

CHINA POWER INTERNATIONAL DEVELOPMENT LIMITED

2021 Annual Results Presentation

For the year Ended 31 December

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01. Results Highlights

02. Business Review

03. Future Prospects

04. Appendices

Part 01

Results Highlights

Income Statement

Items	2021	2020	Change
Revenue (RMB 000's)	34,734,288	28,427,721	+22.18%
Fuel costs(RMB 000's)	-17,937,891	-10,876,072	+64.93%
Other Operating Costs(net) (RMB 000's)	-12,195,530	-11,179,789	+9.09%
Operating Profit (RMB 000's)	4,600,867	6,371,860	-27.79%
Profit Attributable to Equity Holders of the Company(RMB 000's)	-515,693	1,708,305	-
Basic EPS(RMB)	-0.07	0.17	-
Proposed DPS(RMB)	0.05	0.13	-61.54%
EBITDA	10,360,683	12,020,967	-13.81%

Balance Sheet

Items	2021.12.31	2020.12.31	Change
Total Assets (RMB 000's)	174,754,102	155,948,671	+12.06%
Total Liabilities(RMB 000's)	122,869,305	110,158,754	+11.54%
——long-term debts	77,333,483	66,880,887	+15.63%
——short-term debts	45,535,822	40,556,194	+12.28%
Total Equity(RMB Millions) (including non-controlling interests)	51,884,797	45,789,917	+13.31%
Total Liabilities to Total Assets(%)	70.31%	70.64%	-0.33 ppts
Net Debt to Total Equity(%)	200.74%	196.80%	+3.94 ppts



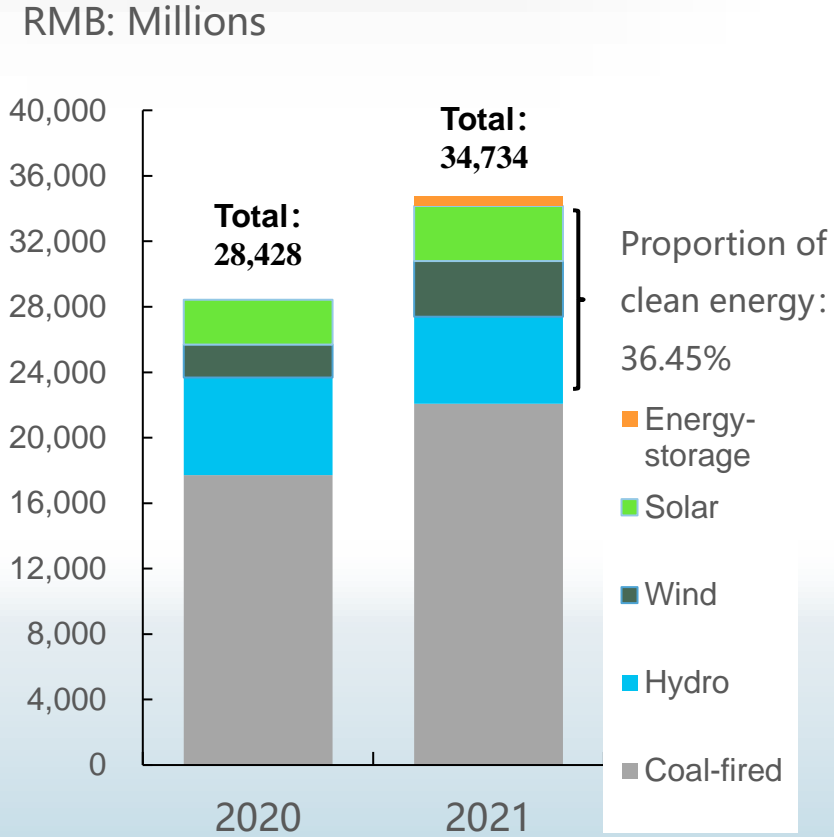
中国电力国际发展有限公司
CHINA POWER INTERNATIONAL DEVELOPMENT LIMITED

