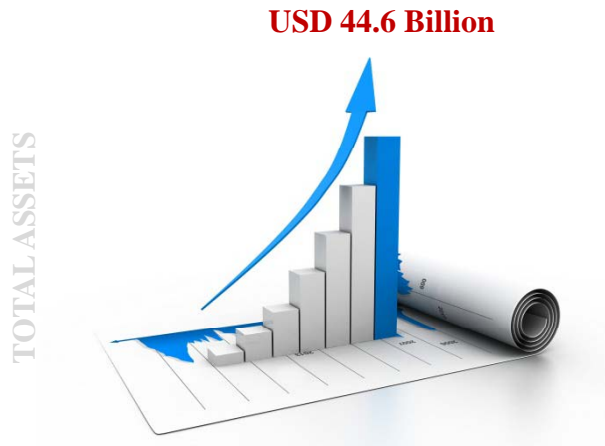




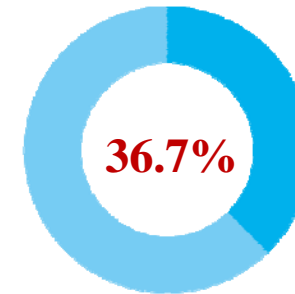
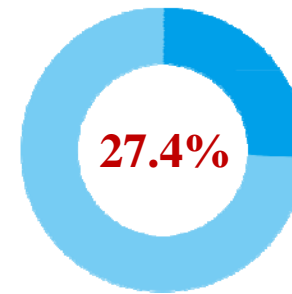
Partnering for Sustainable Development



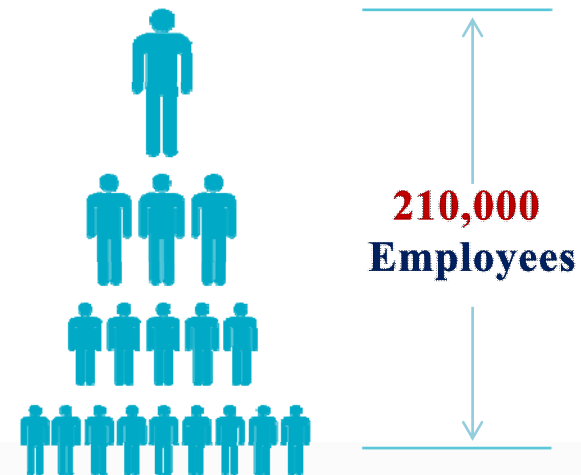


By the end of 2012, total Assets **USD 44.6 Billion.**

In the first half of 2013, **Overseas Business** accounts for **27.4%** and **36.7%** of total business revenue and overall value of new contracts respectively.



18 PROVINCES AND 4 MUNICIPALITIES



www.powerchin.com

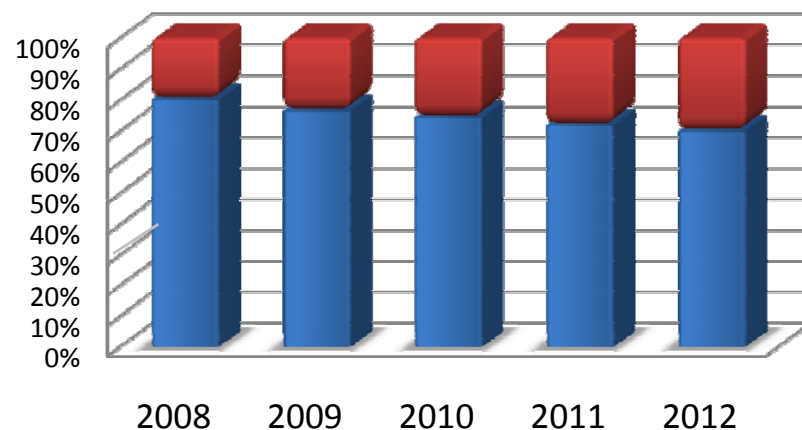




CSR Contributor

Business Revenue in Recent 5 Years

Revenue (USD Billion)



	2008	2009	2010	2011	2012
Domestic Revenue	13.96	16.05	19.55	21.13	22.91
Overseas Revenue	3.46	4.93	6.76	8.3	9.87



354h on Fortune Global 500 in 2013



4th China-Africa Friendship Award by CAPFA

Hydropower

- survey, planning, design, consulting
- construction
- equipment manufacture
- equipment installation
- operation & maintenance
- Investment/financing

Thermal Power

- survey, planning, design, consulting
- construction
- equipment manufacture
- equipment installation
- operation & maintenance
- Investment/financing

New Energy

- survey, planning, design, consulting
- construction
- equipment installation
- operation & maintenance
- Investment/financing

Real Estate

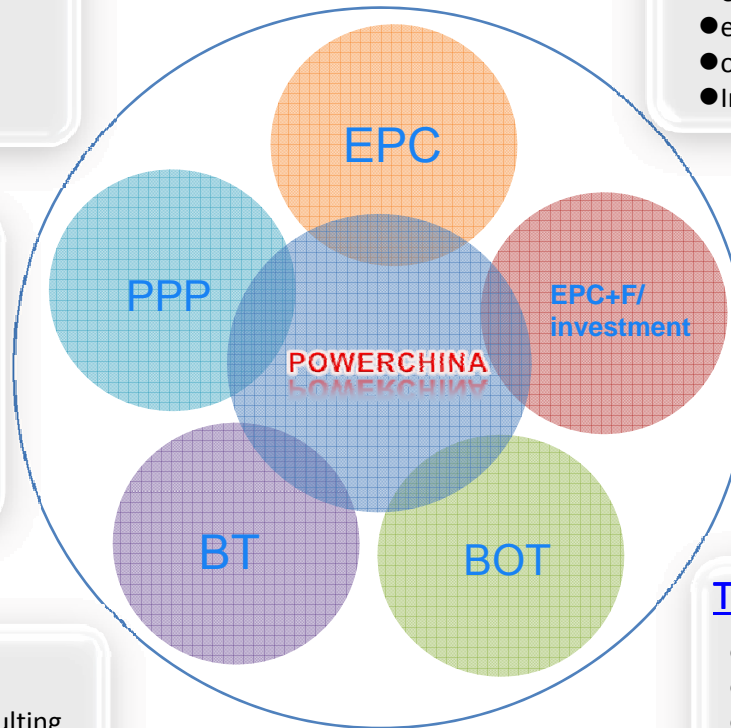
- survey, planning, design, consulting
- construction
- equipment manufacture
- equipment installation
- operation & maintenance
- Investment/financing

