



中國電力國際發展有限公司
China Power International Development Limited

China Power International Development Limited

2018 Annual Results Presentation

22 March 2019

2380.HK



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Agenda

- **Annual Results Highlights**
- **Business Review**
- **Future Development and Prospects**
- **Financial Statements and Appendices**



Section 1

Annual Results Highlights



Results Highlights

Income Statement	2018	2017	Change
Revenue (RMB 000's)	23,175,626	19,966,811	16.07%
Fuel costs(RMB 000's)	(11,020,697)	(9,549,980)	15.4%
Other Operating Costs(net) (RMB 000's)	(7,740,588)	(7,308,377)	5.91%
Operating Profit (RMB 000's)	4,414,341	3,108,454	42.01%
Profit Attributable to Owners of the Company (RMB 000's)	1,098,355	795,272	38.11%
Basic EPS(RMB)	0.11	0.10	10%
Proposed DPS(RMB)	0.110	0.081	35.8%



Results Highlights

Balance Sheet	31 Dec 2018	31 Dec 2017	Change
Total Assets (RMB Millions)	124,959	98,027	27.47%
Total Liabilities(RMB Millions)	82,108	60,832	34.97%
—long-term debts	49,583	29,612	67.44%
—short-term debts	15,335	22,028	-30.38%
Total Equity(RMB Millions) (including non-controlling interests)	42,851	37,195	15.21%
Total Liabilities to Total Assets(%)	65.71	62.06	3.65ppts
Net Debt to Total Equity(%)	147.17	126.53	20.64ppts



Section 2

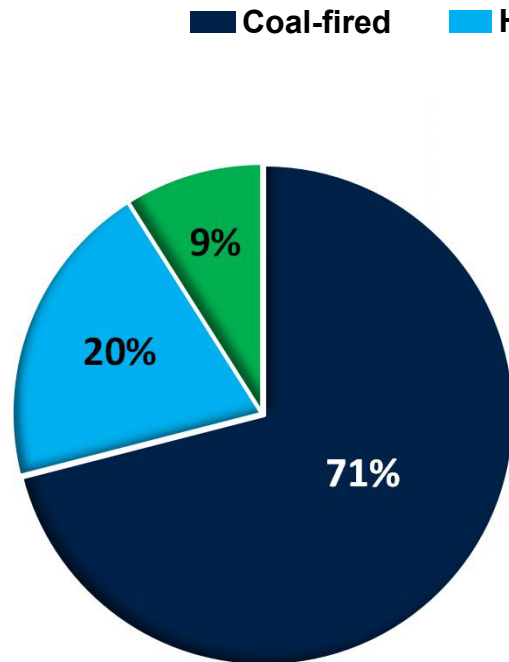
Business Review





Revenue and Profit Structure

Revenue

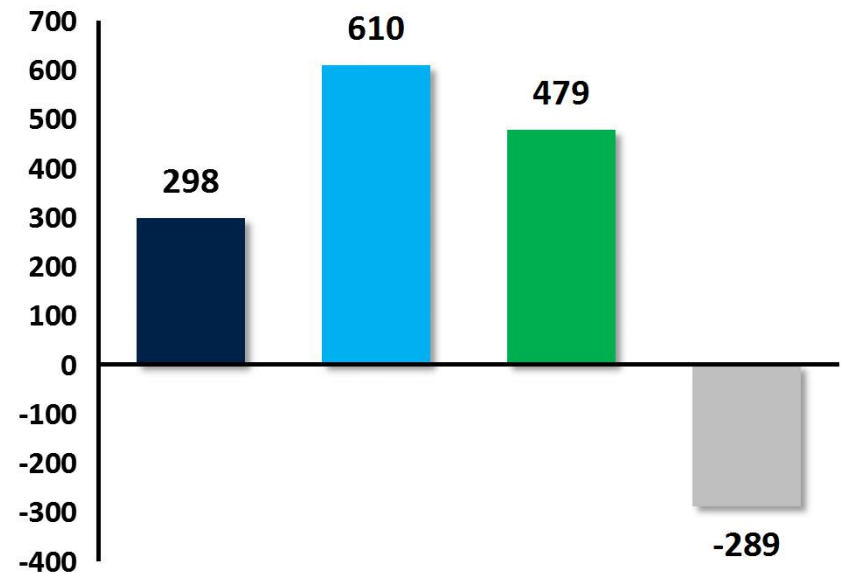


23,175,626
(RMB 000's)

Profit Attributable to Owners of The Company

■ Coal-fired ■ Hydro ■ Wind & Solar ■ Unallocated

Millions RMB



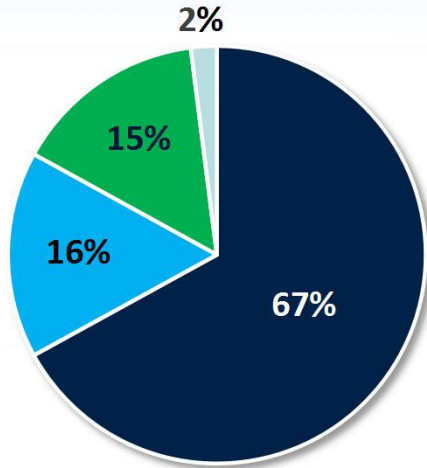
1,098,355
(RMB 000's)