Part 02

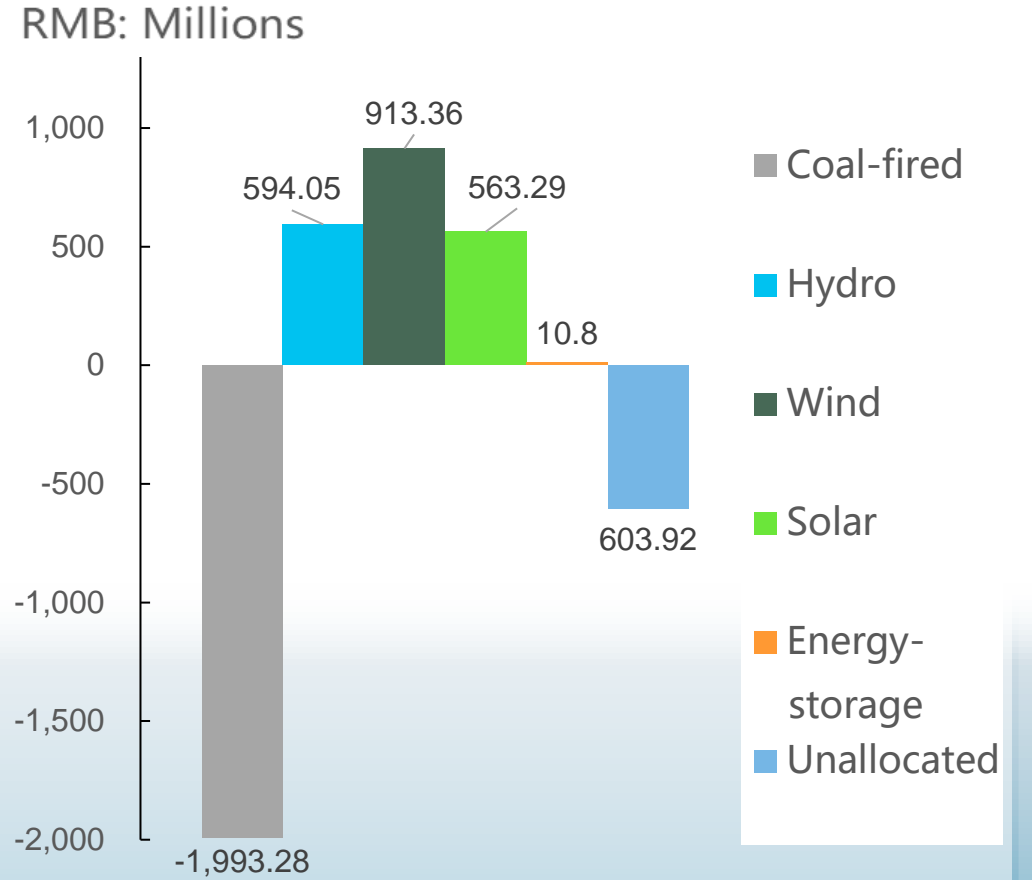
Business Review

Revenue & Profit Structure

Revenue & Profit Structure

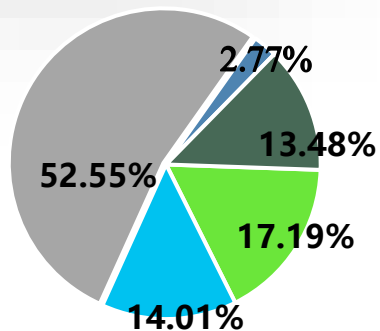


Net Profit Attributable to Equity Holders of the Company



Capacity

Attributable Capacity : 24,960.8 MW

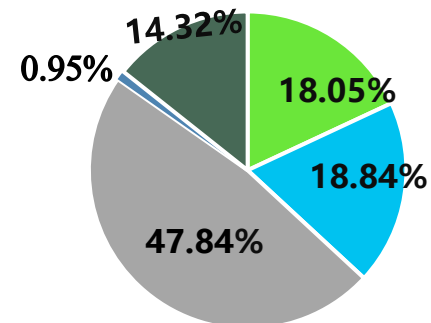


■ Solar ■ Hydro ■ Coal-fired ■ Gas-fired ■ Wind

Changes in Attributable Capacity in 2021

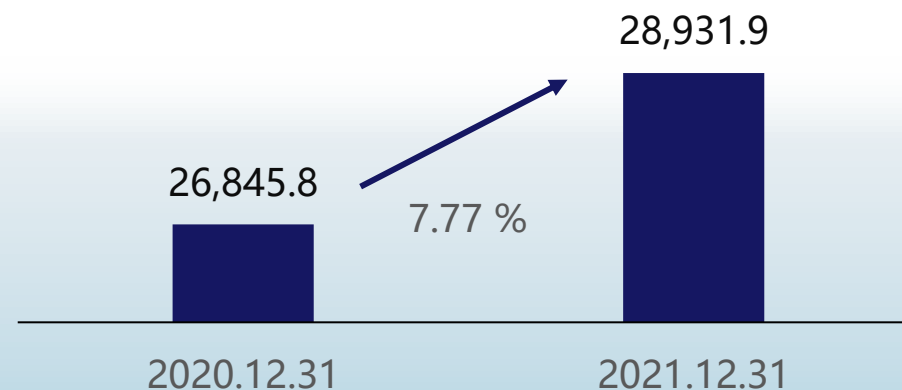
Types	Attributable Capacity (MW)	Locations
Wind	1374.1	Shanxi, Henan, etc
Solar	901.1	Inner Mongolia, Ningxia, etc
Coal-fired	-1,368	Shanxi, Anhui
Gas-fired	186.1	Hubei, Guangdong
Hydro	-10.7	Sichuan

Consolidated Capacity: 28,931.9MW



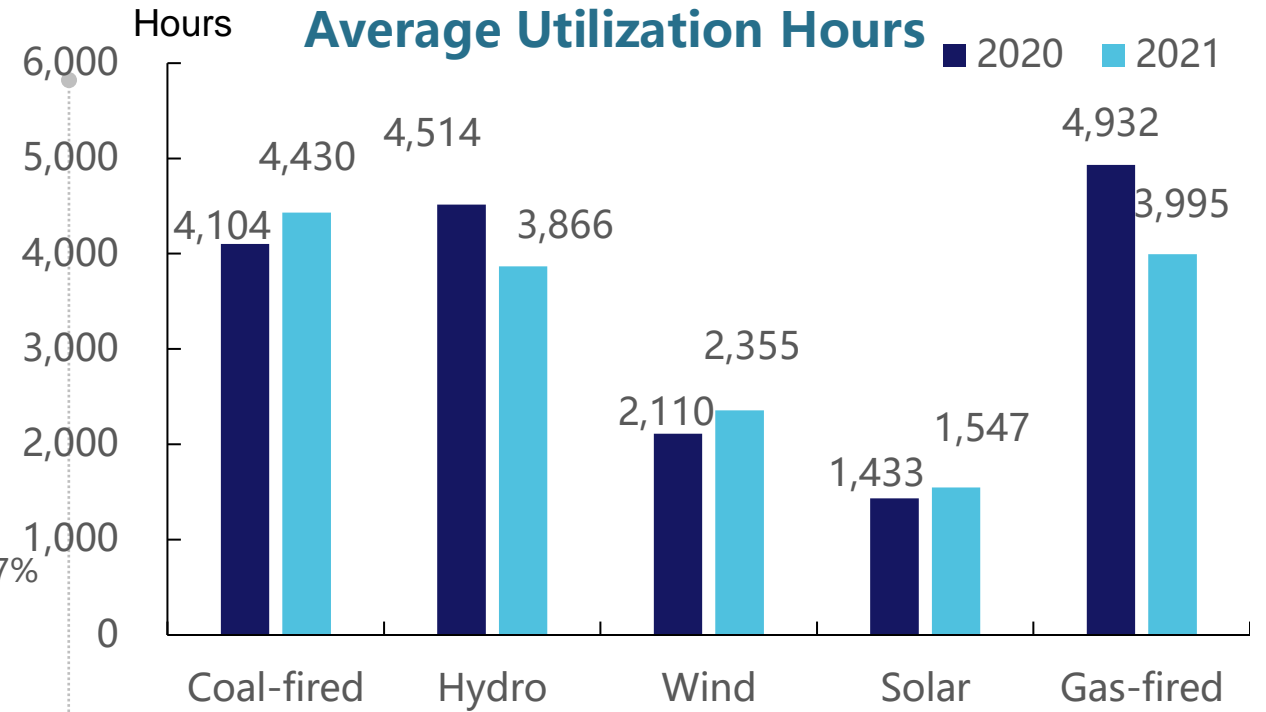
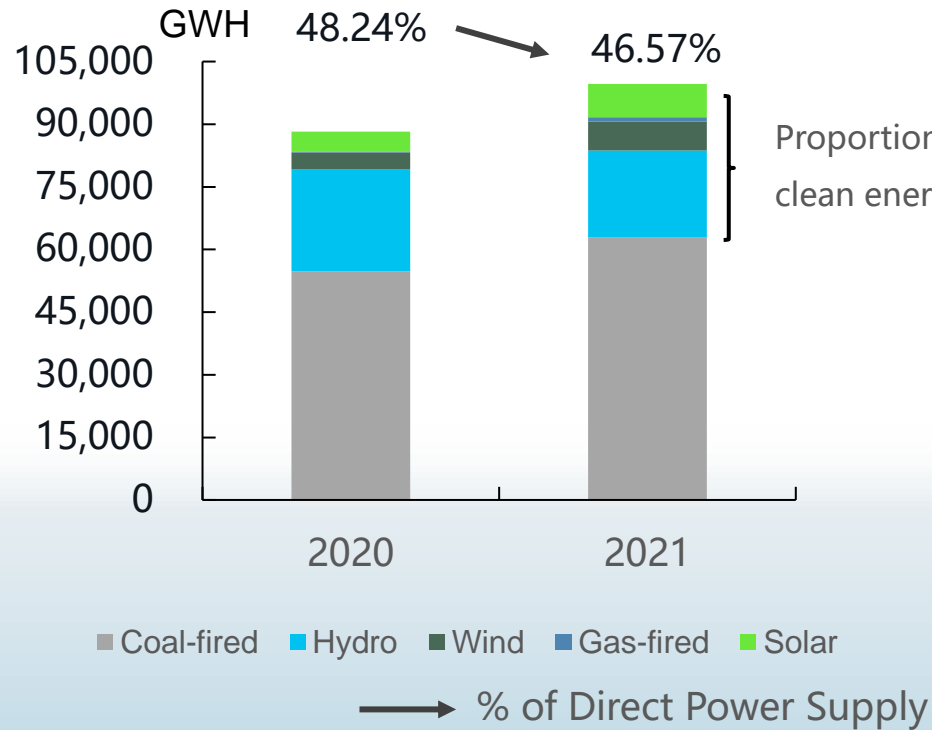
■ Solar ■ Hydro ■ Coal-fired ■ Gas-fired ■ Wind