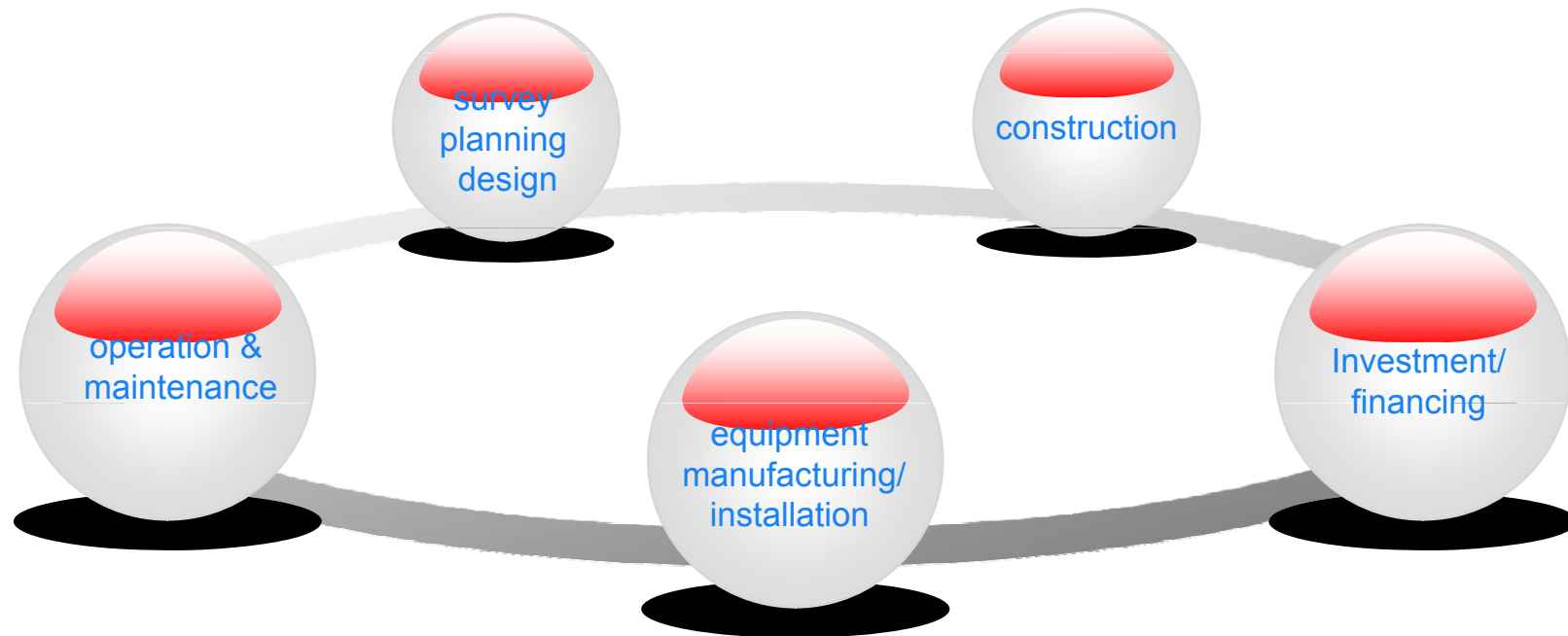
Infrastructure

- survey, planning, design, consulting
- construction
- equipment manufacture
- equipment installation
- operation & maintenance
- Investment/financing

Transmission & Distribution

- survey, planning, design, consulting
- construction
- equipment manufacture
- equipment installation
- operation & maintenance
- Investment/financing





economic planning

cost consulting

safety appraisal

project management and supervision

R&D

EIA and environmental engineering design

resettlement planning

software development

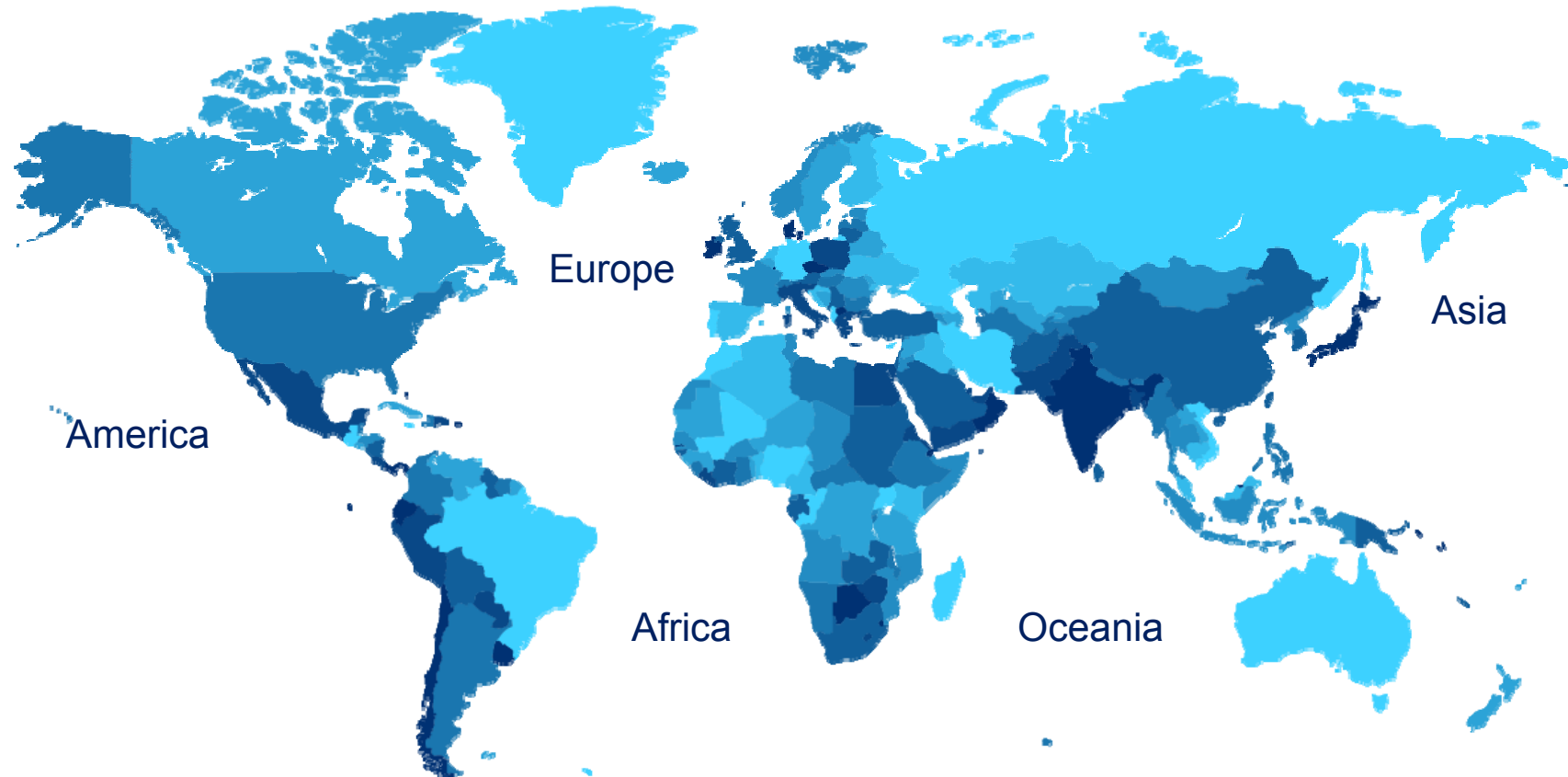


In the first half of 2013, **837** overseas contracts are performed in **87** countries with a total value of **USD 66.68 billion**



Europe: **11** Africa: **350** America: **39** Asia: **433** Oceania: **4**

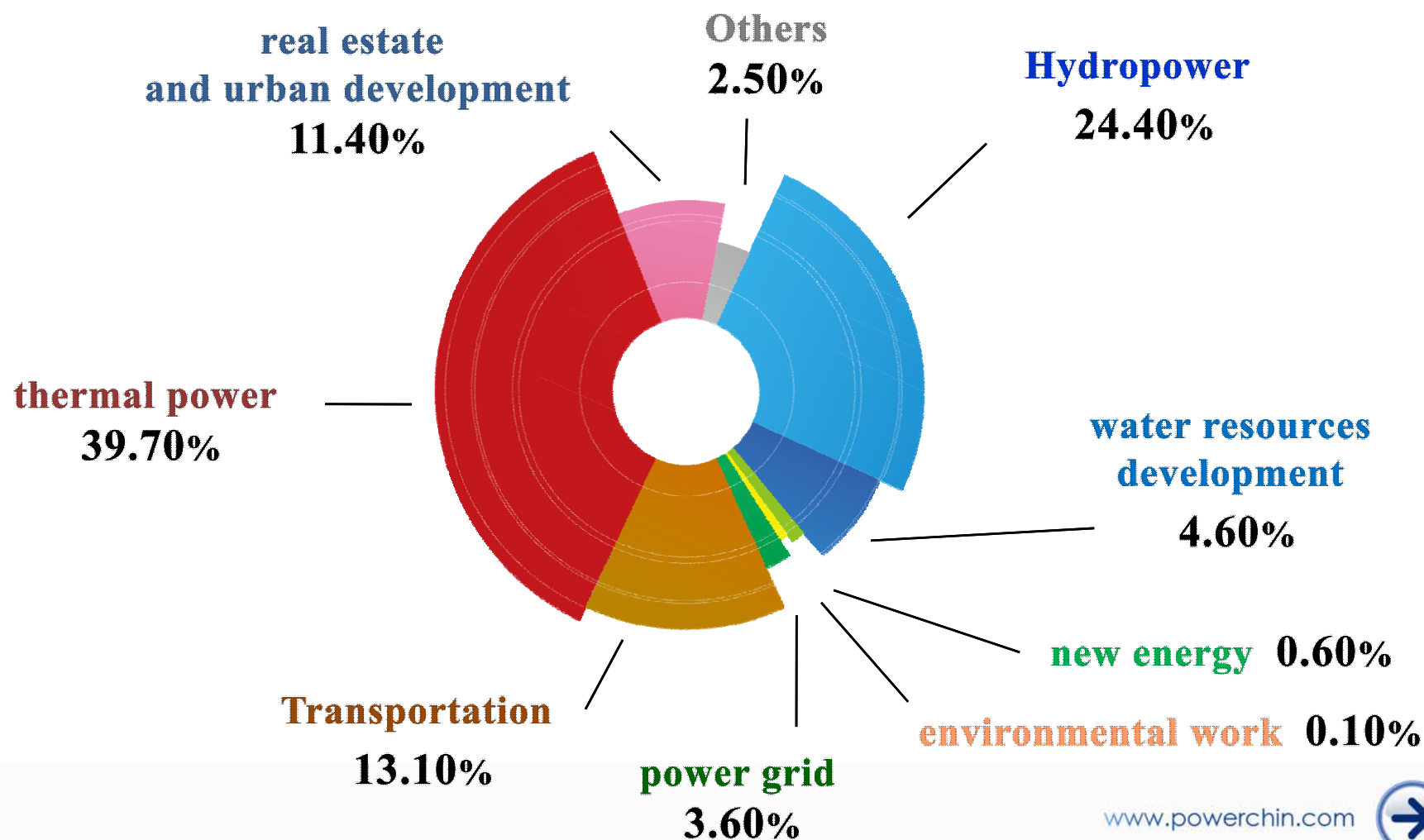
149 branches and representative offices in **71** countries (as of June **2013**)