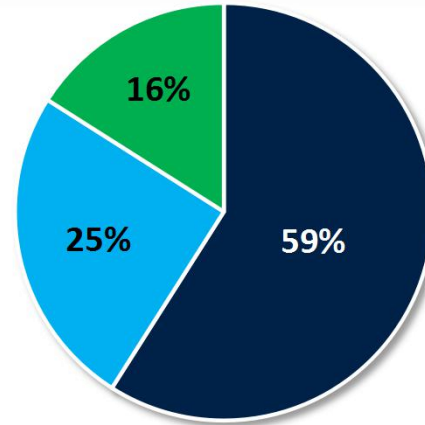
Capacity

Attributable Capacity: 19,731.6MW

Consolidated Capacity: 21,439.2MW

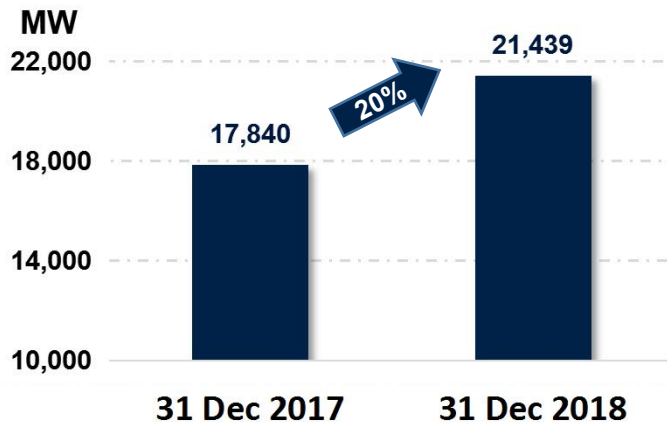


■ Coal-fired
■ Hydro
■ Wind & Solar
■ Gas-fired



※ All the gas-fired power capacity are attributable to Shanghai Power

Consolidated Capacity Change



Newly Added Capacity in 2018

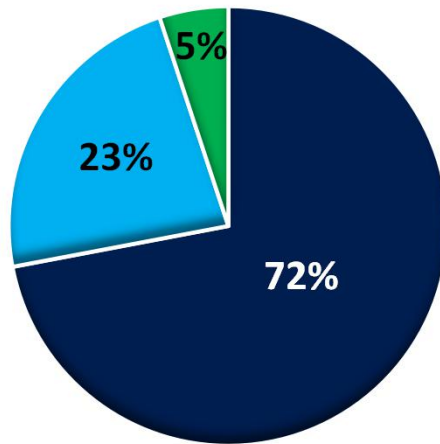
Type	Capacity(MW)	Location
Coal-fired	1,010	Guizhou, Henan
Hydro	630	Guangxi
Wind	914.5	Guangxi, Shandong, etc.
Solar	1,057.5	Anhui, Hubei, etc.



Generation

Net Power Generation

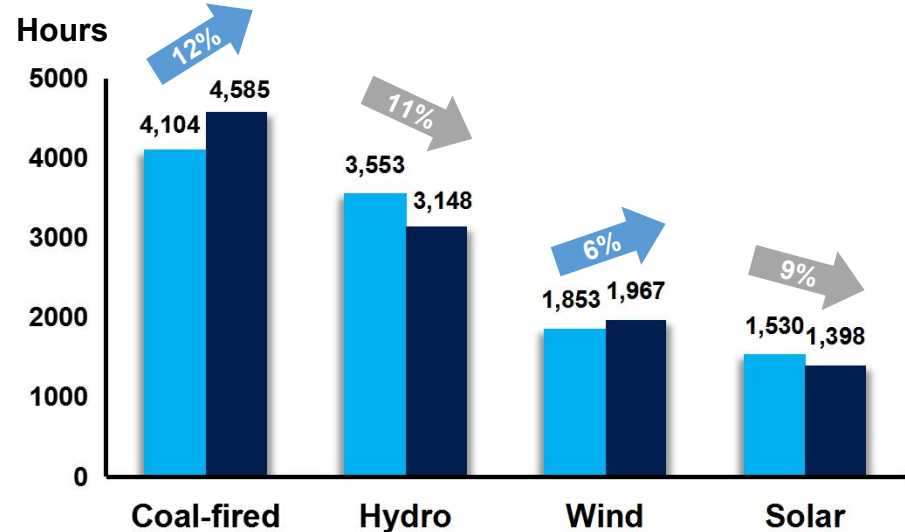
■ Coal-fired ■ Hydro ■ Wind & Solar



2018 Total : 70,965 GWh

Average Utilization Hours

■ 2017 ■ 2018

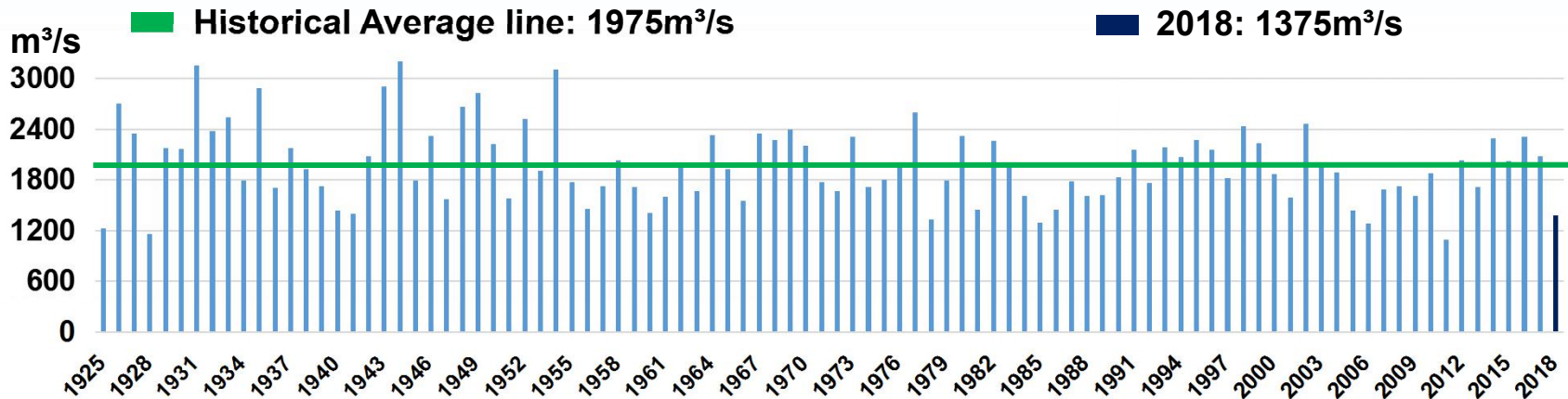


1. The coal-fired power utilization hours rebounded significantly due to the increased electric power consumption and the Group's proactive efforts in power marketing.
2. The hydropower utilization hours dropped yoy in 2018 as a result of low rainfall in the river basins where some of hydropower plants are located.
3. The wind power utilization hours increased 6% yoy. The solar power utilization hours decreased 9% yoy.