Changes in Consolidated Capacity



Generation

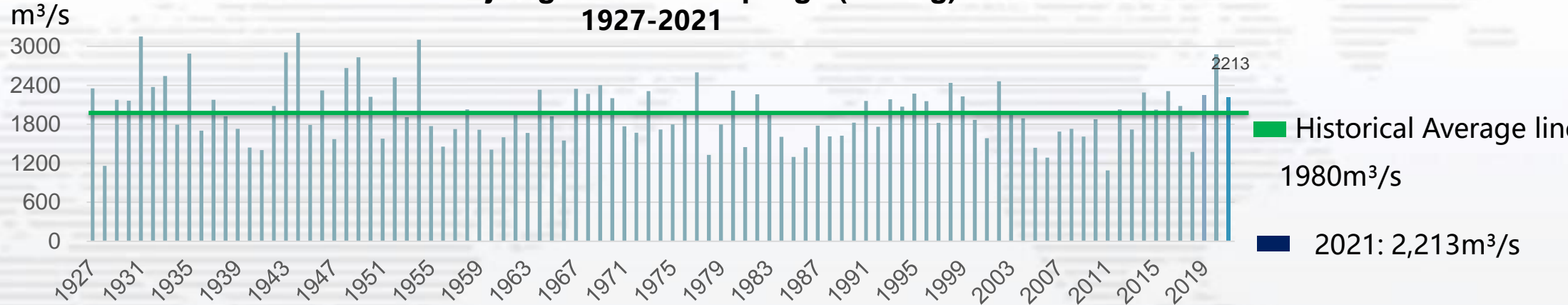
Net Power Generation (98,794GWH in 2021)



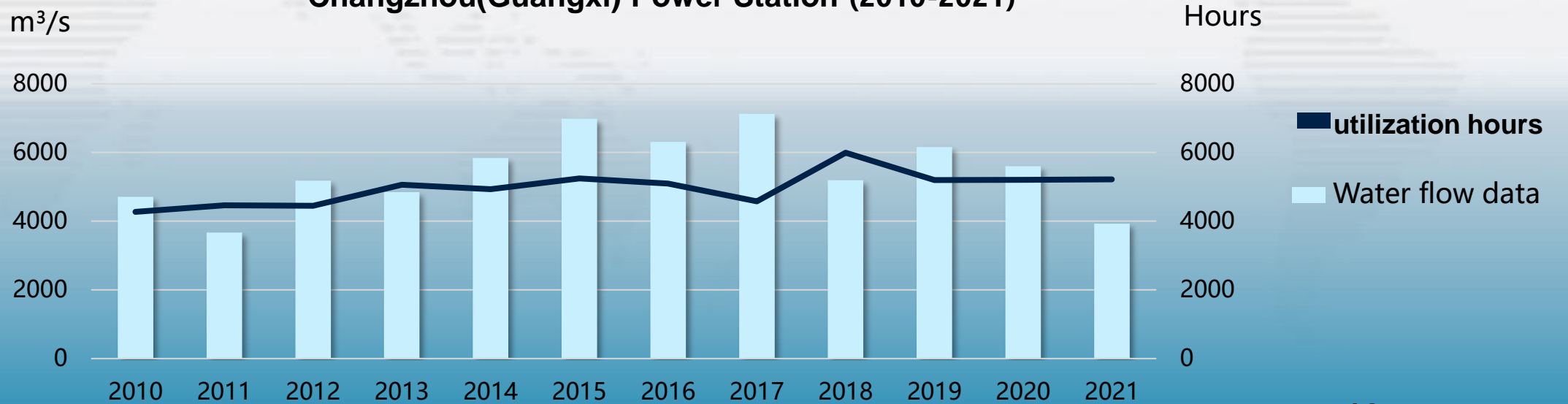
1. The average utilization hours of hydropower generating units decreased due to the decrease in the amount of rainfall in the river basins where most of the Groups hydropower plants are located.
2. The average utilization hours of wind power and photovoltaic power generating unit raised attributable to the results achieved from effective facility maintenance and higher average utilization hours of the newly operating generating units.
3. The average utilization hours of the coal-fired power generating units increased attributable to the recovery of power consumption driven by the year-on-year increase in electricity demand during the year.
4. The average utilization hours of the natural gas power generating units decreased due to lower average utilization hours of the newly operating generating units.