Oceania: **1** Africa: **52** America: **16** Europe: **5** Asia: **75**



pursues a prioritized overseas business strategy



In 2013, POWERCHINA was ranked 354th in Fortune Global 500

THE TOP 250 INTERNATIONAL CONTRACTORS (RANK 2013)

POWERCHINA BUSINESS ARMS

ENR



Sinohydro Corp., Beijing, China

20



SEPCOIII Electric Power Constr. Corp., Weifang, Shandong, China

54



SEPCO Electric Power Construction Corp., Jinan Shandong, China

61

THE TOP 150 GLOBAL DESIGN FIRMS (RANK 2013)

POWERCHINA BUSINESS ARMS

ENR



Hydrochina Corp, China

15



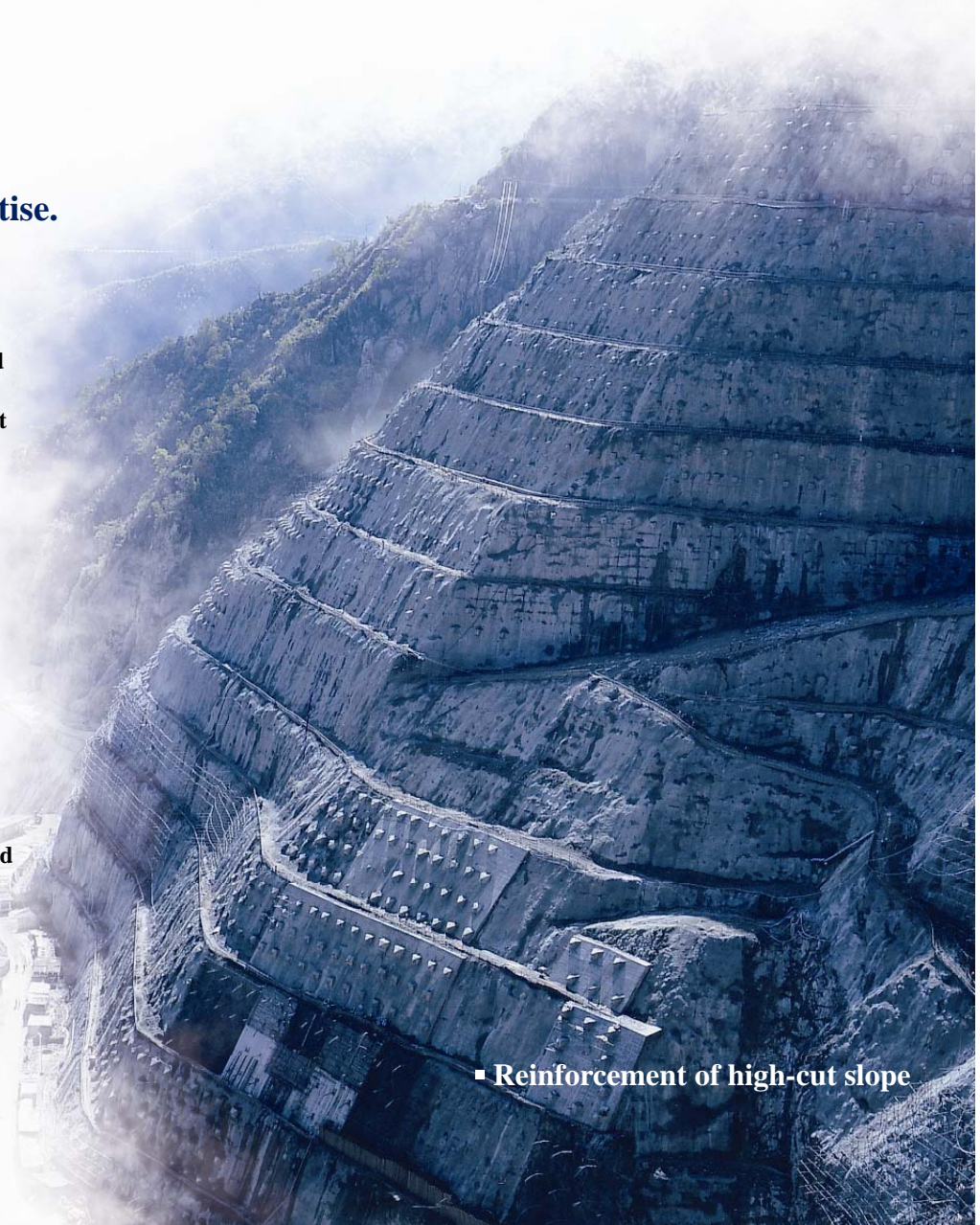


Formulated China's policies and technical standards on renewable energy.

POWERCHINA masters plenty of state-of-art construction technologies and expertise.

- ★ Systematical investigation & planning of hydropower, wind power and solar energy resources.
- ★ Implementation of the appraisal, check and acceptance of ydropower, wind power and other renewable projects as authorized by the Chinese government
- ★ Investigation, design and construction of all kinds of dams with a height up to 200m-300m, including concrete arch dams, RCC gravity dams, concrete faced rockfill dams, rockfill dams with impervious core, etc.
- ★ Design and construction of new energy projects.
- ★ Design and construction of Thermal Power Plants with a unit capacity to 1,000 MW
- ★ Transmission & distribution system (Power Grid) to 1000KV (± 800 KV)
- ★ Design and construction of underground caverns in complex geological conditions.
- ★ Design and construction of foundation treatment, large landslide masses and high cut slopes reinforcement, especially for all kinds of dams on complex geological conditions.
- ★ Energy dissipation and scouring protection for projects with high head and large flood discharge in narrow river valleys.
- ★ Design, manufacture and installation of gates with high head and large-size orifice.

