

# Concord New Energy Group Ltd. (0182.hk)

- An Experienced and Integrated Wind & Solar Developer and Operator

2016 Interim Results Presentation

3<sup>th</sup> Aug 2016



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### Outstanding growth of power generation & Started BT business mode

#### Performance Highlights:

- In the first half of 2016, the Group's power generation business obtain a profit of 263 million growing 60.13% compared to the same period last year, accounting for 94.83% of all the profits Comprehensive. Generating profits has become the core profits of the group.
- During the reporting period, the Group added 3 new wind and solar power plants to production, with total capacity of 146MW (2015: 132MW) and attributable capacity of 122MW (2015: 59MW), of which 2 were wind farms with capacity of 96MW and attributable capacity of 72MW and 1 was solely-funded solar power plant with capacity of 50MW.
- As of June 30, 2016, the Group held interests of 52 grid-connected wind and solar power plants, with a total capacity of 2,372MW and attributable capacity of 1,401MW, of which 34 were wind farms with total capacity of 1,777MW and attributable capacity of 824MW, and 18 were solar power plants with total capacity of 595MW and attributable capacity of 577MW.
- As of June 30, 2016, the Group has 14 projects under construction and the attributable capacity was 692MW. Among them there are 11 wind power projects which the attributable capacity was 612MW and 3 solar power projects which the attributable capacity was 80MW.

#### Model Innovation:

- The Group actively develops BT mode to improve efficiency and increase profits, and have already achieved initial effects.

## 2016 Financial Summary

		As at 30 <sup>st</sup> Jun 16	As at 31 <sup>st</sup> Dec 15	Change%
<b>Balance Sheet</b>	Net assets	HK\$ 5,886.52mil	HK\$5,755.58mil	+2.27%
	Cash and cash equivalent	HK\$ 1,480.84mil	HK\$ 1,950.31mil	-24.07%
	Gearing ratio (Total Liabilities divided by Total Assets)	0.62	0.59	+5.08%
<b>Consolidated P&amp;L</b>		As at 30 <sup>st</sup> Jun 16	As at 30 <sup>st</sup> Jun 15	Change%
	Revenue	HK\$ 1,052.07mil	HK\$ 2,174.46mil	-51.61%
	Profit	HK\$ 280.23mil	HK\$ 252.92mil	+10.79%
	Fully diluted EPS	3.22cent	2.83cent	+13.78%
<b>Segment Revenue</b>	Power generations	HK\$ 428.75mil	HK\$ 250.58mil	+71.10%
	EPC	HK\$ 584.10mil	HK\$ 1,865.40mil	-68.69%
	O&M	HK\$ 39.22mil	HK\$ 58.48mil	-32.93%
<b>Segment Profit</b>	Power generations	HK\$ 264.43mil	HK\$ 164.51mil	+60.73%
	EPC	HK\$9.50 mil	HK\$ 59.94mil	-84.15%
	O&M	HK\$3.57 mil	HK\$ 8.42mil	-57.60%
	Core business profit overall	HK\$ 276.50mil	HK\$ 231.67mil	+19.35%
	Other gain net	HK\$ 5.22mil	HK\$ 0.20mil	+2510%

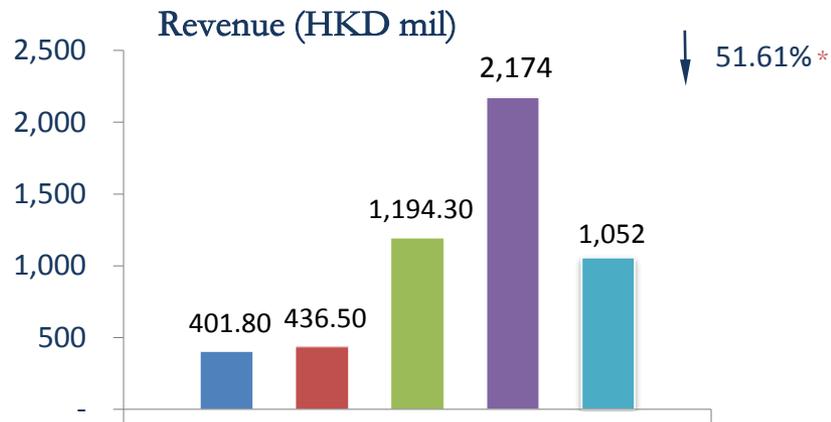
1. Power generation revenue from consolidated power plants

2. The Segment Profit are calculated based on Notes2 of financial report, and single out the other gains. The net profit of power generation includes the power generation, URP release, deferred tax contribution and shared profits of joint ventures.

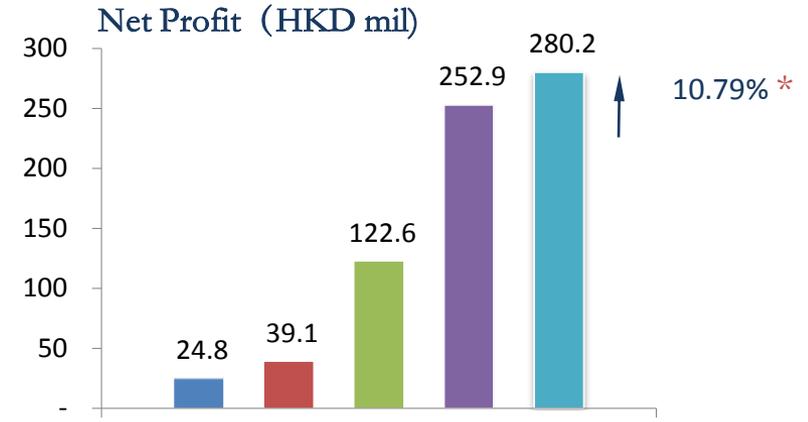
## 2016 Operational Summary

		As at 30 <sup>th</sup> Jun 16		As at 30 <sup>th</sup> Jun 15		Change	
		Total	Equity	Total	Equity	Total	Equity
<b>Power Investment</b>	Total capacity in operation	2,372MW	1,401MW	1,964MW	1,017MW	+20.77%	+37.76%
	- Wind	1,777MW	824MW	1,599MW	671MW	+11.13%	+22.80%
	- Solar	595MW	577MW	365MW	346MW	+63.01%	+66.76%
	Total newly added capacity	146MW	122MW	132MW	59MW	+10.60%	+106.77%
	- Wind	96MW	72MW	98MW	39MW	-2.04%	+84.61%
	- Solar	50MW	50MW	34MW	20MW	+47.05%	+150%
<b>Power Generation</b>	Total wind power generation		1,554mil kWh		1334mil kWh		+16.49%
	Total attributable wind power generation		679mil kWh		554mil kWh		+22.69%
	Weighted average wind farm capacity factor		908hours		918hours		-1.08%
	Total solar power generation		436mil kWh		256mil kWh		+70.31%
	Total attributable solar power generation		417mil kWh		239mil kWh		+74.47%
	Weighted average solar farm capacity factor		813hours		818hours		-0.61%
	Weighted average tariff						
	- Wind		RMB0.5638/kWh		RMB0.5586/kWh		+0.93%
	- Solar		RMB0.980/kWh		RMB1.054/kWh		-7.02%
	Turbines availability rate		95.94%		95.07%		+0.91%
	Modules availability rate		99.22%		99.85%		-0.63%
Wind Power Grid Curtailment		24.1%		23.2%		+3.87%	
Solar Power Grid Curtailment		3.2%		0.5%		+540.00%	
<b>EPC and O&amp;M</b>	No. of projects constructed		20		19		+5.26%
	No. of design & consultancy reports provided		98		63		+55.55%
	No. of O &M service projects		52		39		+33.35%
<b>Human Resources</b>	Total no. of employees		1,091		1,016		+7.38%
<b>Emission Reduction</b>	Total tons of CO <sub>2</sub> emission reduction		1,760,000 tons		1,500,000 tons		+17.33%