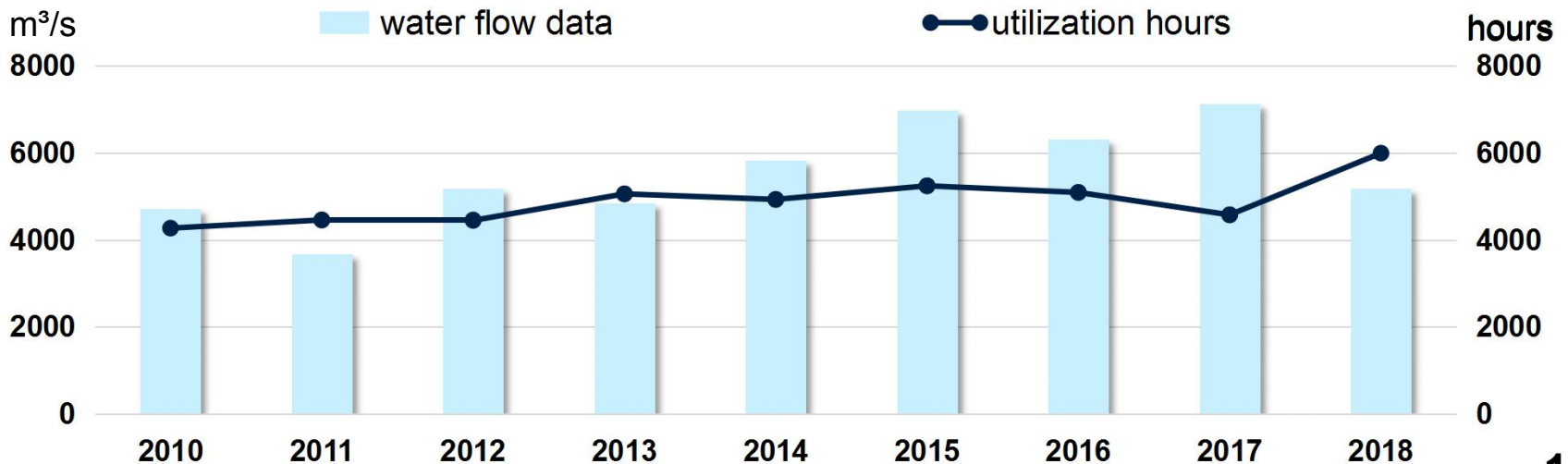


Hydropower

Water Flow data of Yuanjiang River at Wuqiangxi(Hunan) Power Station (1925-2018)



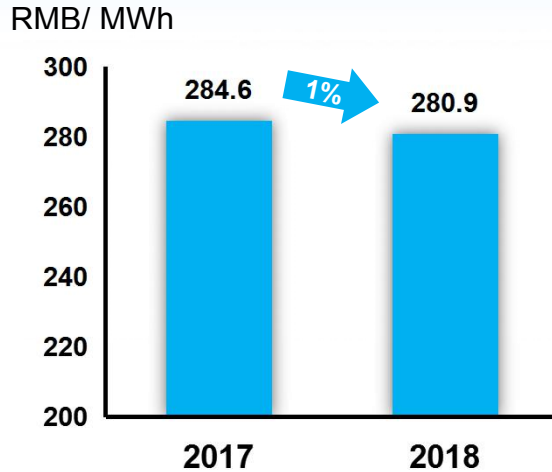
Changzhou(Guangxi) Power Station (2010-2018)