■ Reinforcement of high-cut slope



- Underground diaphragm Wall with depth of 201m





■ River Closure



■ Hydraulic slot cutting

Integrated and Value-added Services

Customer-orientation

Innovation

Risk Control

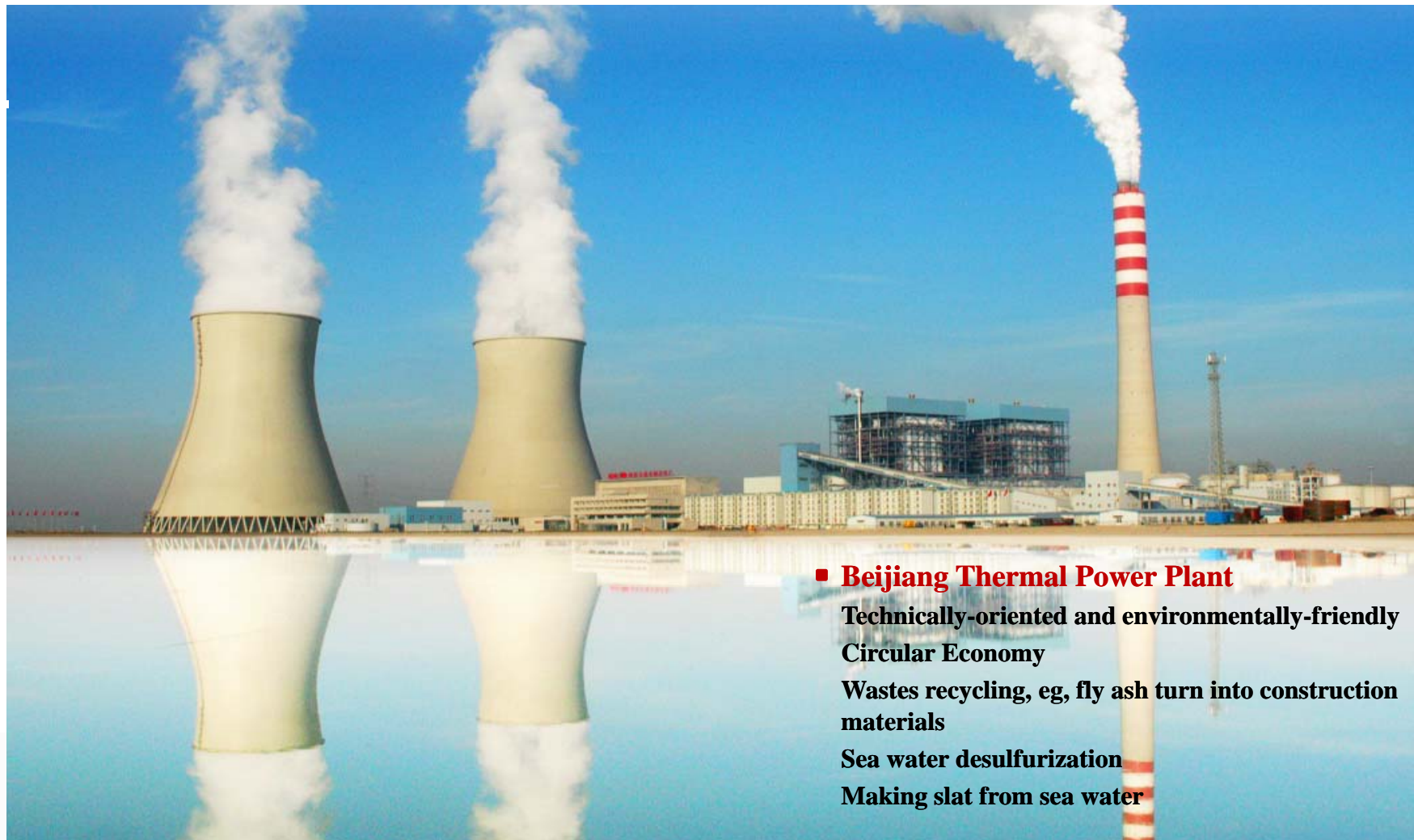


Training

Globalization + Localization

A HARMONIOUS RELATIONSHIP WITH NATURE

Environmental friendly measures are adopted in all projects.



■ **Beijiang Thermal Power Plant**

Technically-oriented and environmentally-friendly
Circular Economy

Wastes recycling, eg, fly ash turn into construction materials

Sea water desulfurization

Making slat from sea water

***A HARMONIOUS RELATIONSHIP WITH
STAFF, CLIENTS, STAKEHOLDERS AND THE
COMMUNITY WE SERVE***



sponsored local middle and high schools with 12 000 scholarships in Kenya.



Nigerian workers celebrate the launch of the Zungeru project which is expected to create many job opportunities for local people.



Our local staff are trained and passed upon knowhow

Planning

- completed the development plans for 12 major rivers in China;
- undertaken 65% of planning and investigation works for hydropower projects in China;
- concluded national water resources census and second census;
- working at formulating water and hydropower development plans in Myanmar, Guinea, Sierra Leone and Columbia;
- compiling flood control and drought prevention scheme for Thailand;

Construction

- undertaken 65% of construction and installation works for hydropower projects in China;
- Performing construction and installation contracts around the world

Investment/Concession

- China, Laos, Cambodia, Myanmar, Nepal, Zambia, etc.



■ China, Yangtze Three Gorges Project

The largest hydropower project in the world;

Work scope: construction, safety appraisal, equipment installation and acceptance test.

Total reservoir volume **39.3 billion m³**.

Installed capacity **22,400 MW**.

Unit Capacity **700MW**, the largest single capacity unit in the world.

Concrete gravity dam **175m** high and **2309m** long;

Concrete casting volume **16 million m³**

■ Malaysia, Bakun Hydropower Plant

Located on Balui River in Belaga division of Sarawak;

Work scope: technical

investigation, design, construction, installation

The **2,400 MW** Bakun scheme began operation in 2011

The concrete face rockfill dam is **205 m** high and **740 m** in crest length.





■ Sudan, Merowe Hydropower Project

Located on Nile River

Work scope: construction, installation, commission

10 km long earth and rock dam, powerhouse **290 m x 44.5 m**

Installed capacity of **1,250 MW**, auxiliary facilities, metal structure **21,511 t**

■ Ethiopia, Tekeze Hydropower Plant

Located on the upper stream of Tekeze . Completion date: March 2010.

Work scope: construction, installation

Double curvature concrete dam with maximum dam height of **185 m**. The total installed capacity is **300 MW**.



■ China, Longtan Hydropower Plant

Located on upstream of Hongshui River, Guangxi Province.

Work Scope: Investigation, design, construction

Installed capacity **700MW x 9**, annual output **18700GWh**.

Largest underground power house **388.5m x 2835m x 76.4m**



Construction

- boasts strong construction capacity for coal/gas/oil fired thermal power projects at voltage up to 1000KV;
- installed capacity of coal/gas/oil fired power projects completed by PowerChina reached around 320GW, accounting for 43% of national total;
- construction of nuclear power plants
- performing construction contracts around the world

Investment/Concession

- China, etc.