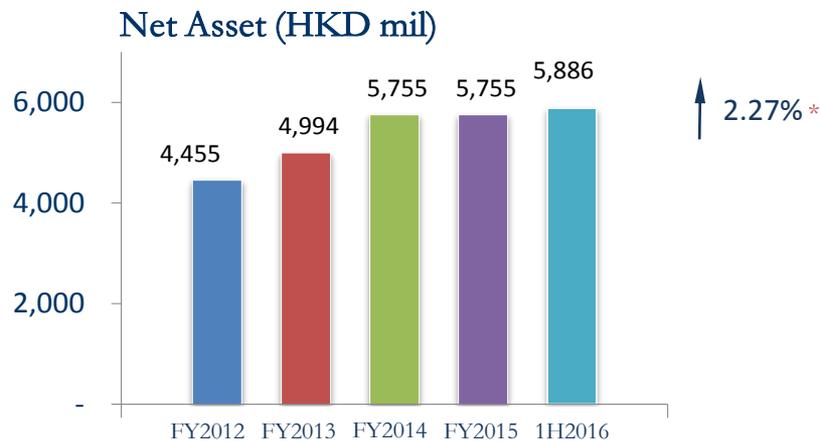
## 1H2012 to 1H2016 Historical Performance



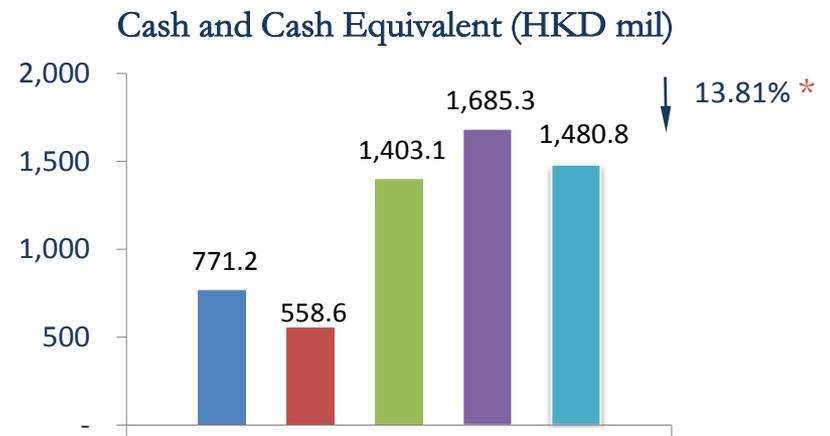
\* Change% between 1H2016 & 1H2015



\* Change% between 1H2016 & 1H2015



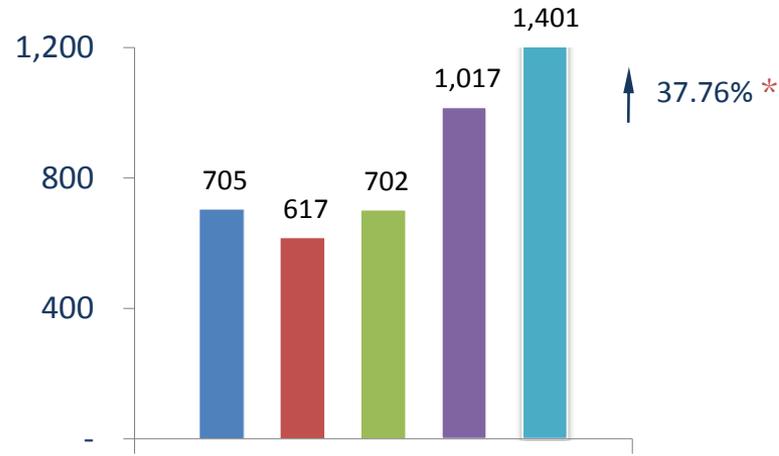
\* Change% between 1H2016 & FY2015



\* Change% between 1H2016 & 1H2015

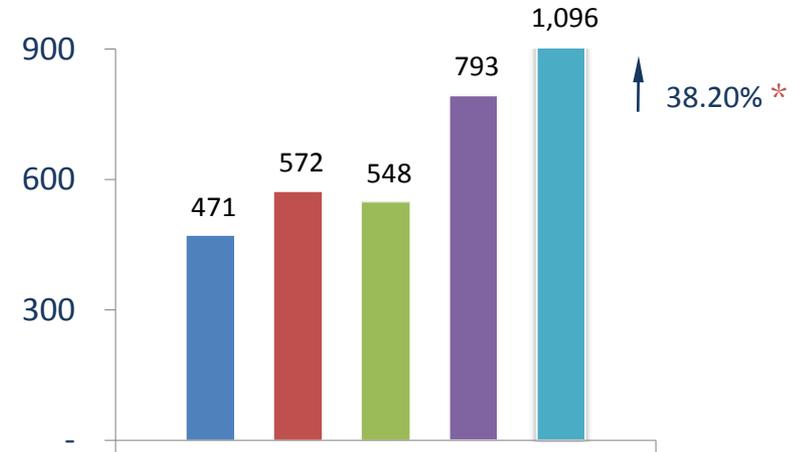
## 1H2012 to 1H2016 Historical Performance (Continued)

Operational Attributable Capacity (MW)



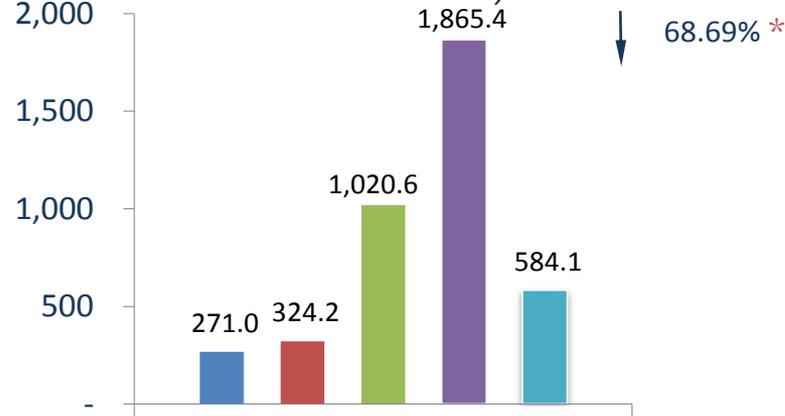
\* Change% between 1H2016 & 1H2015

Attributable Power Generation (GWH)



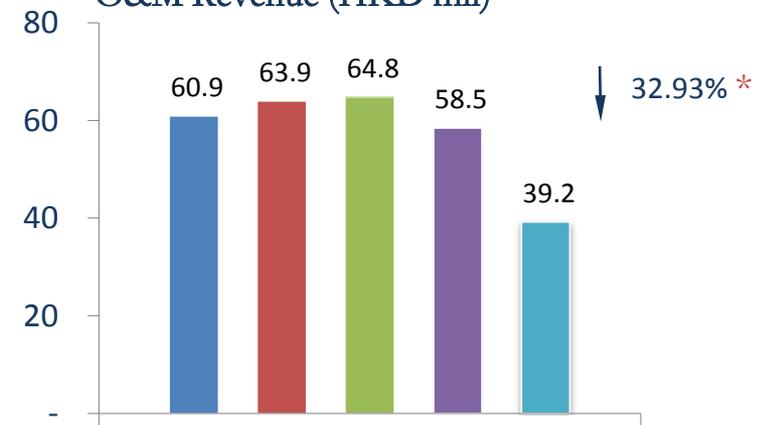
\* Change% between 1H2016 & 1H2015

EPC Revenue HKD mil)