Hydropower

Water Flow data of Yuanjiang River at Wuqiangxi(Wuling) Power Station 1927-2021

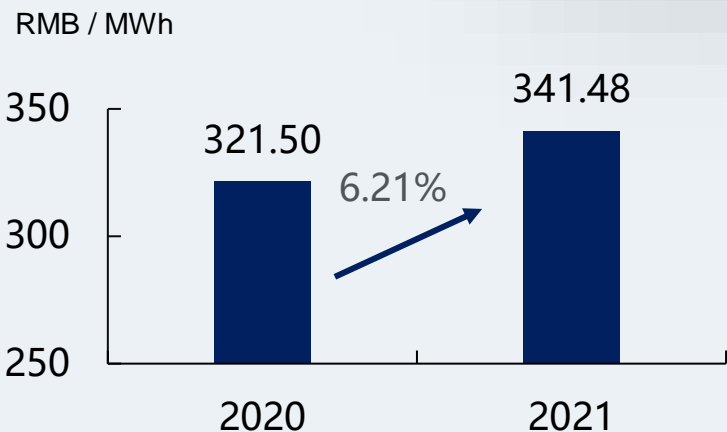


Changzhou(Guangxi) Power Station (2010-2021)

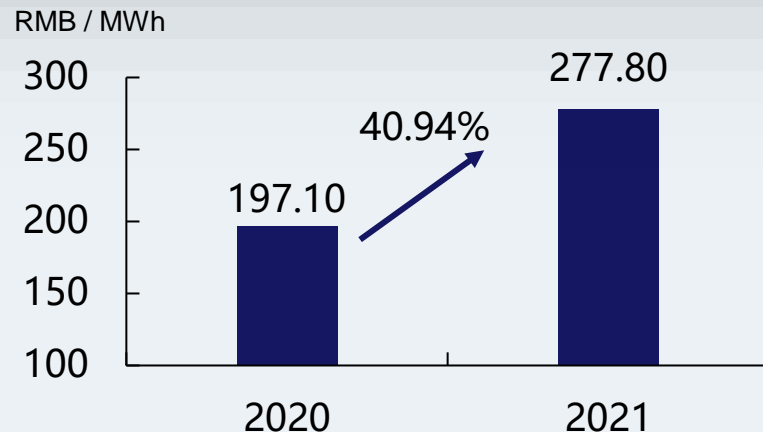


Tariffs (before taxation) and Unit Fuel Cost

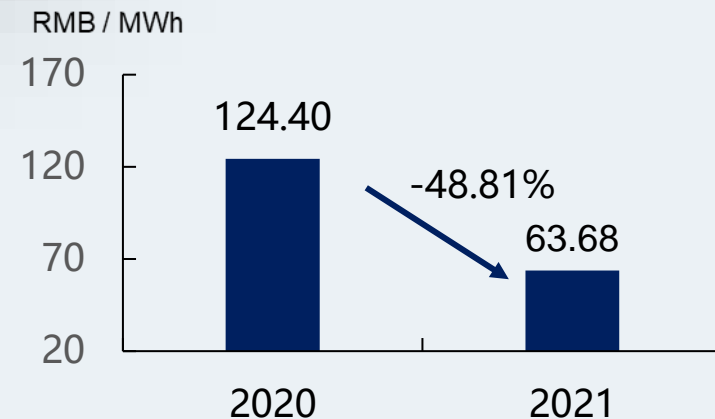
Average Coal-fired Power Tariffs



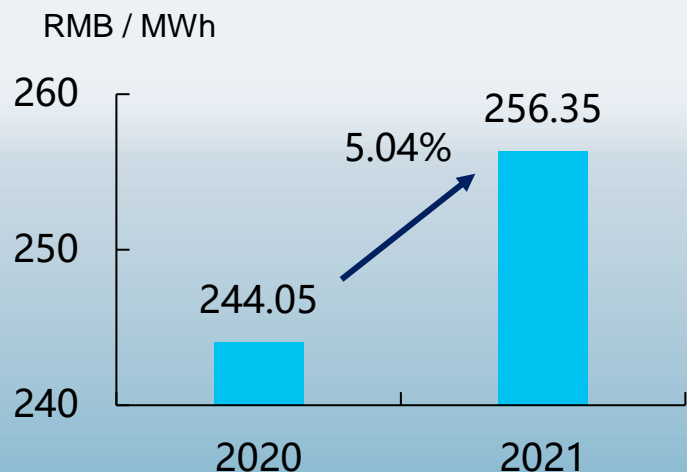
Unit Fuel Cost of Coal-fired Power



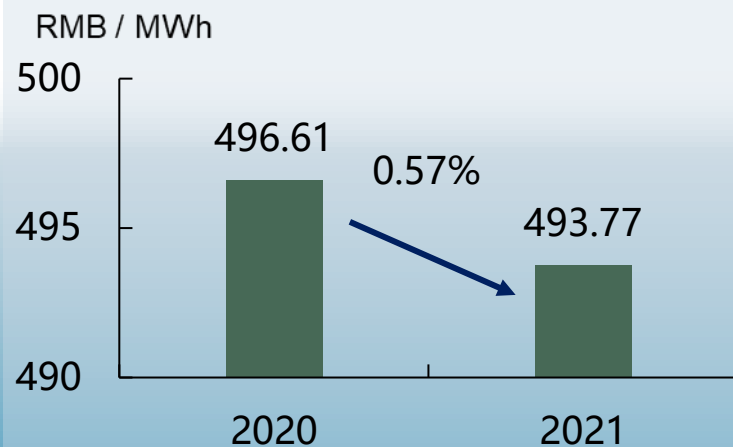
Dark Spread of Coal-fired Power



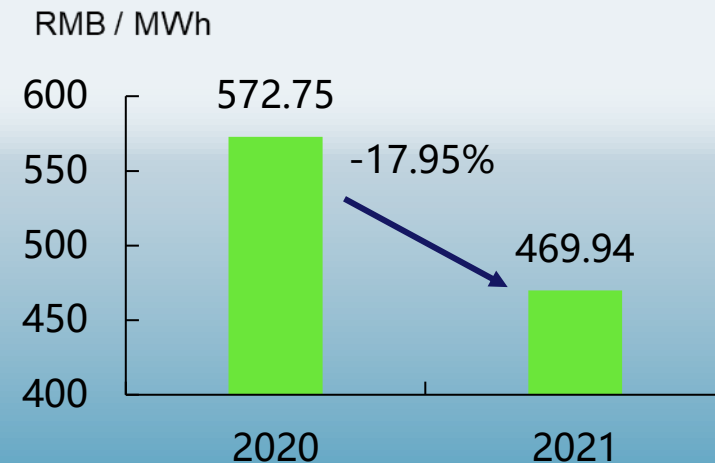
Average Hydro Power Tariff



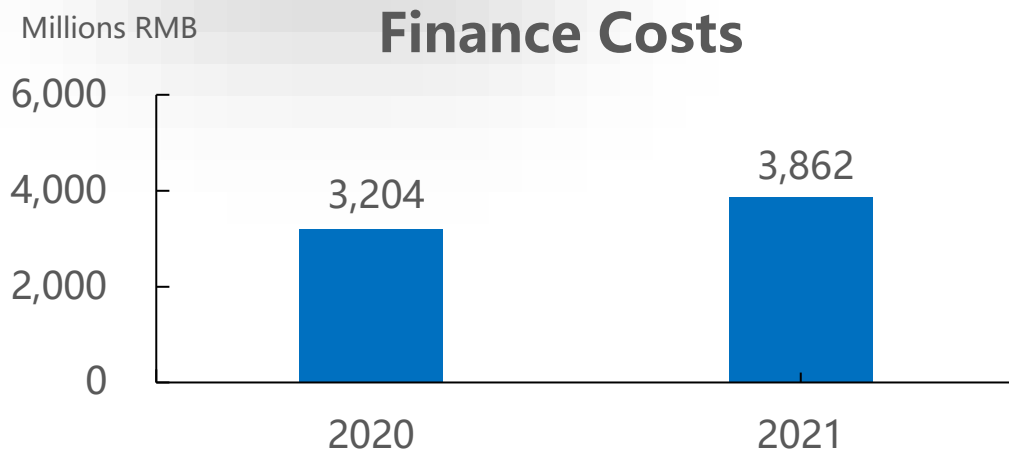
Average Wind Power Tariff



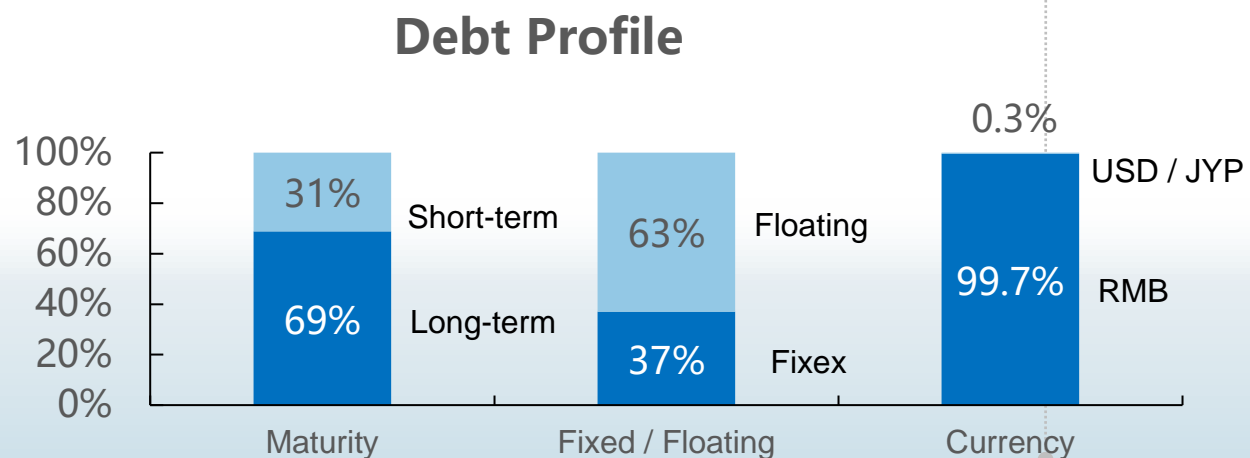
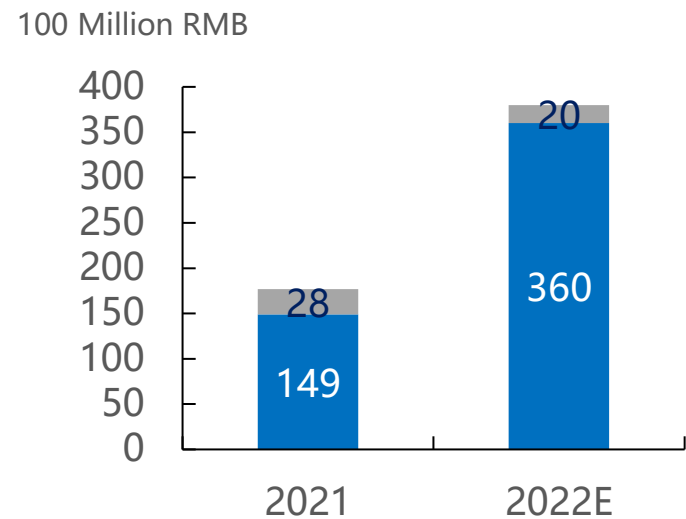
Average Solar Power Tariff



Financial Control



Capital Expenditure



■ Clean Energy ■ Coal-fired

Part 03

Future Prospects

High-quality Cleaning Transformation

**High-quality
Cleaning
Transformation**

**Take **New
Energy** as the
Master Track**

**Vigorously
Develop **Energy
Storage** Business**

**Enter the New Track of
**Green Power
Transportation** Business**

****Reform** of
Systematic
Mechanism**

High-quality Cleaning Transformation



Cleaning Transformation

The Company's installed capacity of clean energy has exceeded **50%** at present, strives to exceed **60%** in 2022, and targets to achieve **90%** by 2025.



Development of New Energy

The large base projects regarding "three types and one area", two "integrated" projects, offshore wind power projects, market development in the county areas and other fields have been fully developed, and the number of reserve projects has exceeded **70GW**.



Disposal of Low Efficiency Coal-fired Power Assets

In 2021, the consolidated capacity of coal-fired power decreased by 1.2GW and the attributable capacity of it decreased by 1.37GW. The company will continue to accelerate the disposal of low efficiency coal-fired power assets in 2022.



New Energy + Safeguard Power Supply

High-quality safeguard coal power with low energy consumption and high efficiency will be retained; its advantages of good cash flow and strong peak shaving ability will be utilized to fully support the development of new energy.

Electrochemical Energy Storage

The industry Star of Electrochemical Energy Storage – Xinyuan Smart Storage



Provide modular combination, mobile deployment, containerized energy storage solutions and energy management cloud platform services



Establish Xinyuan Smart Storage in a holding manner



Within half a year of its establishment, the business scale of energy storage has achieved nearly **688MWh**, and is expected to reach **3GWh – 5GWh** in 2022.