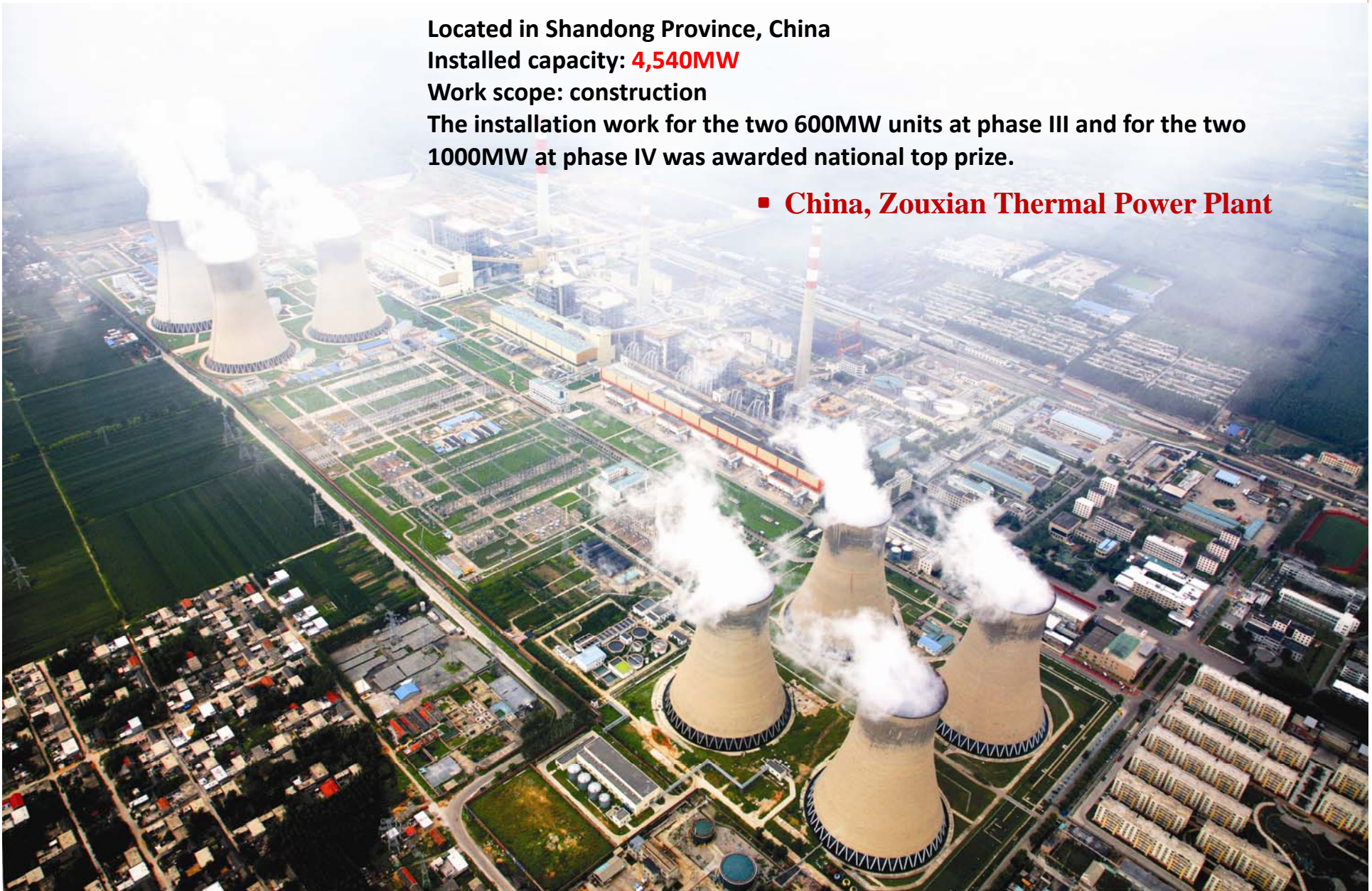
Located in Shandong Province, China

Installed capacity: **4,540MW**

Work scope: construction

The installation work for the two 600MW units at phase III and for the two 1000MW at phase IV was awarded national top prize.

▪ **China, Zouxian Thermal Power Plant**



■ China, Lingwu 2×1000MW Power Station

Located in Ningxia Hui Autonomous Region;

World 1st Ultra Supercritical Air-cooling Unit, helping to greatly reduce water consumption;

Work scope: construction, equipment installation



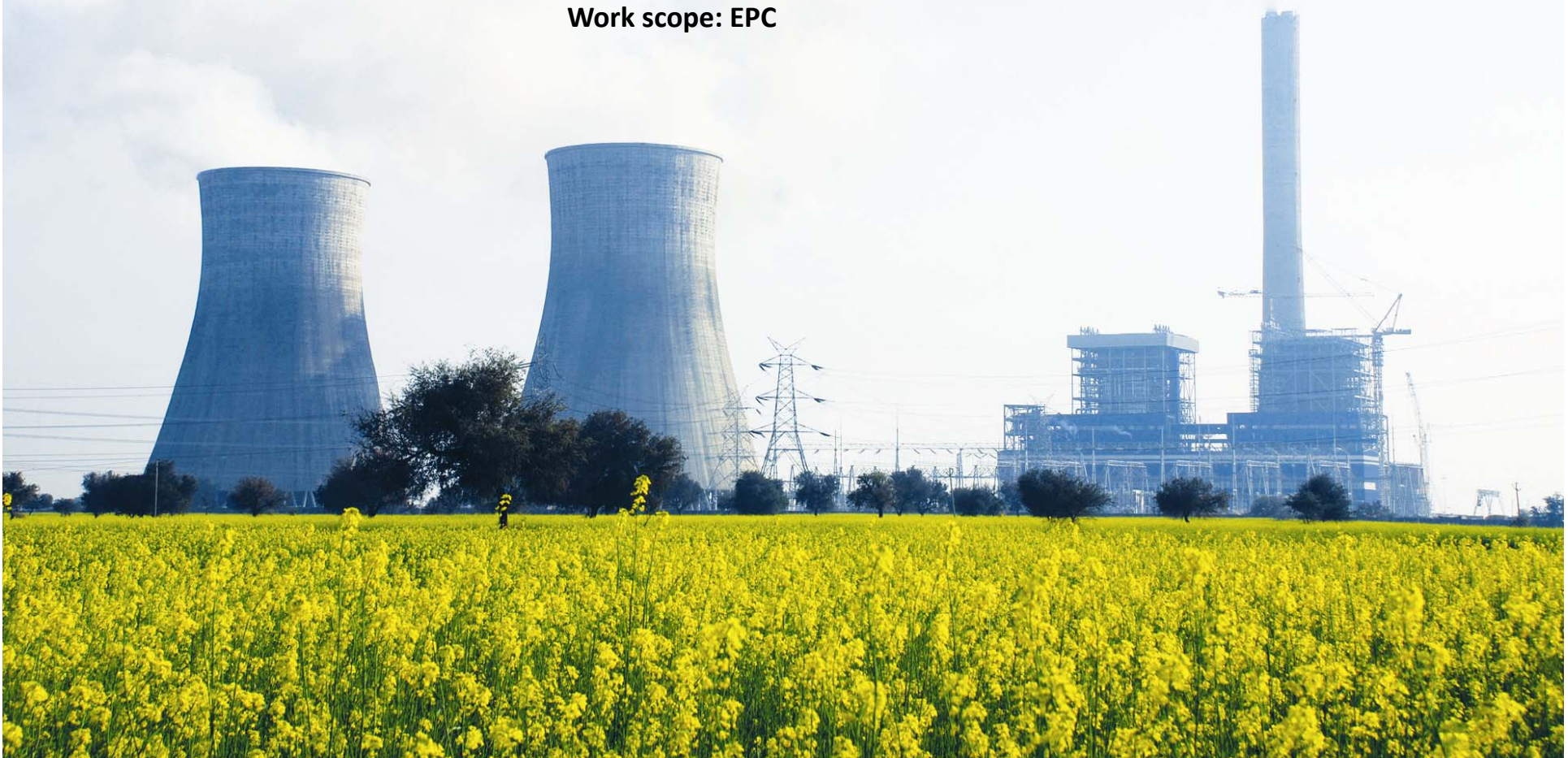
- **India, Jhajjar Coal-fired Power Station**

Located in Haryana, India

90% of power will be distributed to Haryana state and the other 10% to Delhi

Installed capacity: 2x660MW

Work scope: EPC



- **China, Guangdong Daya Bay Nuclear Power Station**

Located in Shenzhen, Guangdong Province

Started commercial operation in 1993 and 1994

Installed capacity: 2x944 MW

Work scope: construction

- authorized by the National Development & Reform Commission and National Energy Administration of China, PowerChina is entrusted to establish technical specifications, standards and codes for China's wind power and solar power development;
- formulated the National Master Plan for Wind and Solar Power;
- concluded the national wind power resources census;
- completed plans for nine 10,000MW-scale wind power bases;
- designed and constructed a host of on-shore and off-shore wind farms;
- designed China's first tidal-power plant;
- compiled ***Ethiopia Wind Power & Solar Power Generation Planning Report***, covering 51 wind farms with total installed capacity of 6820MW and 5 solar power sites with installed capacity of 135MW;
- performing wind farm construction contract in Ethiopia

Investment/Concession

- China, etc.