\* Change% between 1H2016 & 1H2015

O&M Revenue (HKD mil)



\* Change% between 1H2016 & 1H2015

# Company Overview

## Concord New Energy Group Limited (0182.hk)

- Total share outstanding: 8.734bn
- Total assets: HK\$ 15.42bn
- Total net assets: HK\$ 5.886bn
- 1H 2016 Revenue: HK\$ 1.057bn
- 1H2016 Profit: HK\$ 280mil (\* as of 30 Jun 2016)

### Solar Power

- Expanded into solar power since 2010
- Currently owns and operates 18 solar power plants (total capacity: 595MW, attributable capacity: 577MW)
- Over 8GW of exclusive solar resources in the pipeline
- Prioritize solar power development to become one of CNE's core business

### Wind Power

- 10 years of development and operational experiences since 2006
- Currently owns and operates 34 wind power plants (total capacity: 1,777MW, attributable capacity: 824MW); in the future will focus on investment in southern China.
- Total of 3.59GW listed in 1<sup>st</sup> to 5<sup>th</sup> batch of NEA approved project lists
- Over 28GW of exclusive wind resources in the pipeline

### Investment



### EPC&M Business

#### Design & Development

#### Engineering, Procurement, Construction & Manufacturing (EPC&M)

#### Operation & Maintenance (O&M)



**An experienced and integrated SOLAR & WIND developer and operator,  
with rich resources and solid qualifications**

## Latest Industry Outlook

1. According to the plan, China's non-fossil energy sources will occupy 15% of total energy consumption, and total installed capacity for wind power and solar power will reach 250GW and 150GW respectively by 2020 in Mainland China.
2. In March, (National Energy Administration) NEA issued that the development and construction capacity of wind power in Mainland China this year will reach 30.83GW, which continuously maintained a strong development trend.
3. In June, NEA issued that the construction capacity of new solar power station in Mainland China targets to 18.1GW in 2016, representing 20% higher than actual installed capacity in 2015.
4. National Development and Reform Commission(NDRC) of China clearly confirming the priority generation rights for renewable energy and requiring generation output of the renewable energy within a buyout plan. NDRC and NEA clearly setting out minimum annual utilization hour of protective buyout in some areas: wind power not less than 1,800 hours and photovoltaic power not less than 1,300 hours.
5. The green electricity subsidies: NDRC announced that renewable energy tariff surcharge imposed standards to 1.9 cent/KWh in December 30, 2015. According to the sixth group of renewable energy subsidies, the size of subsidies is expected to reach more than 46 billion Yuan.
6. The UHV power grid of North-South and West-East transmission are under construction, which are expected to gradually into use at end of the 2017 to 2018.

## Latest Company News

1. The Group has planned the new development strategy for 2016-2018 and began to implement.
2. Power generation in the first half rises 38.40% and it has been the main part of net profit of CNE.
3. The Group adheres to the south development strategy. Under the condition of the grid curtailment in the north, the Group constructs wind and solar power projects with good economic benefit in south China and good results have been achieved.
4. The Group successfully registered the first Green Note in the PRC with National Association of Financial Market Institutional Investors with registered capital of RMB 500 million, which became the first Green Note from non-financial enterprises in the domestic market.
5. The Group's design company has submitted the application to National Equities Exchange and Quotations Co. Ltd.\*, prepare for any possible future financing.
6. In 2016, the Group repurchased the company's shares.
7. During the reporting period, 11 of the Group's wind power projects with a total capacity of 728MW have been included in the construction programme list "2016 Programme for the Nationwide Development and Construction of Wind Power" issued by NEA, all of which were located in the regions with good access to the grid and no curtailment.

## CNE Three-Year Operational Strategy and Development Target

Operational Strategy (2016-2018)	Development Target (2016-2018)
1. Group's business model gradually transmits from the integration to new energy investment operators on the whole increasing the company's attributable capacity and power generation benefits. More than 70% profit will from power generation for the next 3 years.	1. By the end of 2018, the Group's attributable capacity will reach 2,500 megawatts and the power generation profits will achieve about 900 million HK dollars. At the same time, the power generation business becomes the core business and its profit proportion reaches to more than 70%.
2. The company plans to reduce the proportion of third party's EPC business, focusing to the internal services. Developing O&M business actively and carry out the build & sale strategy partly instead of EPC model to improve efficiency and profitability.	2. By the end of 2018, part of EPC profit will be replaced by BT model and accelerating investment in attributable capacity(about 300MW), improving earnings stability and predictability finally.
3. Put more effort in getting more project approvals and persist without wavering in the business strategies of development in south areas (where no curtailment is enforced). The Group will increase its investment and develop wholly-owned or controlled wind power and solar power projects with good economic benefits in southern China where no curtailment is enforced, to maintain a steady growth in the Group's attributable installed capacity.	3. The Group will develop O&M services actively and enhance the operation and maintenance technology and its coverage combined with the energy internet technology and big data applications. When improving plant operation efficiency through technical renovation, technology promotion and other measures, the Group will achieve rapid growth on the scale and efficiency.
4. Continue to increase investment in projects development and focus on southern areas without grid curtailment. In addition, having BT&EPC business mode to balance the business portfolio.	4. Appropriate to expand overseas business and asset allocation according to financing conditions, dispersion single market risk.
5. In the future, the Group will have more proportion of wind power projects, specially those in the south area, reducing reliance on green electricity subsidies and enhancing operating cash flow.	5. Having more than 700MW annually approved projects.
6. Enhance project financing capability.	6. Target to have a profit growth of power generation at a CAGR of more than 30% for the next 3 years.
7. Appropriate to accelerate the pace of investment of wind & solar farms.	7. On the basis of the traditional business sector remained stable growth, actively explore new development opportunities.

# Solar Power Projects in Operation and Under Construction

## Operating Solar Power Plants:

595MW – total capacity;

577MW – attributable capacity

Year	Project name	Province	Capacity (MW)	CWP's stake	Tariff (RMB/kWh)
2011	Suqian	Jiangsu	8.88	49%	2.4
2011	Wuwei	Gansu	9	100%	1.15
2012	HOKU SOLAR POWER I, LLC (USA)	US	1.8707	100%	USD 0.39
2012	Urban Energy Solar LLC (USA)	US	0.9	100%	USD 42,928/month
2013	Yongren	Yunnan	50	100%	1
2013	GSE WI 1, LCC (USA)	US	1	100%	USD 0.20
2014	Naidong	Tibet	20	100%	1.15
2014	Yushen	Shanxi	200	100%	0.95
2014	Pingyuan	Shandong	40	100%	1.2
2015	Indiana	USA	10	100%	0.95
2015	Huaping	Yunnan	50	100%	0.95
2015	Eryuan	Yunnan	30	100%	0.95
2015	Zhaer	Inner Mongolia	20	32.16%	0.95
2015	Yuyang	Shanxi	50	100%	0.95
2015	Yanyuan	Sichuan	30	100%	0.95
2015	Rhode Island	USA	20	100%	0.07USD
2015	Ohio	USA	4.3	100%	0.07USD
2016	Yuyang II	Shanxi	50	100%	0.95