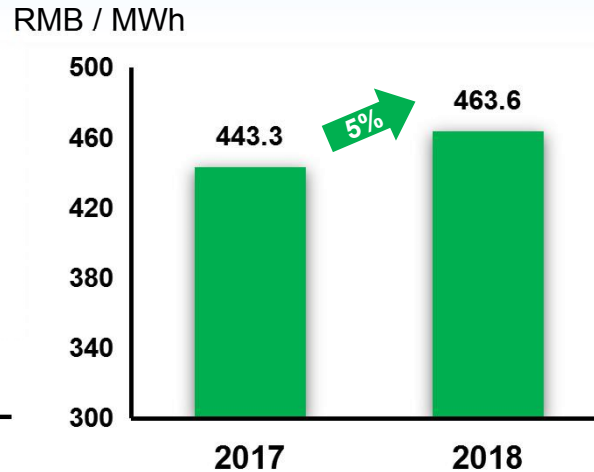


Tariffs and Unit Fuel Cost

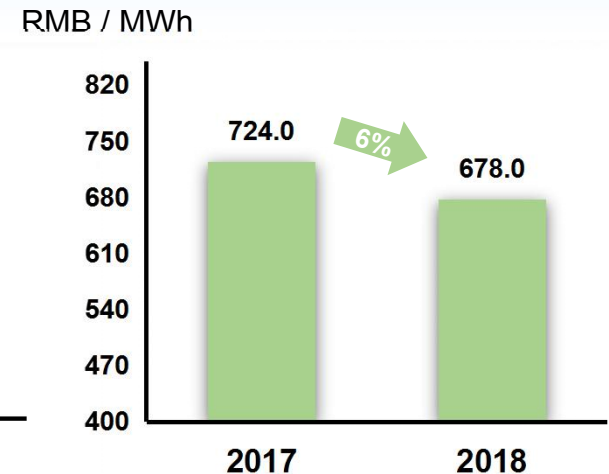
Average Hydro Power Tariff



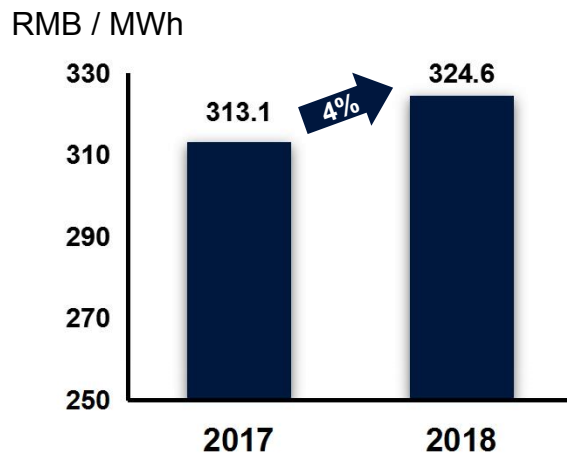
Average Wind Power Tariff



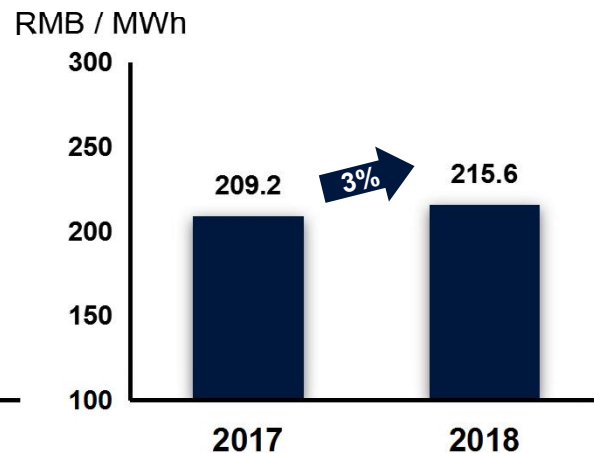
Average Solar Power Tariff



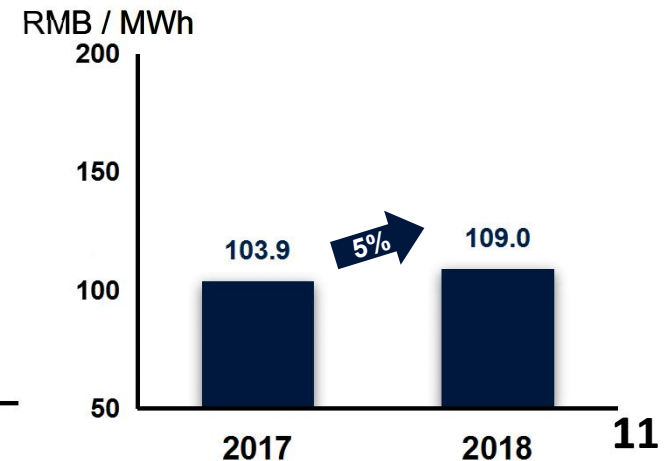
Average Coal-fired Power Tariff



Unit Fuel Cost of Coal-fired Power



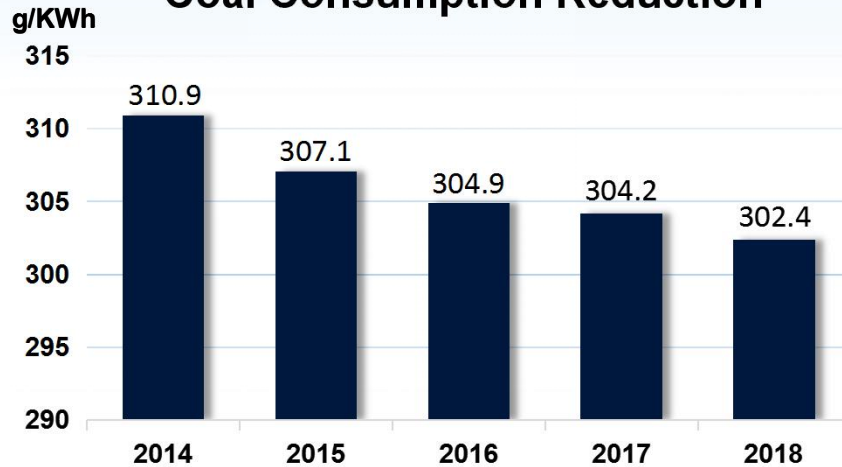
Dark Spread of Coal-fired Power



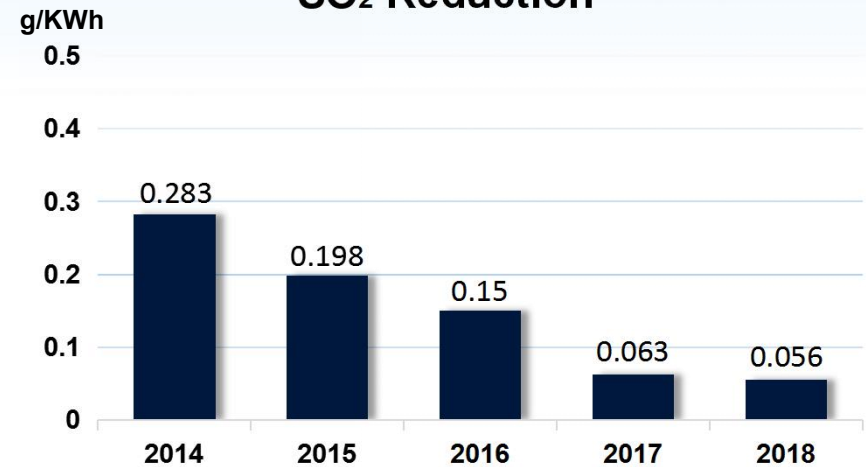


Energy Saving and Emission Reduction

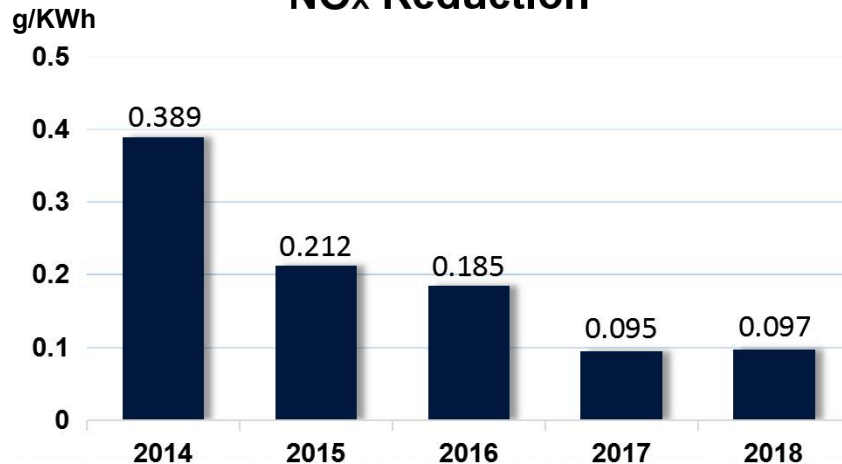