**Develop independent shared energy storage station;
Establish thermal power auxiliary service energy storage;
Actively probe into the customer-side demand response energy storage;
Intensify the technology research and development, integrated application of energy storage. 16**

Green Power Transportation

To be the industry leader in the green power transportation industry—
Qiyuanxin Power

Currently, Qiyuanxin Power manages nearly 100 battery swapping / charging stations.



The largest shareholder of
Shanghai Qiyuanxin Power
Technology Co., Ltd.



Achieved universal coverage of all business situations including steel mills, mines, power plants, cities and trunk roads.

Management Stock Option Plans

Wage Distribution Enhancement
and Projects Co-Investment

Highlights
No. 1

Highlights
No. 2

Highlights
No. 3

Highlights
No.4

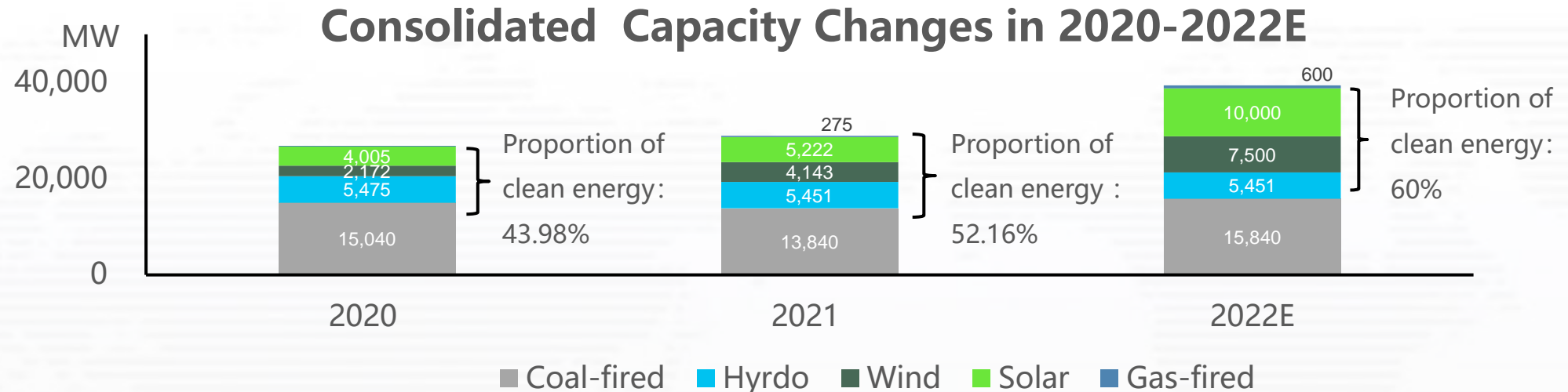
Highlights
No. 5

Market-oriented Recruitment and
Management Transformation

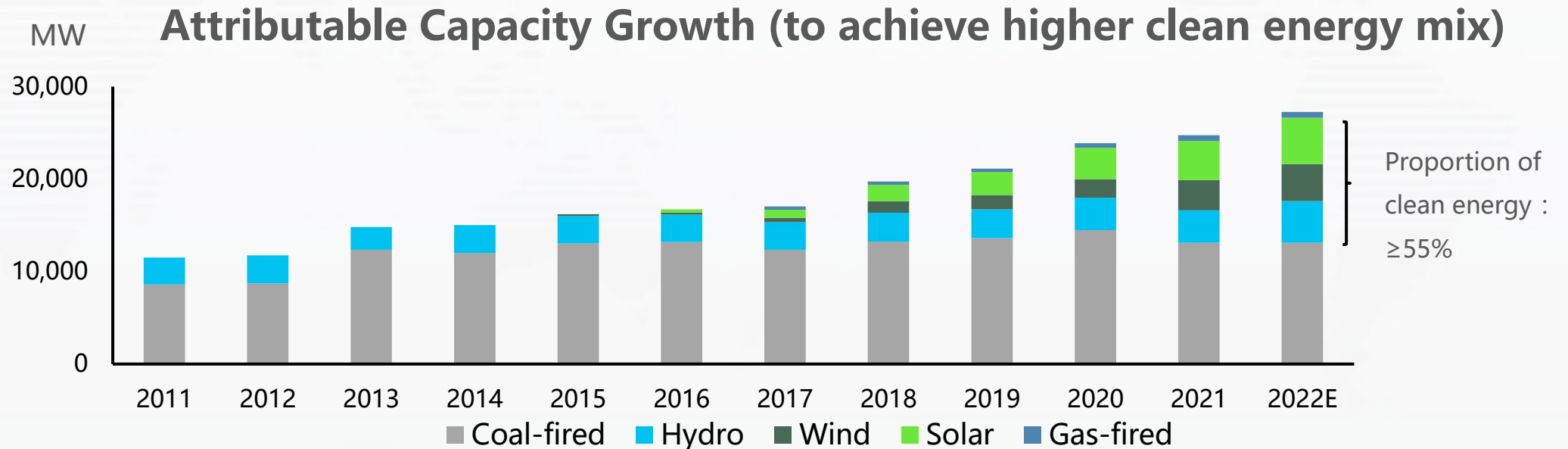
Optimization & Reform of
Systematic Mechanism

Enhancement of ESG
Management

Pipeline Projects



* The consolidated capacity of clean energy exceeded **50%** by the year-end of 2021, and is targeted to achieve **60%** before the year-end of 2022.







Part 04

Appendices

Operating Highlights

	2021	2020	Change
Attributable capacity (MW)	24,960.80	23,878.20	+4.53%
Consolidated capacity (MW)	28,931.90	26,845.80	+7.77%
—coal-fired	13,840	15,040	-7.98%
—clean energy	15,091.90	11,805.80	+27.83%
Gross generation (MWh)	103,048,687	91,902,510	12.13%
—coal-fired	66,630,939	57,999,478	+14.88%
—clean energy	36,417,748	33,903,032	+7.42%
Average utilization hours			
—coal-fired	4,430	4,104	+7.94%
—hydro	3,866	4,514	-14.36%
Average realized tariffs (RMB/MWh)			
—coal-fired	341.48	320.50	+6.21%
—hydro	256.35	244.05	+5.04%
Net coal consumption rate(g/KWh)	301.16	303.31	-0.71%