## Under-construction Solar Power Projects:

80MW – total capacity;

80MW – attributable capacity

Project name	Province	Capacity (MW)	CWP's stake	Tariff (RMB/kWh)	Status
Xizangcuomei	Xizang	10	100%	0.95	under construction
Yanyuan II	Sichuan	20	100%	0.95	under construction
Jiangzi	Xizang	50	100%	0.88	prepare

- Target to net increase **80MW** of new attributable capacity and reach around **657MW** of aggregate attributable capacity by end of 2016
- As at 30<sup>th</sup> June 2016, the attributable solar power capacity is 577MW, account 41.18% of CNE's total attributable power capacity

# Wind Power Projects in Operation and Under Construction

## Operating Wind Power Plants:

1,777MW – total capacity; 824MW – attributable capacity

Year	Project name	Province	Capacity (MW)	CWP's stake	Tariff (RMB/kWh)
2006	Changtu Phase I	Liaoning	50.25	25%	0.64
2008	Taiqi Phase I	Inner Mongolia	49.5	49%	0.52
2008	Erlianhaote Phase I	Inner Mongolia	21	49%	0.52
2009	Linchang Phase I	Jilin	49.5	49%	0.61
2009	Mazongshan	Liaoning	49.5	24.50%	0.61
2009	Qujiagou	Liaoning	49.5	24.50%	0.61
2009	Zhaqi Phase I	Inner Mongolia	49.5	49%	0.54
2009	Heiyupao Phase I	Jilin	49.5	49%	0.61
2010	Wuchuan	Inner Mongolia	49.5	46%	0.51
2010	Huadeng Phase I	Inner Mongolia	49.5	32%	0.54
2010	Huadeng Phase II	Inner Mongolia	49.5	32%	0.54
2010	Zhalute Phase II	Inner Mongolia	49.5	32%	0.54
2010	Zhalute Phase III	Inner Mongolia	49.5	32%	0.54
2010	Guazhou	Gansu	201	51.50%	0.52
2011	Kailu	Inner Mongolia	49.5	32%	0.54
2011	Touzhijian	Inner Mongolia	49.5	51%	0.51
2011	Maniuhu	Liaoning	49.5	30%	0.61
2011	Gulibengao	Liaoning	49.5	30%	0.61
2012	Heiyupao Phase III	Jilin	49.5	32%	0.58
2012	Heiyupao Phase IV	Jilin	49.5	32%	0.58
2012	Tianchang	Anhui	48	49%	0.62
2013	Chaoyang Wanjia	Liaoning	48	30%	0.61
2013	Jianghua Yaozu	Hunan	48	59%	0.61
2013	Xiaoxian Guanshan	Anhui	48	49%	0.61
2013	Suzhou Fuli	Anhui	48	49%	0.61
2014	Jinmen Zilingpu	Hubei	48	59%	0.61
2014	Hebi Huolonggang	Henan	49.5	59%	0.61
2014	Yantai Gaotong	Shandong	48	49%	0.61
2015	Sihong	Jiangsu	50.4	30%	0.61
2015	Feixi	Anhui	34	100%	0.61
2015	Dongtian	Hunan	48	100%	0.61
2015	Yiyang	Henan	48	51%	0.61
2016	Lingshan	Anhui	48	49%	0.61
2016	Jiepai	Hunan	48	100%	0.61

## Under-construction Wind Power Projects:

612MW – total capacity;  
612MW – attributable capacity

Project name	Province	Capacity (MW)	CWP's stake	Tariff (RMB/kWh)	Status
Shijia	Guangxi	96	100%	0.61	Under construction
Jiagou	Anhui	48	100%	0.61	Under construction
Baijingni	Sichuan	32	100%	0.61	Under construction
Linkou	Hunan	48	100%	0.61	Under construction
Cangfang	Yunnan	48	100%	0.61	Under construction
Wuheyinmahu	Anhui	48	100%	0.61	Under construction
Nanzhao	Henan	100	100%	0.61	Under construction
Jianghua	Hunan	48	100%	0.61	Under construction
Yangjiawan	Henan	48	100%	0.61	Under construction
Xinzao	Guangxi	48	100%	0.61	Under construction
Yushan	Hubei	48	100%	0.61	Under construction

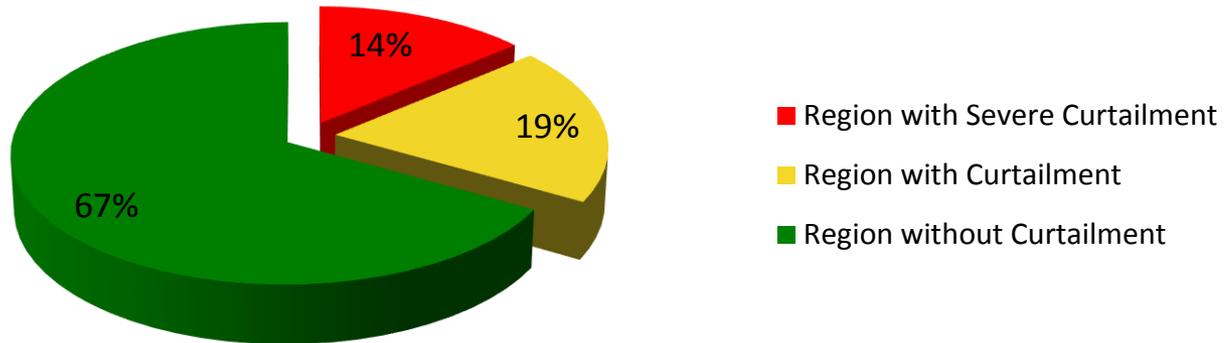
## BT Wind Power Projects

Project name	Province	Capacity (MW)	Tariff (RMB/kWh)
Yiyang	Henan	48	0.61
Jinquan	Hubei	48	0.61

- Target to increase 320MW of new attributable capacity and reach around 1,144MW of aggregate attributable capacity by end of 2016