Coal Consumption Reduction



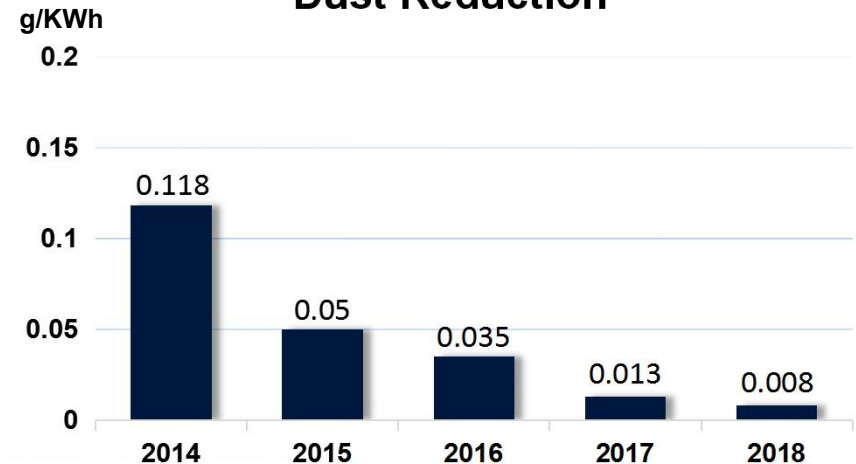
SO₂ Reduction



NO_x Reduction



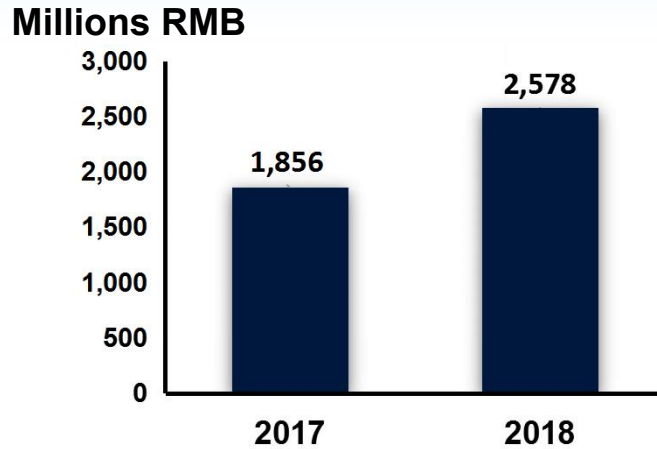
Dust Reduction



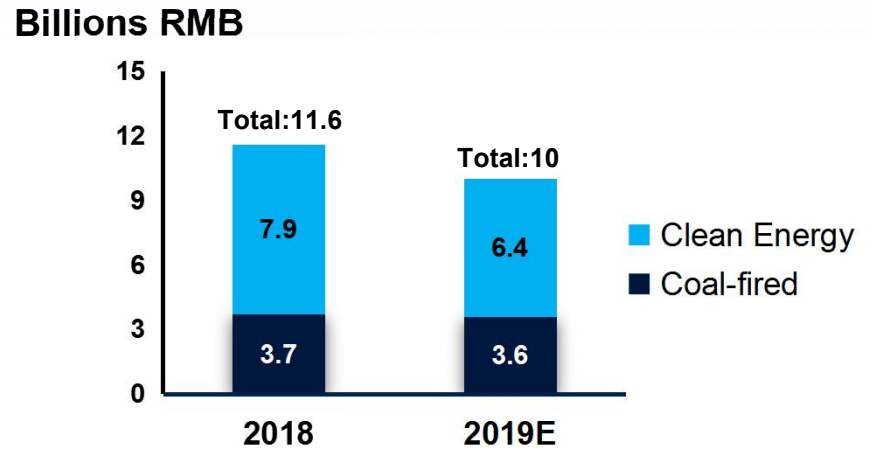


Financial Control

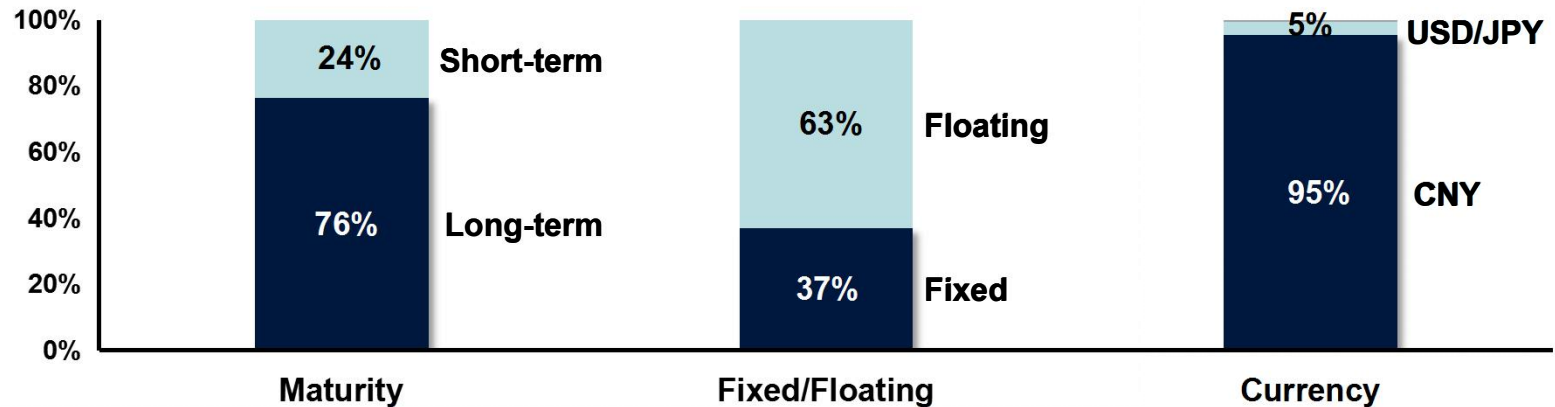
Finance Costs



Capital Expenditure



Debt Profile





Section 3

Future Development and Prospects



Transforming into a Clean Energy Company

I . Developing Clean Energy

- Expansions focusing on clean energy (on-shore wind farms in Zone 4, off-shore wind farms near Guangdong and Shandong coastal area, top-runner solar farms or solar farms without subsidies).