Income Statement

(RMB'000)	2021	2020	Change
Revenue	34,734,288	28,427,721	+22.18%
Fuel costs	-17,937,891	-10,876,072	+64.93%
Other operating costs (net)	-12,195,530	-11,179,789	+9.09%
Operating profit	4,600,867	6,371,860	-27.79%
Finance income	126,603	330,352	-61.68%
Finance costs	-3,861,500	-3,203,698	+20.53%
Share of profits of associates	-213,524	283,952	-
Share of profits of joint ventures	-119,280	43,661	-
Pre-tax profit	533,166	3,826,127	-86.07%
Taxation	-361,947	-900,576	-59.81%
Profit for the period	171,219	2,925,551	-94.15%
Profit Attributable to Equity Holders of the Company (RMB 000's)	-515,693	1,708,305	-
EPS (RMB)	-0.07	0.17	-

Controlling Shareholder

State Power Investment Corporation (SPIC)

SPIC, as the shareholder of China Power, is a wholly State-owned enterprise established by the approval of the State Council of the PRC. The business of SPIC includes power, coal, aluminum, logistics, finance, environmental protection and high-tech industries, and is the only comprehensive energy corporation which owns nuclear, hydro, thermal and other types of clean energy assets within China.

Capacity Structure of SPIC

(Total capacity exceeds **195GW**, capacity of clean energy exceeds **60%**)

Hydro

24.6_{GW}

Wind

38.2_{GW}

Solar

41.1_{GW}

Thermal

75.2_{GW}

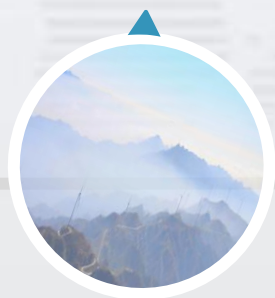
Nuclear

8.1_{GW}



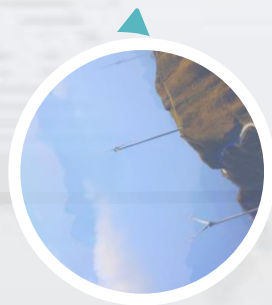
24 March 2004

Incorporated in *Hong Kong* with limited liability under the Hong Kong Companies Ordinance. Being a core subsidiary for conventional energy business of SPIC-which simultaneously owns coal-fired power, hydropower, nuclear power and renewable energy resources in the PRC.



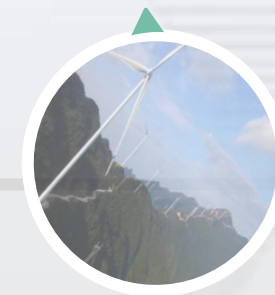
15 October 2004

Listed on The Main Board of the Hong Kong Stock Exchange on 15 October 2004 with the stock code 2380. In addition to the coal-fired power business in the start-up stage, the Company has expanded its business into the areas of, among others, hydropower, wind power, photovoltaic power, electricity sales and distribution and integrated energy through continuous development over the past 15 years. Various business segments are growing orderly along with the constant expansion of the Group.



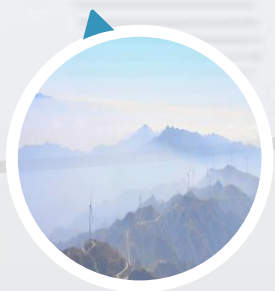
December 2006

Acquired 3.9 billion worth of A-stock shares of Shanghai Electric Power Co., Ltd.



2009

Acquired 63% of shares of Wuling Power Corporation Ltd.



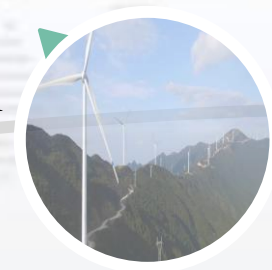
2018

Acquired 100% shares of each Guangxi Power, Shandong Power, Hubei Power and Anhui Power.



31 December 2021

The total consolidated capacity was **28931.9 MW**, of which attributable consolidated capacity of clean energy was **15091.9 MW**, accounting for **52.16%** of all attributable consolidated capacity.



July 2021

Formed Xinyuan Smart Storage as a joint venture company and officially foray into the energy storage field.

As of 31 December 2021, the energy storage segment recorded a **profit of 42.09 Million RMB**.