## Area Distribution of Operating Power Plants

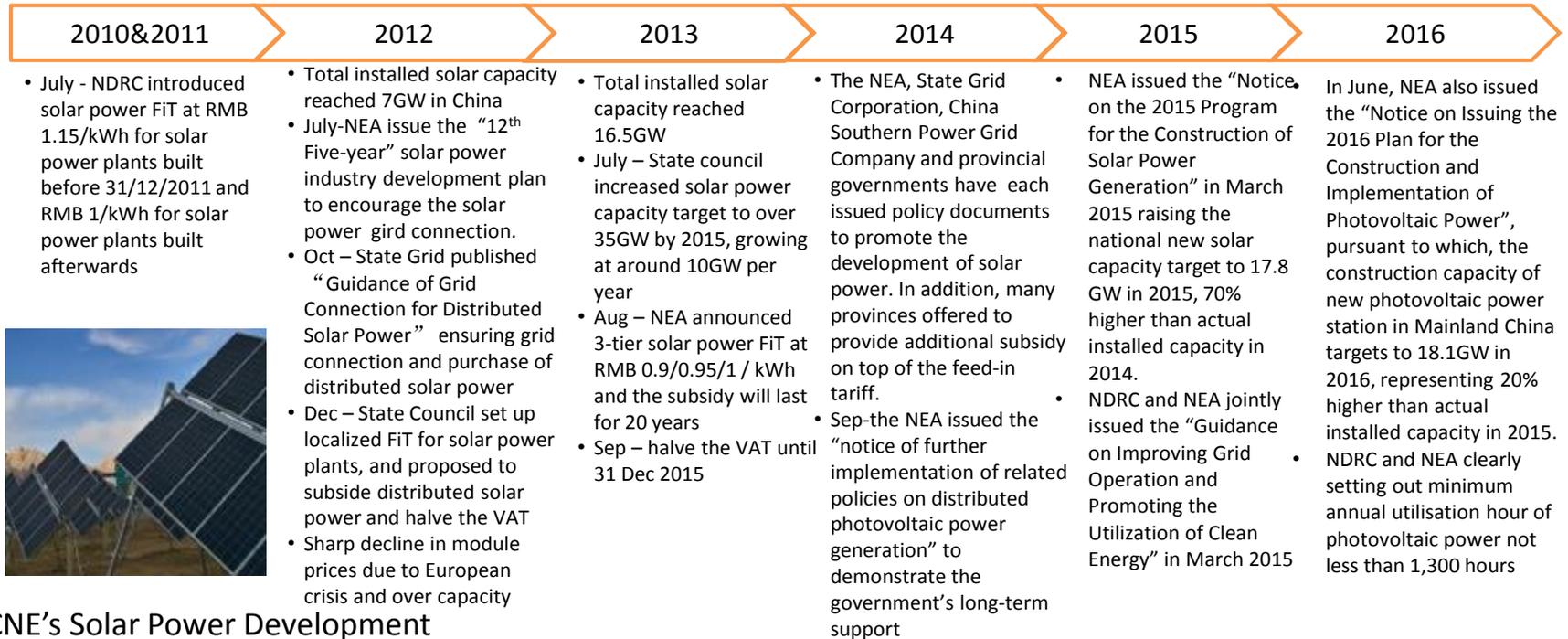
Area distribution of operation power plants (attributable capacity)



<b>Region with Severe Curtailment (193MW/14%)</b>	Solar Power (9MW)	Gansu	9	Wind Power (184MW)	Gansu	103.5
					Jilin	80.4
<b>Region with regular Curtailment (274MW/19%)</b>	Solar Power (6.4MW)	Inner Mongolia	6.4	Wind Power (267.4MW)	Inner Mongolia	186.44
					Liaoning	80.96
<b>Region with no Curtailment (935MW/67%)</b>	Solar Power (562MW)	Jiangsu	4.35	Wind Power (373MW)	Anhui	128.08
		Yunnan	130		Hunan	76.32
		Xizang	20		Hubei	28.32
		Shanxi	300		Henan	53.68
		Shandong	40		Shandong	23.52
		Sichuan	30		Jiangsu	63.12
		Overseas	38			

# Early Mover in Solar Power Development

## Solar Power Industry Development History in China

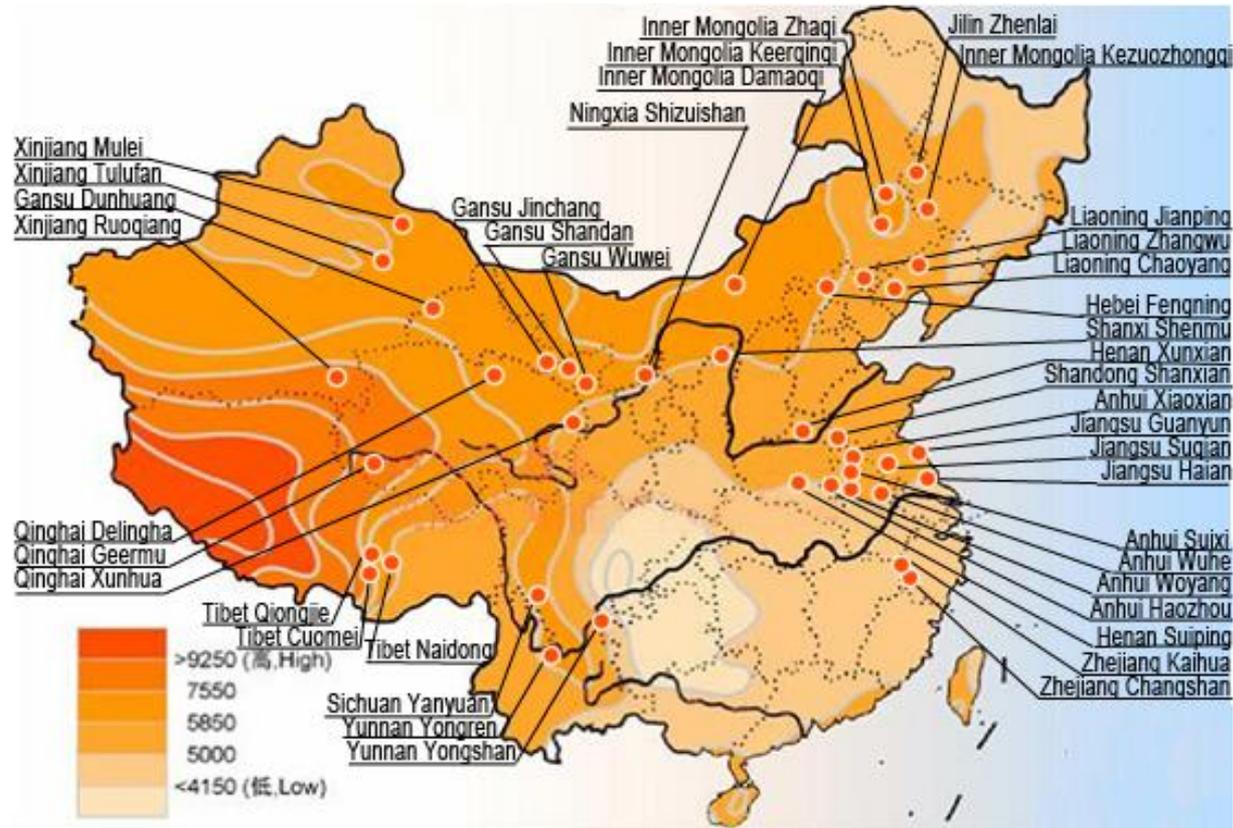


## CNE’s Solar Power Development

- |   |   |  |   |   |   |
|---|---|--|---|---|---|
| <ul style="list-style-type: none"> <li>Started solar power feasibility study and set solar development strategy</li> <li>Setup light measuring stations</li> <li>Successfully developed 48MW solar power plants</li> <li>Signed 5GW of exclusive solar resources</li> </ul> | <ul style="list-style-type: none"> <li>Obtained 320MW solar power project approvals and 800MW initiation approvals</li> <li>Added 52MW of solar power plants</li> <li>Gathered &gt; 5GW of exclusive solar resources</li> </ul> | <ul style="list-style-type: none"> <li>Total 420MW of solar power project approvals and 520MW of initiation approvals for near term development</li> <li>Gathered &gt; 6.5GW of exclusive solar resources</li> <li>Added 71MW of solar power plants</li> </ul> | <ul style="list-style-type: none"> <li>Added net 260MW of solar power plants</li> </ul> | <ul style="list-style-type: none"> <li>70MW projects were newly approved and 200MW of newly added reserves.</li> <li>Added 34MW of solar power plants</li> <li>&gt; 8GW of exclusive solar resources</li> </ul> | <ul style="list-style-type: none"> <li>The Group added 1 was solely-funded solar power plant with capacity of 50MW.</li> <li>The Group added 3 new construction solely-funded solar power plants with capacity of 80MW</li> </ul> |
|---|---|--|---|---|---|