- Developing with a reasonable investment hurdle rate for new clean energy projects, especially for new solar farms .

II . Reducing Coal-fired Power Capacity

- Reducing stakes in existing coal-fired power plants.
- Potential disposal of coal-fired power plants.
- Strictly controlling coal-fired construction pipeline and capital expenditure.
- Improving the profitability of existing coal-fired power plants.

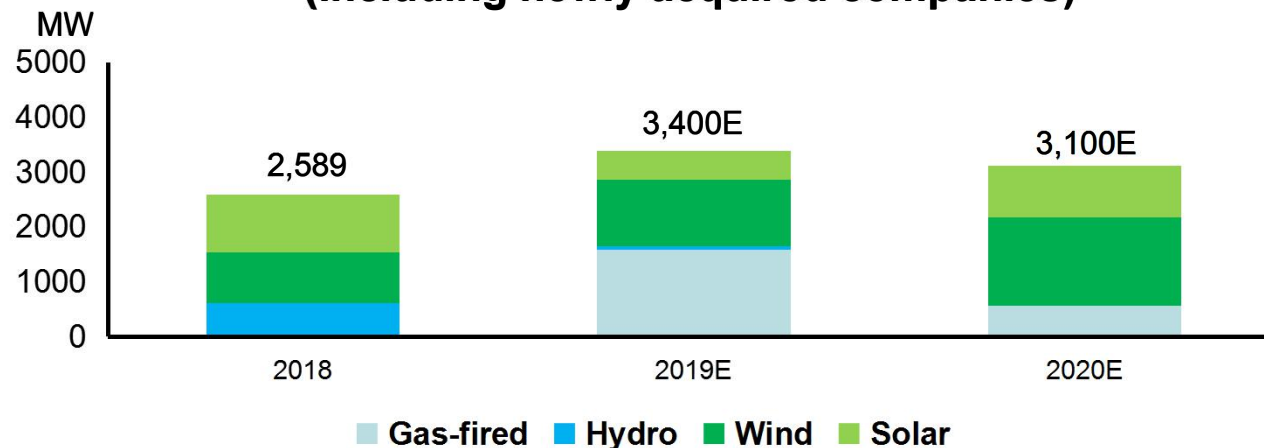


Pipeline Projects

Installed capacity changes in 2018-2020E (Coal-fired)