Hydropower Plants Distribution

- Existing Plant Location
- Plants under construction

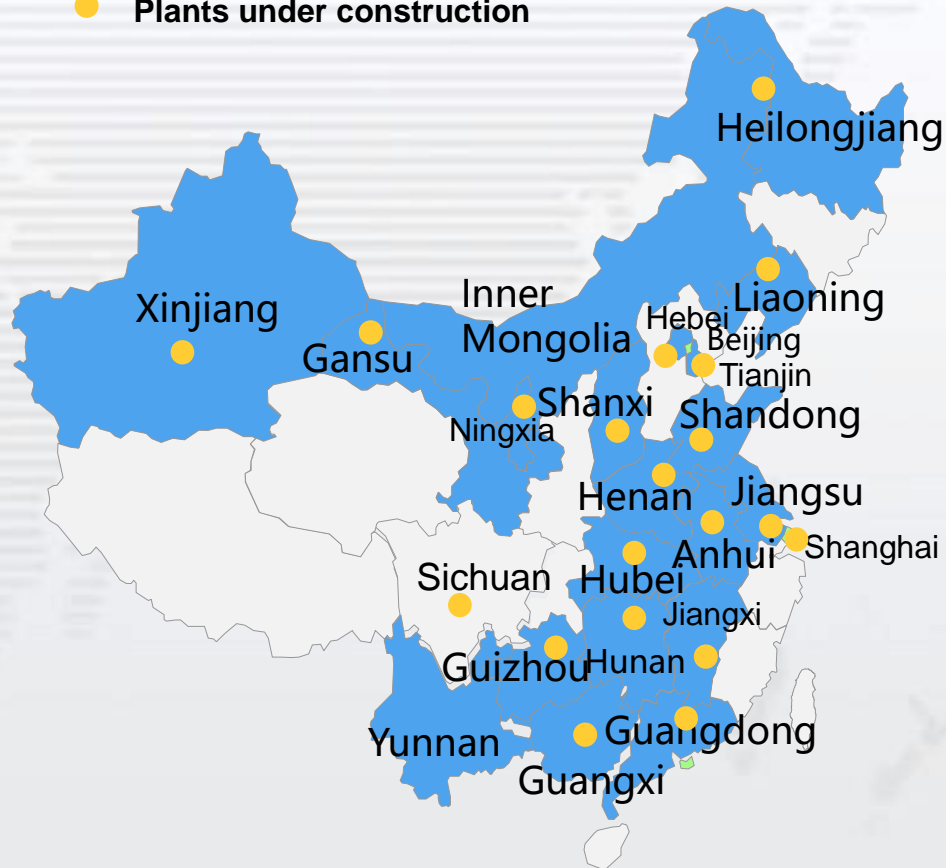


Plans	Capacity(MW)	Equity	Locations
In Operation			
Wuqiangxi:	1,200	63%	Hunan
Sanbanxi:	1,000	59.85%	Guizhou
Tuokou:	830	63%	Hunan
Changzhou:	630	78.95%	Guangxi
Baishi:	420	59.9%	Guizhou
Lingjintan:	270	63%	Hunan
Hongjiang:	270	63%	Hunan
Wanmipo:	240	63%	Hunan
Guazhi :	150	59.85%	Guizhou
Others:	441.1	9.13-63%	
Under Construction			
Wuqiangxi:	500	63%	Hunan

Wind & Solar Power Plants Distribution



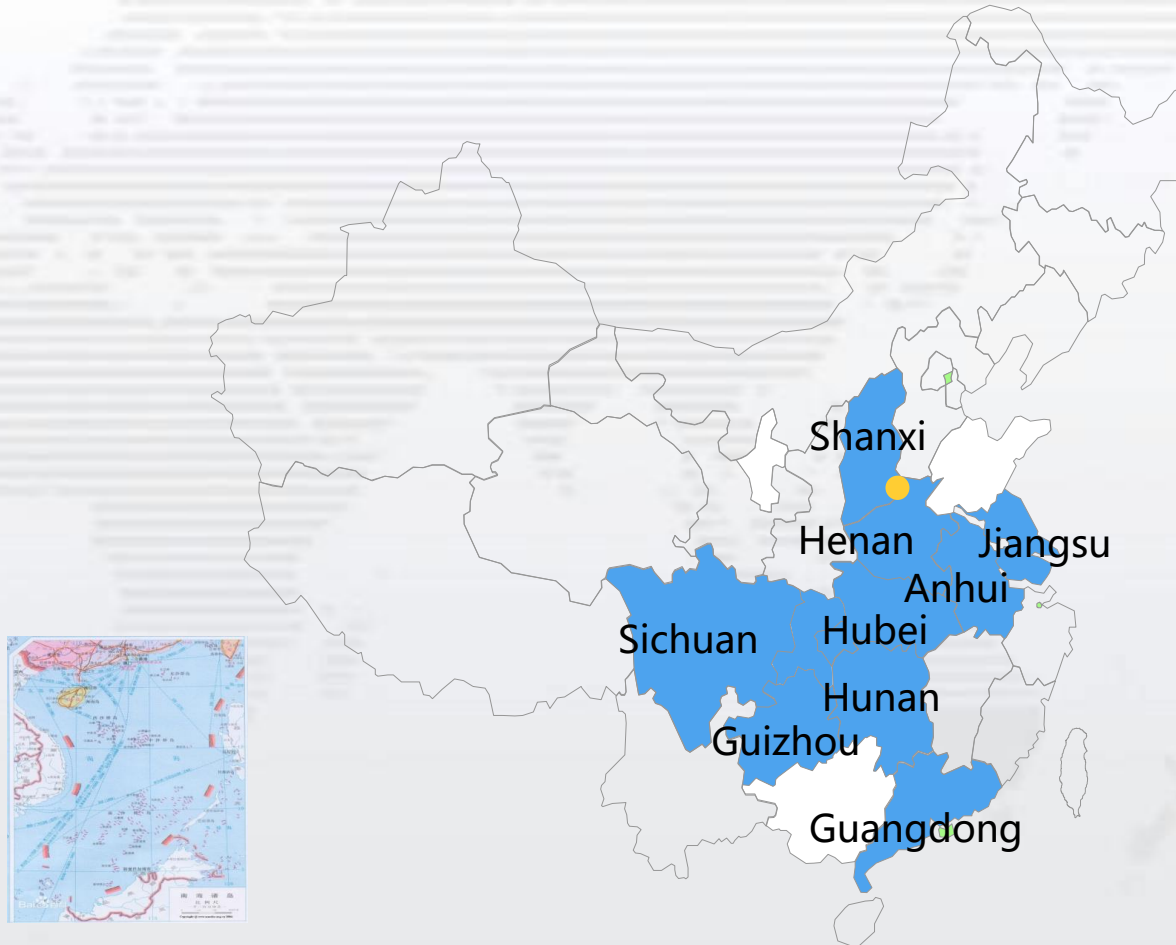
- Existing Plant Location
- Plants under construction



Plans	Capacity(MW)	Equity	Locations
Wind Farms in Operation			
Anqiu	208	51%	Shandong
Xing'an	694.4	95%	Guangxi
Tuokexun	49.5	63%	Xinjiang
Shanshan	99	63%	Xinjiang
Yaoposhan	50	63%	Hunan
Donggangling	50	63%	Hunan
Gulang:	100	44.1%	Gansu
...			
Total:	4143.3	32-100%	
Solar Farms in Operation			
Solar Farms :	4,005.1	44.1-100%	
Wind and Solar Farms Under Construction			
Wind Far	1,100	32.1-100%	
Solar Farms :	2,800	32.1-100%	

Thermal Power Plants Distribution

- Existing Plant Location
- Plants under construction



Plants	Capacity(MW)	Equity	Locations
In Operation			
Pingwei I :	2×630	60%	Anhui
Pingwei II :	2×640	60%	Anhui
Pingwei III :	2×1,000	60%	Anhui
Yaomeng :	3×300+2×630	100%	Henan
Dabieshan :	2 x 640 + 2 x 660	51%	Hubei
Fuxi:	2×600	51%	Sichuan
CP Shentou:	2×600	80%	Shanxi
Wuhu:	2×660	20%	Anhui
Pu'an	1×660	95%	Guizhou
Shangqiu(co-gen) :	2×350	100%	Henan
Changshu:	2×1,000+4×330	50%	Jiangsu
CP Shentou:	2×600	54%	Shanxi
Xintang(co-gen):	2×300	50%	Guangdong
Liyujiang:	2×300	25%	Hunan
Sujin Energy	2,983.2	9.5%	Shanxi
Under Construction			
CP Shentou II:	2×1,000	100%	Shanxi



Thank You!

*CHINA POWER INTERNATIONAL
DEVELOPMENT LIMITED*

Stock Code: 2380.HK