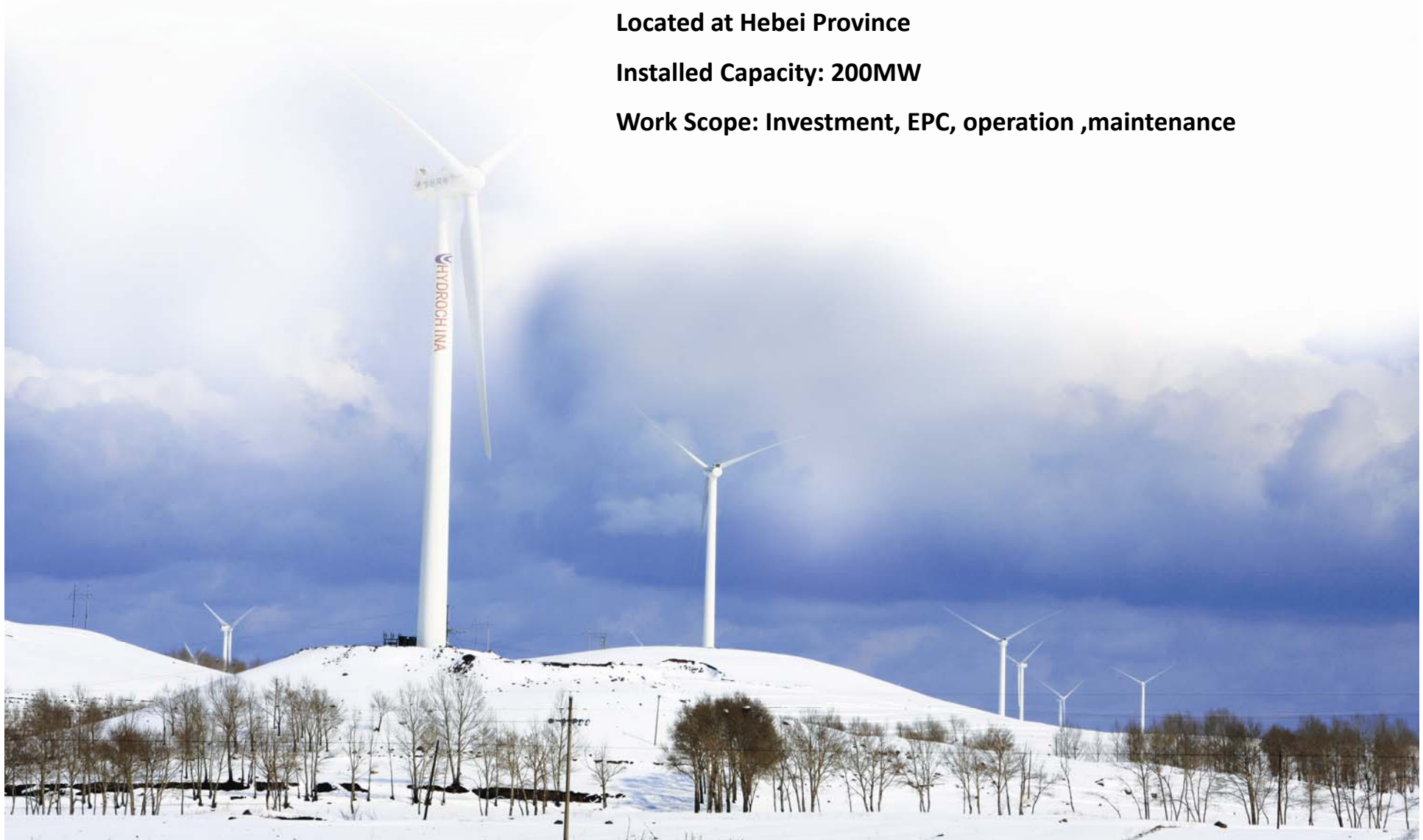


■ China, Zhangbei Batou Wind Farm

Located at Hebei Province

Installed Capacity: 200MW

Work Scope: Investment, EPC, operation ,maintenance



The first African wind farm project financed by Chinese funds.

- **Ethiopia, Adama Wind Farm Phase I**

Installed capacity: 51 MW

Work scope: EPC+Financing



- **China, Jiangsu Rudong Off-shore Wind Farm**

Work scope: survey, design

Total planned capacity: 150 MW

Completed and connected to power grid in 22 Sep, 2012

The largest off-shore wind farm in Asia



- **China, Changling Wind Power Station**

The total installed capacity is **49.5 MW**.

Invested by POWERCHINA.

Work scope:

investment, construction, installation, operation,
maintenance



- China, Ningxia Gaoshawo Solar PV Station

Work scope: construction, equipment installation

Total planned capacity: 150 MWp



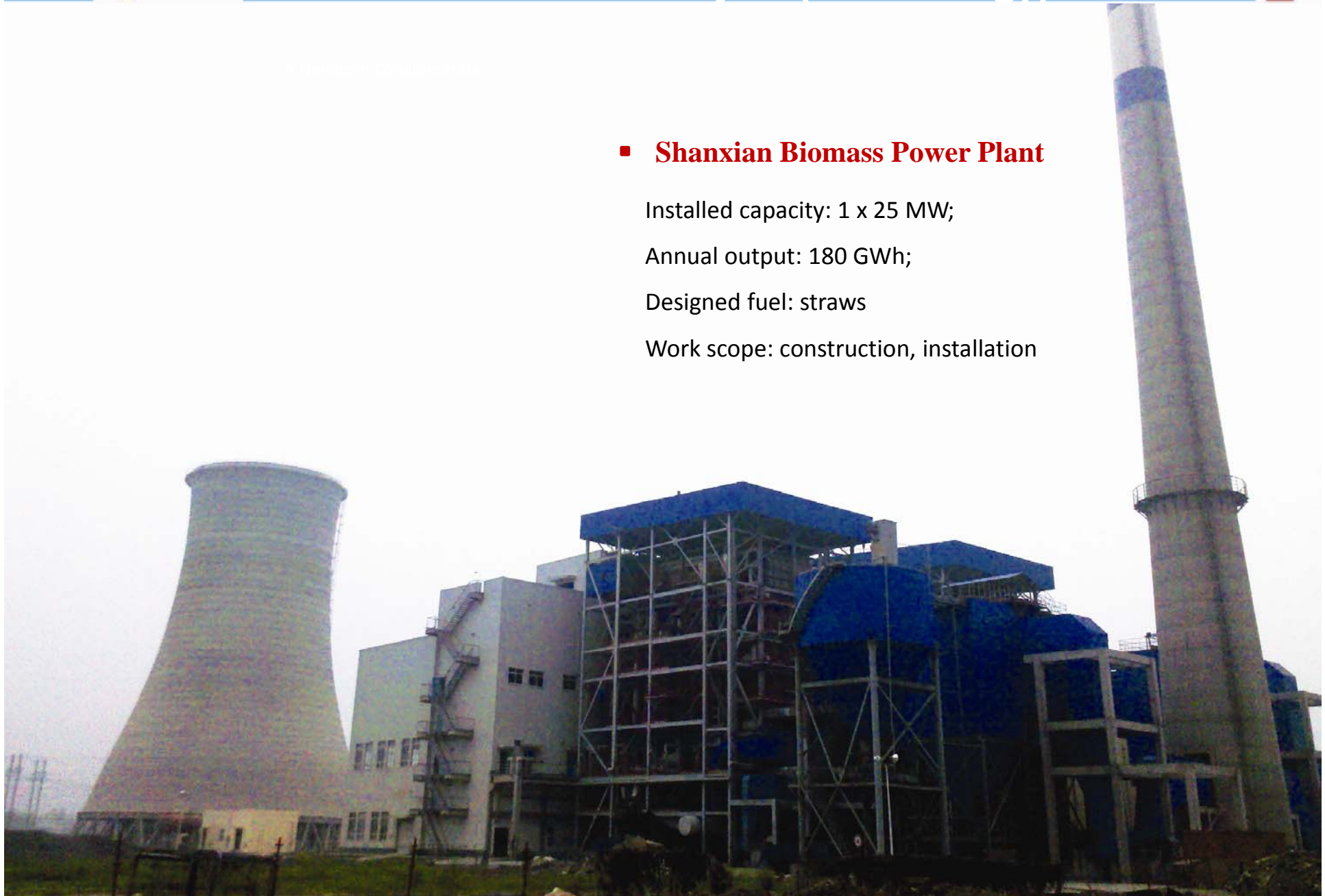
■ Shanxian Biomass Power Plant

Installed capacity: 1 x 25 MW;

Annual output: 180 GWh;

Designed fuel: straws

Work scope: construction, installation





■ Jiangxia Tidal Power Plant

Original Installed capacity 3.9MW;

First unit started generation in 1980; in 1985, all five units were on operation.

During expansion phase, the sixth unit was installed with capacity of 0.7MW.

- Advanced design and construction ability for DC and AC transmission lines under 1000KV;
- Design and construction of convertor stations;
- Overseas Projects in Africa, America, Asia



Two 275KV transmission lines from Bakun switchyard via Similajau substation to an aluminum smelter, with total length of 281.5km;

Work scope: construction, installation

- **Malaysia, Bakun-Similajau Transmission Line Project**



- Xiangjiaba-Shanghai ± 800 Transmission Project, the world's highest voltage and most advanced DC transmission project.



- 1000KV Southeast Shanxi—Nanyang—Jingmen Ultra High Voltage Converter Station

- designed a host of infrastructure projects, including Beijing West Railway Station, National Center for the Performing Arts, Caofeidian Land Reclamation Project, Jinan Urban Infrastructure Refurbishment, Kunming Waste Water Treatment Station;
- constructed plenty of infrastructure projects, covering roads & bridges, airports, ports, urban railway, water supply, public stadium, ect;
- Invested in various kinds of infrastructure, including roads, water works, subways etc;

Investment/Concession

- China, etc.



▪ China, South to North Water Diversion Project

The project will reallocate water resources among the Yangtze River, Yellow River, Huaihe River and Haihe River basins areas.