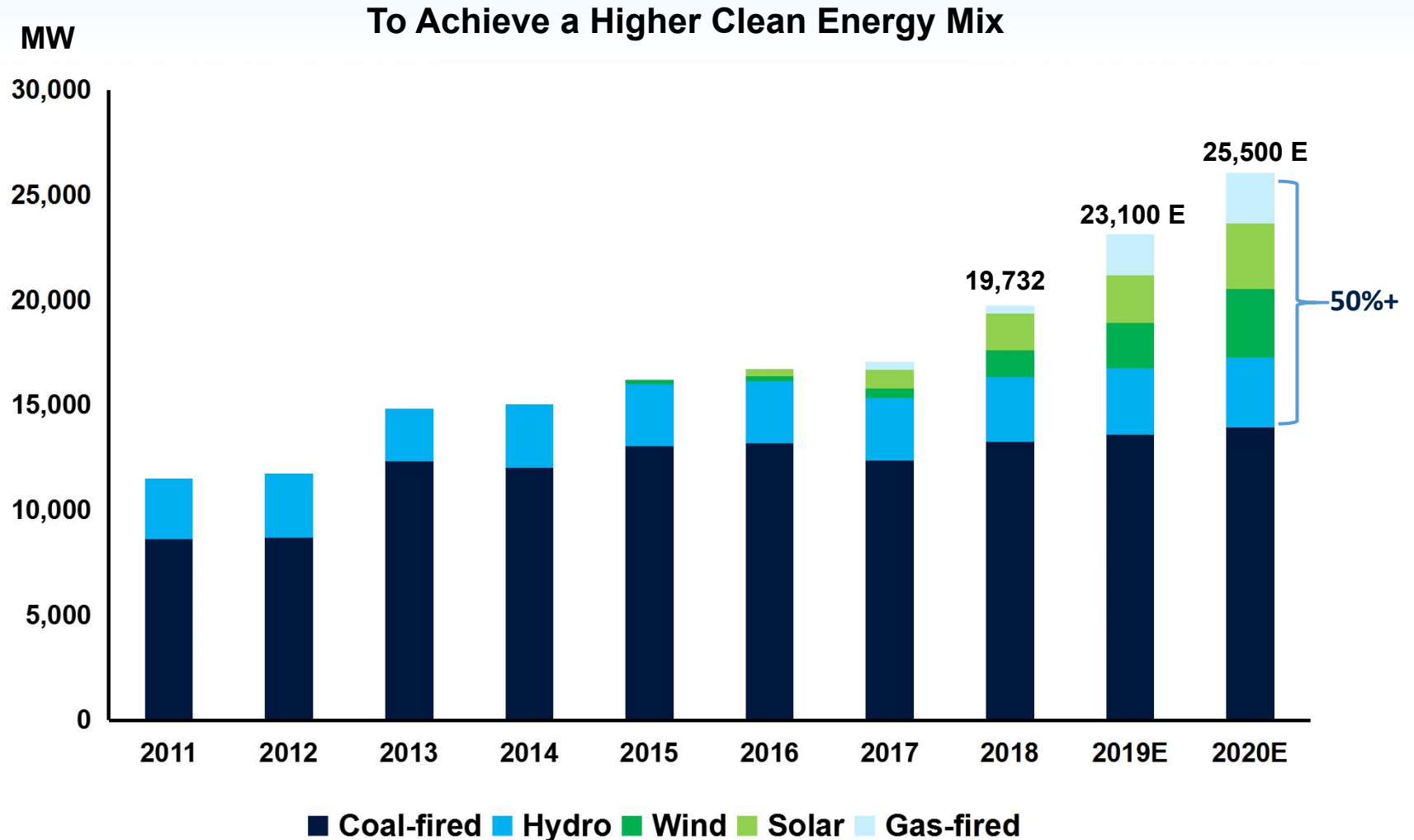


Installed capacity (approx.) to be added in 2018-2020 (Clean energy) (Including newly acquired companies)





Attributable Capacity Growth





Developing Integrated & Smart Energy

I . Integrated Energy Services

- Promoting integrated and smart energy demonstration projects
- Selectively carrying out clean heat-supply
- Providing facilities management services
- Exploring the technology of solar energy storage & charging

II . Smart Energy & Energy Internet of Things

- Developing smart energy management cloud platform
- Developing and optimizing IEMS(Integrated Energy Management System) with Tsinghua University and advanced technology companies
- Data sharing



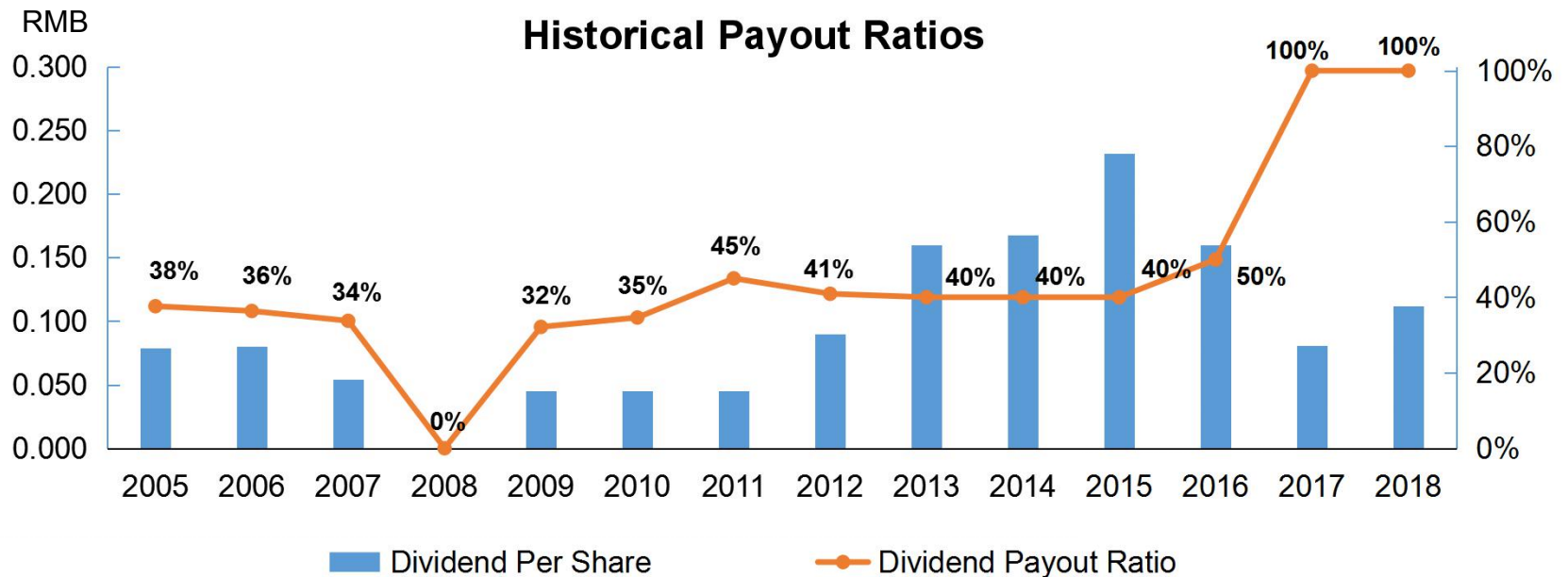
Dividend Policy & Guidance

1

Annual cash dividends in an amount representing not less than 50% (previously 25%) of the profit attributable to owners of the Company.