**Prioritized solar power development and investment to become CNE’s core business**

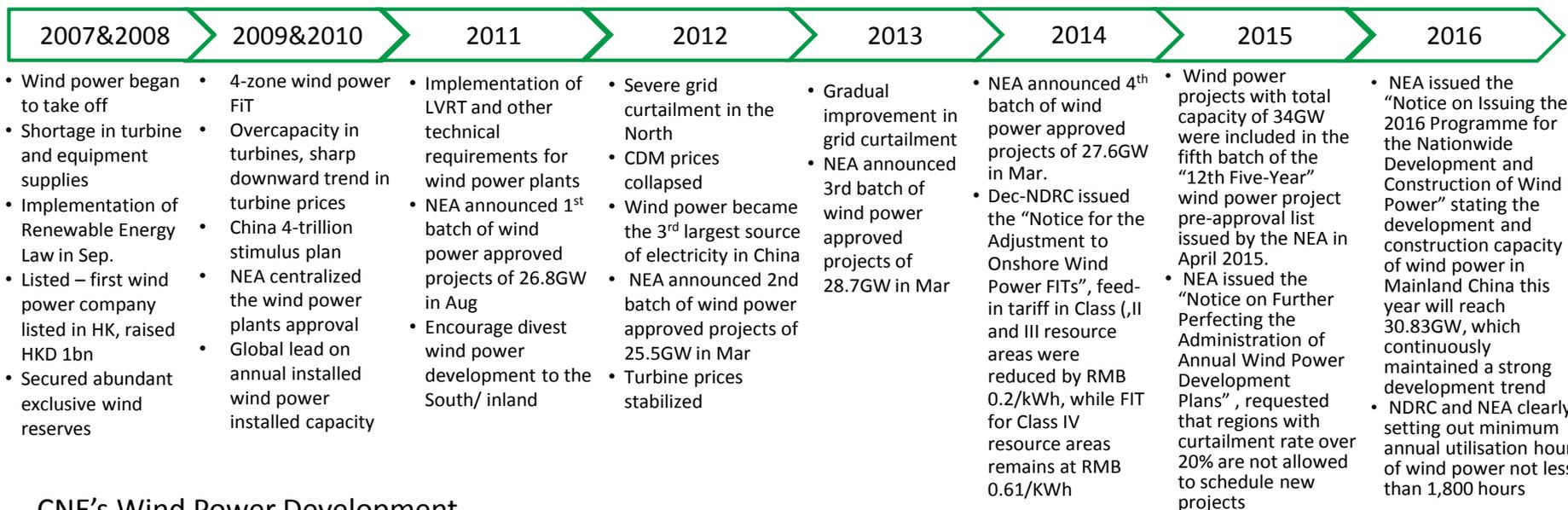
## Strong and Solid Solar Power Project Pipeline



- The green electricity subsidies: NDRC announced increase energy tariff surcharge imposed standards to 1.9 cent/KWh in December 30, 2015. According to the sixth group of renewable energy subsidies, the size of subsidies is expected to reach more than 46 billion Yuan.
- 1H 2016, NDRC confirming the priority generation rights for renewable energy and requiring generation output of the renewable energy within a buyout plan.
- 1H 2016, NDRC and NEA clearly setting out minimum annual utilisation hour of solar power not less than 1,300 hours.
- The construction capacity of new photovoltaic power station in Mainland China targets to 18.1GW in 2016.

