants, sugar plants, fertilizer plants, oil refinery and so on.



加纳炼油厂项目 GHANA TOR PROJECT











#### ● 交通 TRANSPORTATION

公司作为国际总承包企业,一直涉足铁路、 公路、桥梁、机场等领域的建设

As an international EPC contractor, SINOTEC is involved in contracting of railways, highways, bridges and airports.

# TECHNOLOGY AND SERVICE

# 技术和服务

在电力、水及工业交通通讯领域我们提供前期项目 咨询、可研、融资方案、设计、勘测、建设、运营、 维护等"一站式"服务。以满足客服各类需求。

In order to meet the various requirements of customers, we provide a "one-stop" service including consultation in project early stage, feasibility study, financing, design, survey, construction, operation and maintenance.









### ●咨询和项目解决方案

CONSULTANCY AND PROJECT SOLUTION

可研、勘察、设计、施工、采购、物流及安装成套设备、调试、运营。

Feasibility, study, investigation, design, construction, procurement, logistics and equipment installation, commissioning and operation.



## ●投融资

INVESTMENT AND FINANCING

公司可以根据客户不同的需求提供相应的投融资方案,积极参与 EPC+Financing 以及IPP和PPP项目开发,开发模式涉及BOT、 BOO、BOOT和BOL等模式,全方位满足客户各类需求。

SINOTEC can provide appropriate investment and financing schemes according to customer demands such as EPC+Financing, IPP and PPP. Investment models can be BOT, BOO, BOOT and BOL, etc.



#### ●装备制造

#### **EQUIPMENT MANUFACTURING**

公司有一套完整的设计、研发、制造、安装服务体系,并设有生产研发基地,可从事专业的水轮 发电机组设计、制造和服务。

SINOTEC has established a complete system comprising design, R&D, manufacturing, installation and commissioning services of hydropower plants, and its manufacture and R&D base can provide professional services in design, manufacture, supply and installation for the hydraulic turbine generator sets.



公司拥有一支经验丰富,具有创新精神的技术研发队伍。有先进的设计理念、制造技术和管理方 法,并与国内外知名公司、高校、研究院所等进行广泛的技术交流与合作,丰富提升了公司的技 术水平。可根据不同用户的需求,制定相应的技术方案,进行CFD(计算流体动力学)分析, 也可以在国内外实验室验证水轮机的水力性能。

SINOTEC has an experienced and innovative R & D team. Most of the team members have received training in world famous companies and organizations such as FUJI. ALSTOM, and VOITH etc. They are familiar to the international standards and have good cooperation relationship with the world famous companies, universities and research institutes. The experienced and well trained engineers develop specific products according to the clients specific requirements, provide Computational Fluid Dynamics analysis and carry out performance certification.



制造能力 MANUFACTURING CAPACITY

公司引进世界先进的技术工艺和生产设备,具有完善的水轮发电机组及其附属设备制造能力,可以生产目前国 内最大的竖井灌流机组设备,产品范围涵盖:

Our company has world leading technology and manufacturing equipment, can manufacture complete water-turbine generator sets and accessories. We are the one who design and manufacture the biggest Kaplan turbine set in China. Our products cover but not limited to the following:

◎灯泡贯流式机组: 单机容量60MW, 转轮直径8m

Bulb: single unit capacity 60MW, runner diameter 8m

◎**轴流转桨式机组**:单机容量100MW,转轮直径10m Kaplan: single unit capacity 100MW, runner diameter 10m

◎混流式机组: 单机容量300MW, 转轮直径8m Francis: single unit capacity 300MW, runner diameter 8m

◎ 冲击式机组: 单机容量200-80000KW, 转轮直径0.6-3.5m, 适应水头80-1200m Pelton: single unit capacity 200-80000KW, runner diameter 0.6-3.5m, water head 80-1200m