Work scope: construction

Its annual handling capacity will reach 44.8 billion m³





■ **China, Kunming
Waste Water
Treatment Station**

Daily handling capacity:

50,000 m³

Work scope: construction

- **Qatar, Lusail Development:
Marine, Earthworks and Site Preparation**

Areas covered: **35 km²**; Excavation: **22.1 million m³**; Back filling: **20 million m³**;

Work scope: construction, excavation, dredging, filling





- Koh Puos Bridge, Cambodia;
Length: 900 m; Width: 12 m.

- Emali-Oloitokitok Road, Kenya;
Total length 100.5km, including 4 bridges and 30 culverts.



■ Beijing-Shanghai High Speed Railway



POWERCHINA was awarded the Package No.3 which covers **267 km** railway line crossing Shandong and Jiangsu provinces, including **94km** railway bed, **99 bridges** (total length 161km), **10 tunnels** (total length 10km) and **4 stations**.

Design speed **350km/h**.

Work scope: construction

■ Shanghai Pudong International Airport

Parking apron: **1.49 million m²**

Runway length: **4000 m**

Aircraft parking bay: **218**

Boarding bridge: **70**

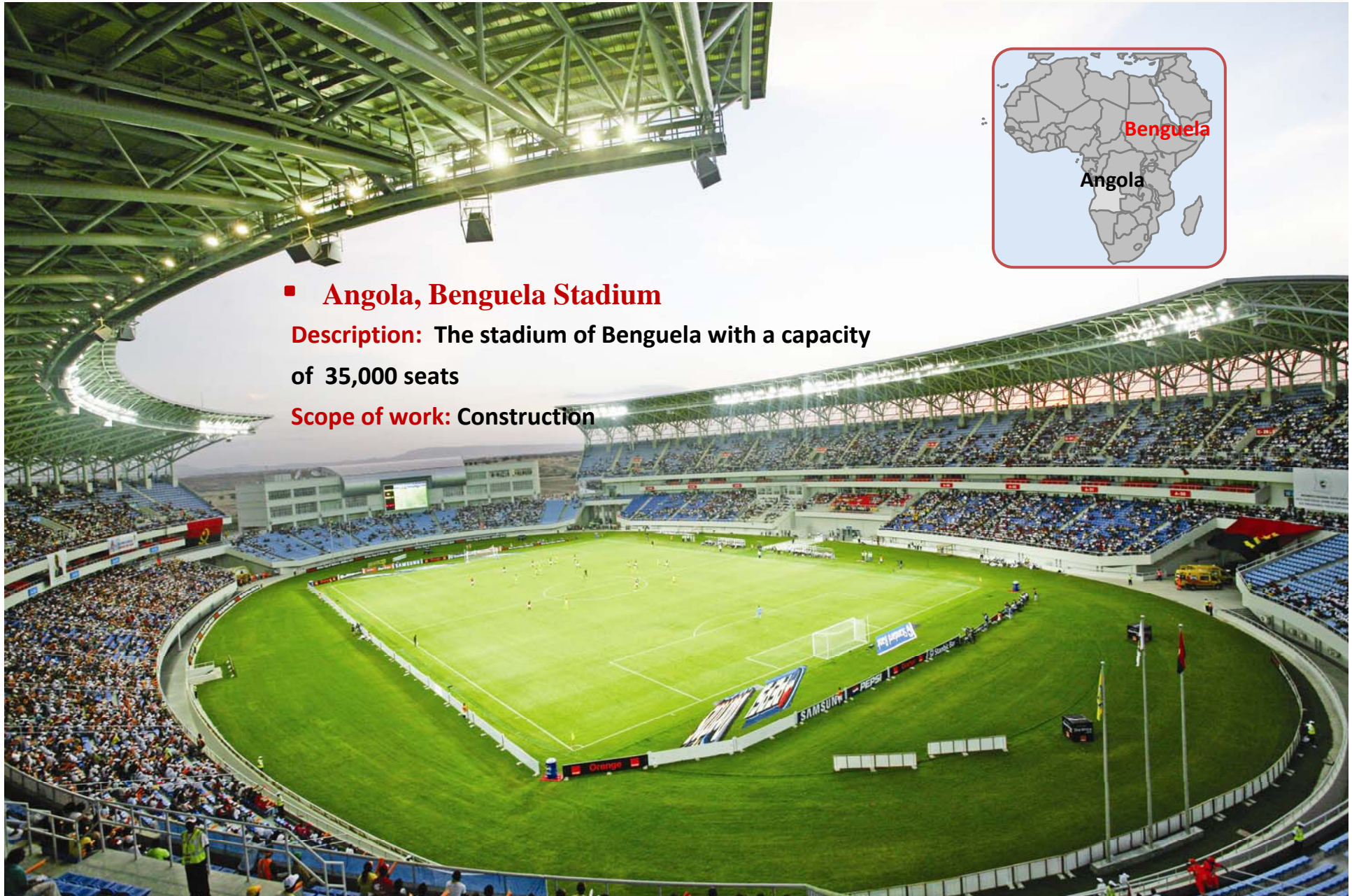




■ Angola, Benguela Stadium

Description: The stadium of Benguela with a capacity of 35,000 seats

Scope of work: Construction



- Investment in power sectors, equipment manufacturing, roads and bridges, municipal facilities and real estate;
- At the end of 2012, among invested installed capacity, 6,390 MW are in operation, including 3470MW of hydropower, 1490MW of thermal power and 1430MW of wind power;
- At the end of 2012, among invested installed capacity, 2590MW are under construction, including 2280MW of hydropower and 310 MW of wind and solar power;
- Invested in 22 water projects, mainly in Sichuan, Yunan, Hunan, Zhejiang, Guizhou Provinces, with total handling capacity of 816,000 tons/day, among which 356,000 tons/per are in operation;
- invested concessional express way 144km;

Overseas Investment:

Cambodia, Laos, Nepal, Congo, Zambia, Mongolia, Burma



■ Cambodia, Kamchay Hydropower Project

Invested by Powerchina

Total installed capacity 193.2 MW

Annual output: 498 GWh

Completed in November 2011.