# Expert in Wind Power Development and Operation

## Wind Power Industry Development History in China

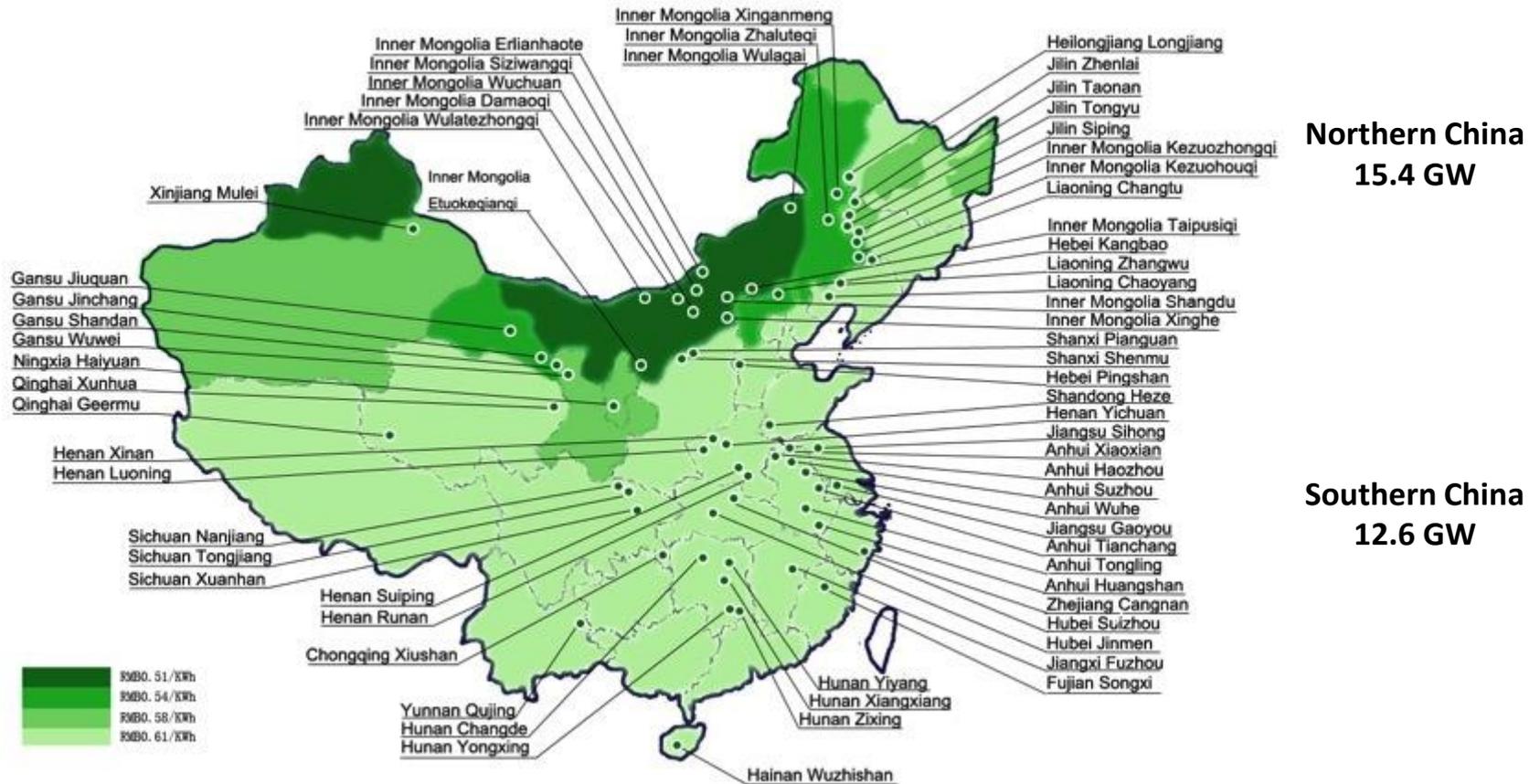


## CNE’s Wind Power Development

- |  |   |   |   |  |   |  |   |
|--|---|---|---|--|---|--|---|
| <ul style="list-style-type: none"> <li>• FiT entered into practice</li> <li>• Wind power continued to grow rapidly</li> <li>• Tight financing environment</li> <li>• Partnered with strong SOEs to leverage on the financing capacities</li> </ul> | <ul style="list-style-type: none"> <li>• Expanded capacities and completed 8 grid connected wind power plants</li> <li>• Started our “B&amp;T” strategy</li> <li>• Completed 9 grid connected wind power plants</li> <li>• Received financing support from IFC</li> </ul> | <ul style="list-style-type: none"> <li>• Diversify into the South</li> <li>• Received 400MW of approval from the 1st batch</li> <li>• First wind power company to issue CNH bond in HK</li> </ul> | <ul style="list-style-type: none"> <li>• Received 1,150MW of approval from the 2nd batch</li> <li>• Start selling down equity stakes in northern wind power plants</li> <li>• Severe costs cutting</li> </ul> | <ul style="list-style-type: none"> <li>• Received 880MW of approval from 3<sup>rd</sup> batch</li> <li>• More diversified and balanced portfolio</li> <li>• Less curtailment, higher average utilization hours</li> <li>• Prioritize southern wind power plants development</li> </ul> | <ul style="list-style-type: none"> <li>• Received 300MW of approval from 4<sup>th</sup> batch</li> <li>• Work closely with SOE IPPs</li> <li>• Add 81MW net attributable capacity of wind power plants</li> </ul> | <ul style="list-style-type: none"> <li>• 17 wind power projects(860MW) included in the 5<sup>th</sup> batch and all projects are located in regions with no subject to grid congestion.</li> <li>• Added 39MW attributable capacity</li> </ul> | <ul style="list-style-type: none"> <li>• 11 of the Group’s wind power projects with a total capacity of 728MW have been included in the construction programme list which issued by NEA, all of which were located in the regions with good access to the grid and no curtailment</li> <li>• The Group added 2 newly wind power plants with attributable capacity of 72 MW</li> </ul> |
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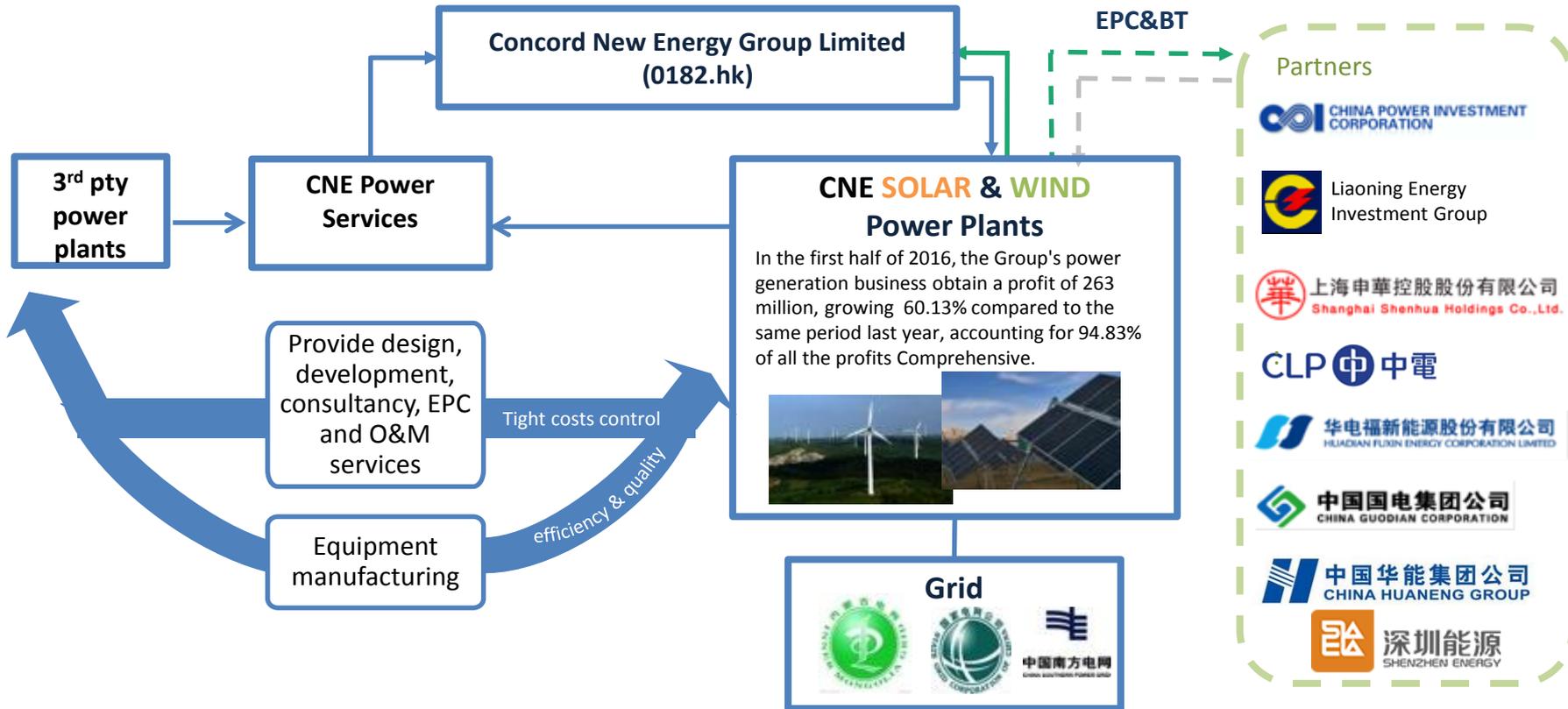
Constantly staying ahead of market trend. Always taking a proactive and agile approach to challenges

# Steady Wind Power Project Pipeline



- The latest feed-in tariff released by NDRC, which will be executed from 2016, is divided into four levels, RMB0.49/kWh, RMB0.52/kWh, RMB0.56/kWh and RMB0.61/kWh based on the wind resources at each region.
- 1H 2016, NDRC confirming the priority generation rights for renewable energy and requiring generation output of the renewable energy within a buyout plan.
- 1H 2016 NDRC and NEA clearly setting out minimum annual utilisation hour of wind power not less than 1,800 hours.
- The construction capacity of new wind power station in Mainland China targets to 30.83GW in 2016.

# Integrated Business Model



## Benefits of having integrated services and manufacturing:

- CNE maintains greater control over the availability of equipments, construction time, costs, and quality
- Higher output efficiency due to experienced O&M team
- Improved cash flow from the power plants services and BT business model

**Integrated business model allows greater control and higher efficiency in capital usage**

## B & T strategy versus EPC

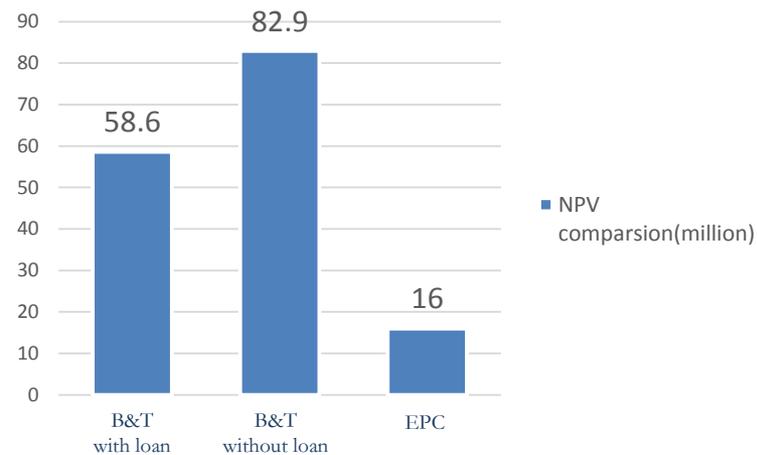
Assumptions:		
capacity of wind farm	48.0	MWh
capacity factor	2000	hours
tariffs(include VAT)	0.60	kWh
total investment	374.4	RMB million
VAT offset for CAPEX	46.2	RMB million