2

Maintaining a relatively stable dividend per share for three consecutive years starting from 2018, with the principle of not less than that declared in 2017.





Section 4

Financial Statements and Appendices



Operating Highlights

	2018	2017	Change
Attributable capacity (MW)	19,732	17,052	15.72%
Consolidated capacity (MW)	21,439	17,840	20.18%
—coal-fired	12,710	11,700	8.63%
—clean energy	8,729	6,140	42.17%
Gross generation (MWh)	74,101,429	66,683,402	11.12%
—coal-fired	53,941,613	48,021,260	12.33%
—clean energy	20,159,816	18,662,142	8.03%
Average utilization hours			
—coal-fired	4,585	4,104	11.72%
—hydro	3,148	3,553	-11.40%
Average realized tariffs (RMB/MWh)			
—coal-fired	324.57	313.14	3.65%
—hydro	280.86	284.62	-1.32%
Net coal consumption rate(g/KWh)	302.41	304.23	-1.82



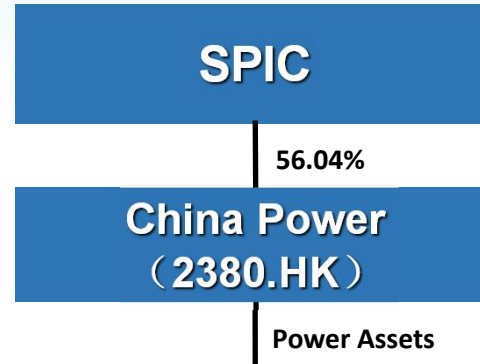
Income Statement

(RMB'000)	2018	2017	Change
Revenue	23,175,626	19,966,811	16.07%
Fuel costs	(11,020,697)	(9,549,980)	15.40%
Other operating costs (net)	(7,740,588)	(7,308,377)	5.91%
Operating profit	4,414,341	3,108,454	42.01%
Finance income	125,846	40,413	211.40%
Finance costs	(2,578,254)	(1,855,603)	38.94%
Share of profits of associates	114,461	222,630	-48.59%
Share of profits of joint ventures	(6,446)	44,743	-114.41%
Pre-tax profit	2,069,948	1,560,637	32.63%
Taxation	(432,763)	(279,930)	54.60%
Profit for the period	1,637,185	1,280,707	27.83%
Profit attributable to equity holders	1,098,355	795,272	38.11%
EPS (RMB)	0.11	0.10	10.00%



Corporate Structure

SPIC is the only comprehensive energy corporation which owns nuclear, hydro, thermal and other types of clean energy assets within China.



Total conventional energy of SPIC includes:

Hydro	23.0 GW
Wind	17.4 GW
Solar	16.0 GW
Thermal	79.4 GW

	50-100%	63%	100%	100%	100%	100%	100%	13.88%	9.13%
Capacity (MW)	Power Plants	Wuling Power	Guangxi Power	Shandong Power	Anhui Power	Hubei Power	SEP (600021.SH)	SichuanEI (1713.HK)	
Thermal	16,030	600	-	-	-	-	-	-	
Hydro	-	4,794	630	-	-	-	-	-	
Wind	-	718	646	99	-	-	-	-	
Solar	917	421	20	33	234	293	-	-	
Total	16,947	6,533	1,296	132	234	293	13,512	139	



Thermal Power Plants Distribution

- Existing Plant Location
- Plants under construction
- SEP



Plants	Capacity(MW)	Equity	Locations
In Operation			
Pingwei :	2×630	100%	Anhui
Pingwei II :	2×640	75%	Anhui
Pingwei III :	2×1,000	60%	Anhui
Yaomeng :	3×300+2×630	100%	Henan
Dabieshan :	2×640	51%	Hubei
Fuxi:	2×600	51%	Sichuan
CP Shentou:	2×600	80%	Shanxi
Wuhu:	2×660	100%	Anhui
Pu'an	1×660	95%	Guizhou
Shangqiu(co-gen) :	1×350	100%	Henan
Changshu:	2×1,000+4×330	50%	Jiangsu
Xintang(co-gen):	2×300	50%	Guangdong
Liyujiang:	2×300	25%	Hunan
Under Construction			
Pu'an :	1×660	95%	Guizhou
Shangqiu(co-gen) :	1×350	100%	Henan
Dabieshan (New):	2×660	51%	Hubei
Shanghai Electric Power			
● SEP:	7,426	13.88%	East China



Hydropower Plants Distribution

- Existing Plant Location
- Plants under construction



Plants	Capacity(MW)	Equity	Locations
In Operation			
Wuqiangxi:	1,200	63%	Hunan
Sanbanxi:	1,000	63%	Guizhou
Tuokou:	830	37.2%	Hunan
Changzhou:	630	65%	Guangxi
Baishi:	420	59.9%	Guizhou
Lingjintan:	270	63%	Hunan
Hongjiang:	270	37.2%	Hunan
Wanmipo:	240	63%	Hunan
Others:	564	59.9-100%	
Under Construction			
Luoshuidong:	35	63%	Hunan
Mawo:	32	63%	Sichuan



Wind & Solar Power Plants Distribution

■ Existing Wind and Solar Farms Location

● Plants under construction



Plants	Capacity(MW)	Equity	Locations
Wind Farms in Operation			
Shibanling	120	95%	Guangxi
Jinzishan	99	51%	Guangxi
Tuokexun	49.5	63%	Xinjiang
Shanshan	99	63%	Xinjiang
Yaoposhan	50	63%	Hunan
Donggangling	50	63%	Hunan
Gulang:	100	44.1%	Gansu
...			
Total:	1,462	32-95%	
Solar Farms in Operation			
Solar Farms:	1,843.5	44.1-100%	
Wind and Solar Farms Under Construction			
Wind Farms:	1,490.4	44.1-100%	
Solar Farms:	481.7	44.1-100%	



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Thank you!