■ China, Sergu Hydropower Station

The forth cascade hydropower station in Hieshui River

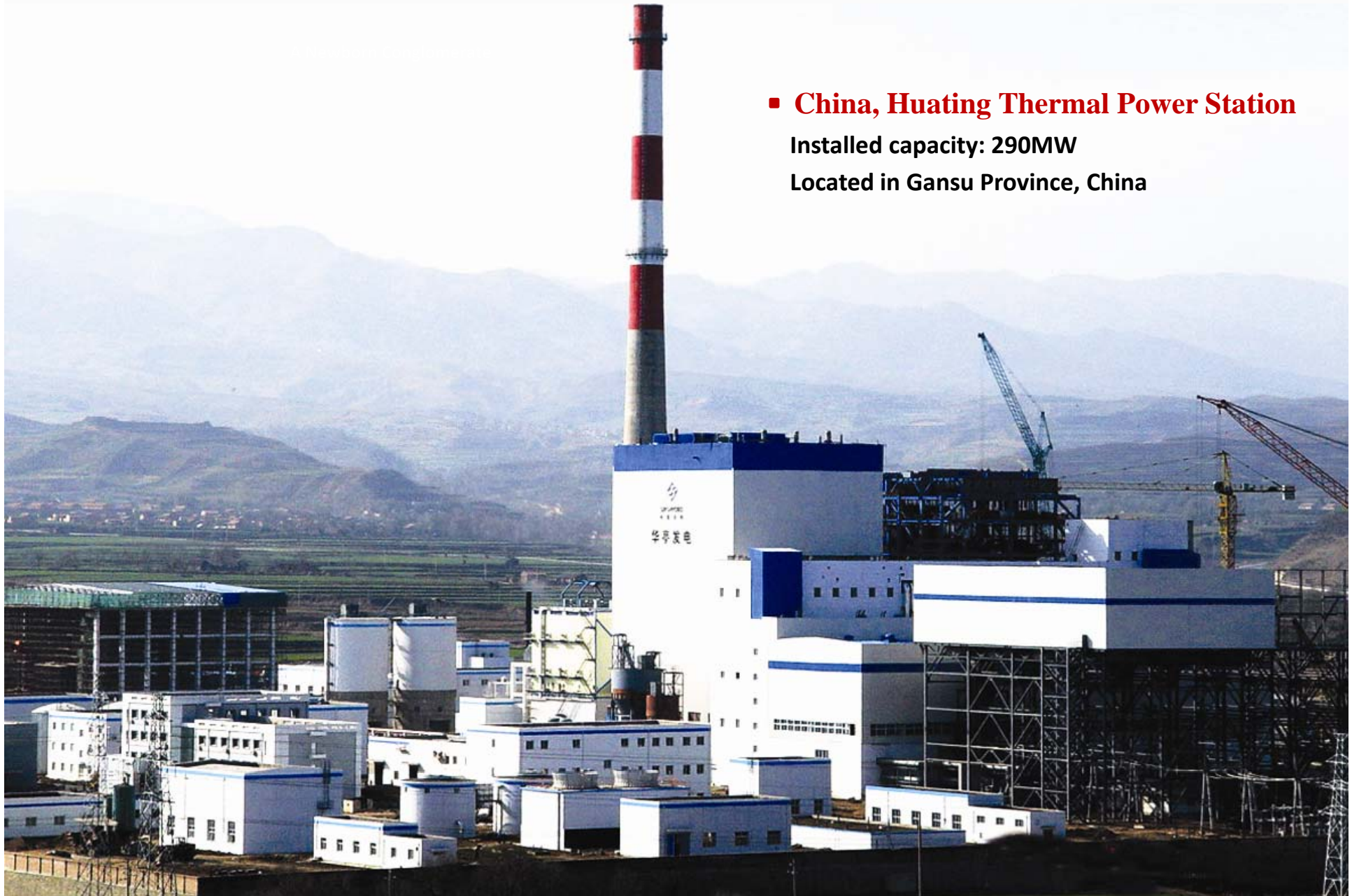
Installed capacity: 150MW

Despite of negative impact from Sichuan earth quake in 2012, PowerChina successfully achieve on time power generation.

- **China, Huating Thermal Power Station**

Installed capacity: 290MW

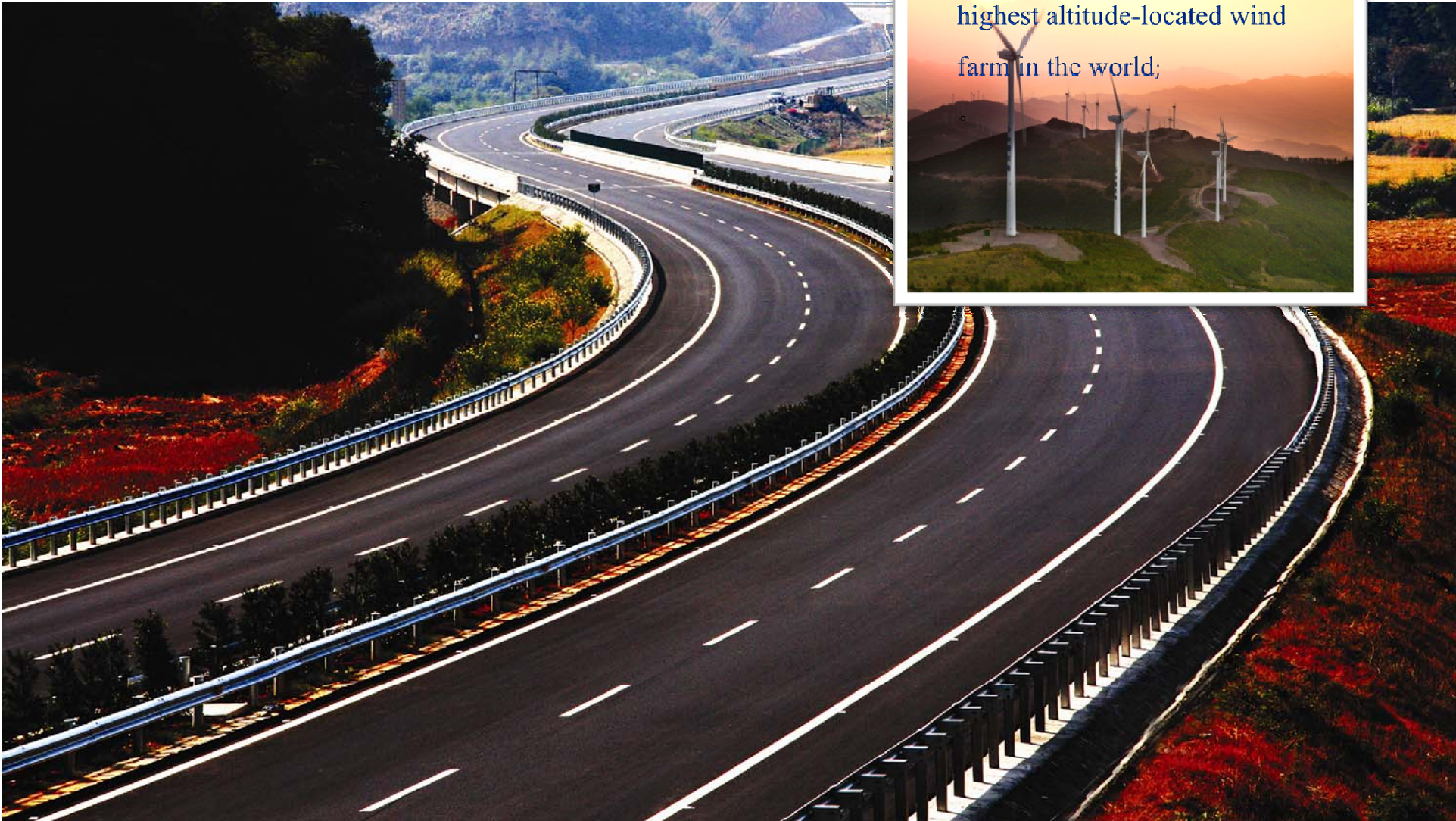
Located in Gansu Province, China



- **Wuyishan-shaowu express way**

Total length: 91km;

Completion time: 5 Nov, 2010



- Zhemoshan Wind Farm, the highest altitude-located wind farm in the world;



China, Yunnan Anning Water Treatment Plant

Invested by POWERCHINA

Daily handling capacity 250,000T/day, among which 120,000T/day in operation

Total investment RMB 250 million



PowerChina developed real estates in
Beijing, Tianjin, Guizhou, Sichuan, Yunnan, Hunan, Hubei provinces.



■ West Bank, Sichuan Province



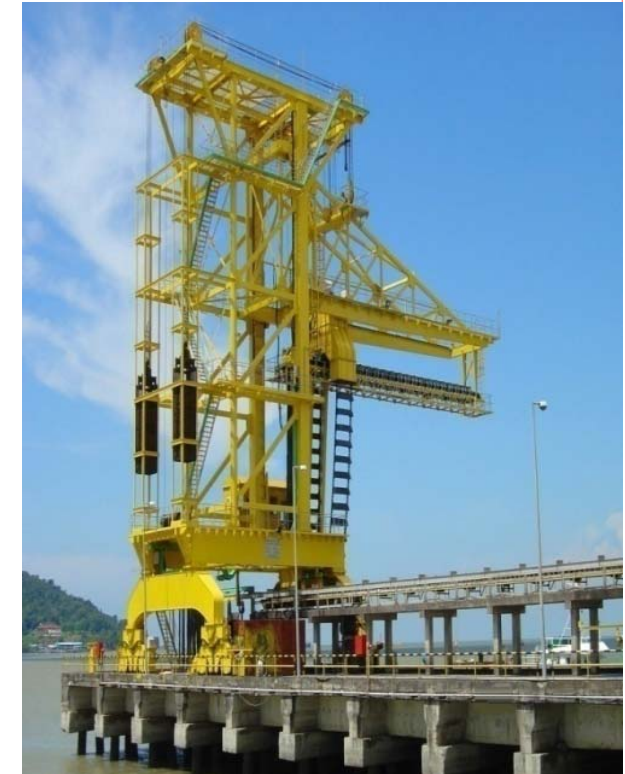
■ Lake View, Guizhou Province

PowerChina makes proprietary and joint research and innovation on projects related equipments, and was awarded many national and ministerial prizes.

- 10,000MW Boiler Feed Water Pump



- Booster Pump for 1250MW third generation Nuclear Power Conventional Island



- Chain Bucket Unloader



■ Spiral Case Installation



■ Gantry Crane

■ Integrated handling machine





谢谢 Thank You!

Merci Gracias

شكرا спасибо