**With Loan (Equity20%, Debt80%)**

Income Statement(in RMB million)		1	2	3	4	22	23	24
total revenue		49.23	49.23	49.23	49.23	53.42	53.42	53.42
total cost(include D&A)		19.73	19.78	19.83	19.88	21.06	21.14	21.23
operation profit		29.50	29.45	29.40	29.35	32.36	32.27	32.18
interest expense		14.77	13.48	12.20	10.92	-	-	-
tax		-	-	-	2.30	8.09	8.07	8.05
profit after tax		14.73	15.97	17.20	16.13	24.27	24.20	24.14
non-cash charges		13.84	13.84	13.84	13.84	13.84	13.84	13.84
VAR offset from CAPEX		8.37	8.37	8.37	8.37	-	-	-
repayment during the year		-24.96	-24.96	-24.96	-24.96	-	-	-
cash flow	-79.40	11.97	13.21	14.45	13.38	38.10	38.04	37.97
discount rate	12%	1.12	1.25	1.40	1.57	12.10	13.55	15.18
discount cash flow	-79.40	10.69	10.53	10.28	8.50	3.15	2.81	2.50
<b>NPV</b>		<b>58.69</b>						

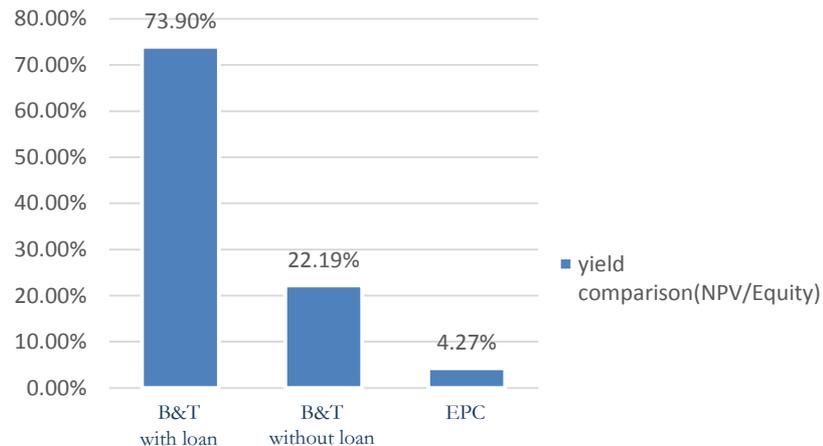
### Assumption:

Net profit through providing EPC service for each 48MW wind power project is 16 million RMB.

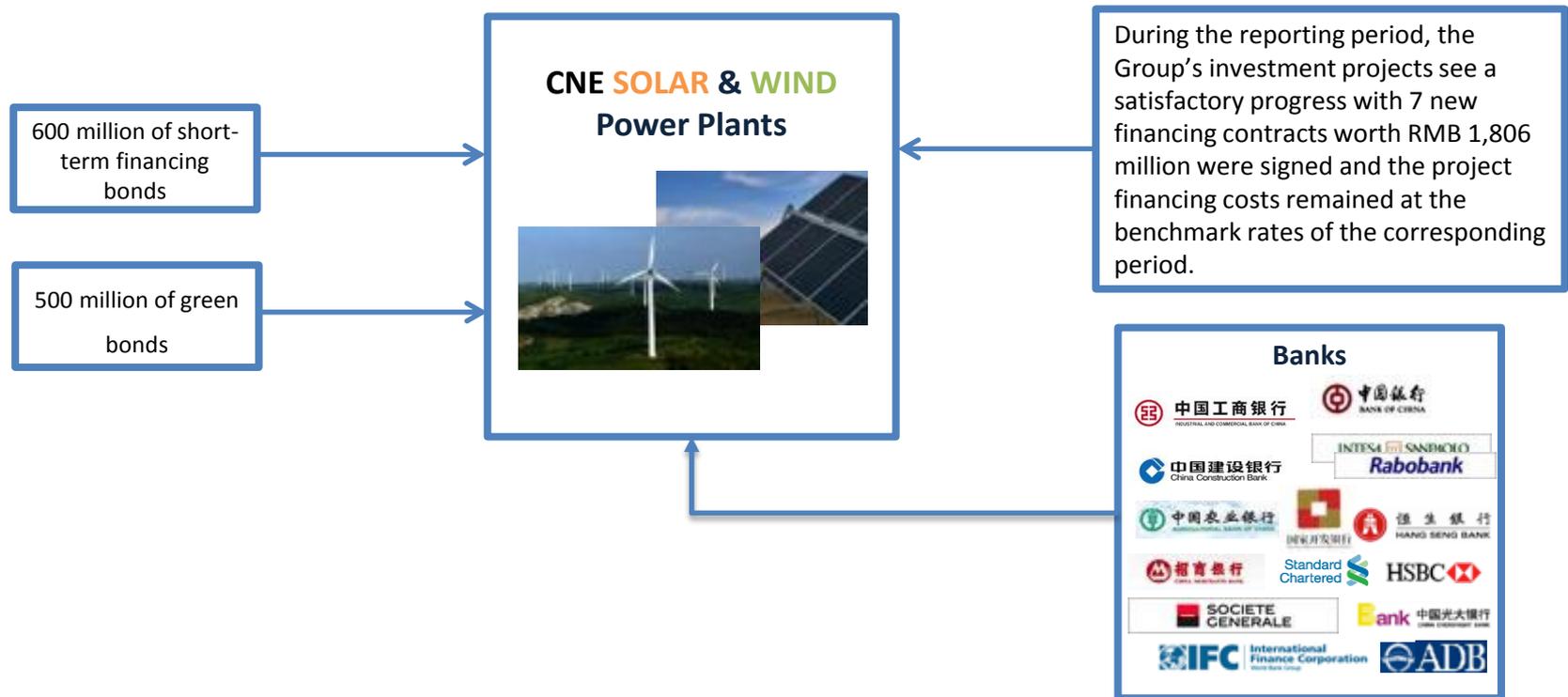


### Without Loan

Income Statement		1	2	3	4	22	23	24
total revenue		49.23	49.23	49.23	49.23	53.42	53.42	53.42
total cost(include D&A)		19.73	19.78	19.83	19.88	21.06	21.14	21.23
operation profit		29.50	29.45	29.40	29.35	32.36	32.27	32.18
profit before tax		29.50	29.45	29.40	29.35	32.36	32.27	32.18
tax		-	-	-	3.67	8.09	8.07	8.05
profit after tax		29.50	29.45	29.40	25.69	24.27	24.20	24.14
non-cash charge		13.84	13.84	13.84	13.84	13.84	13.84	13.84
VAT offset from CAPEX		8.37	8.37	8.37	8.37	-	-	-
cash flow	-374.4	51.70	51.66	51.61	47.89	38.10	38.04	37.97
discount rate	8%	1.08	1.17	1.26	1.36	5.44	5.87	6.34
discount cash flow	-374.4	47.87	44.29	40.97	35.20	7.01	6.48	5.99
<b>NPV</b>		<b>82.96</b>						



## Excellent financing capacity



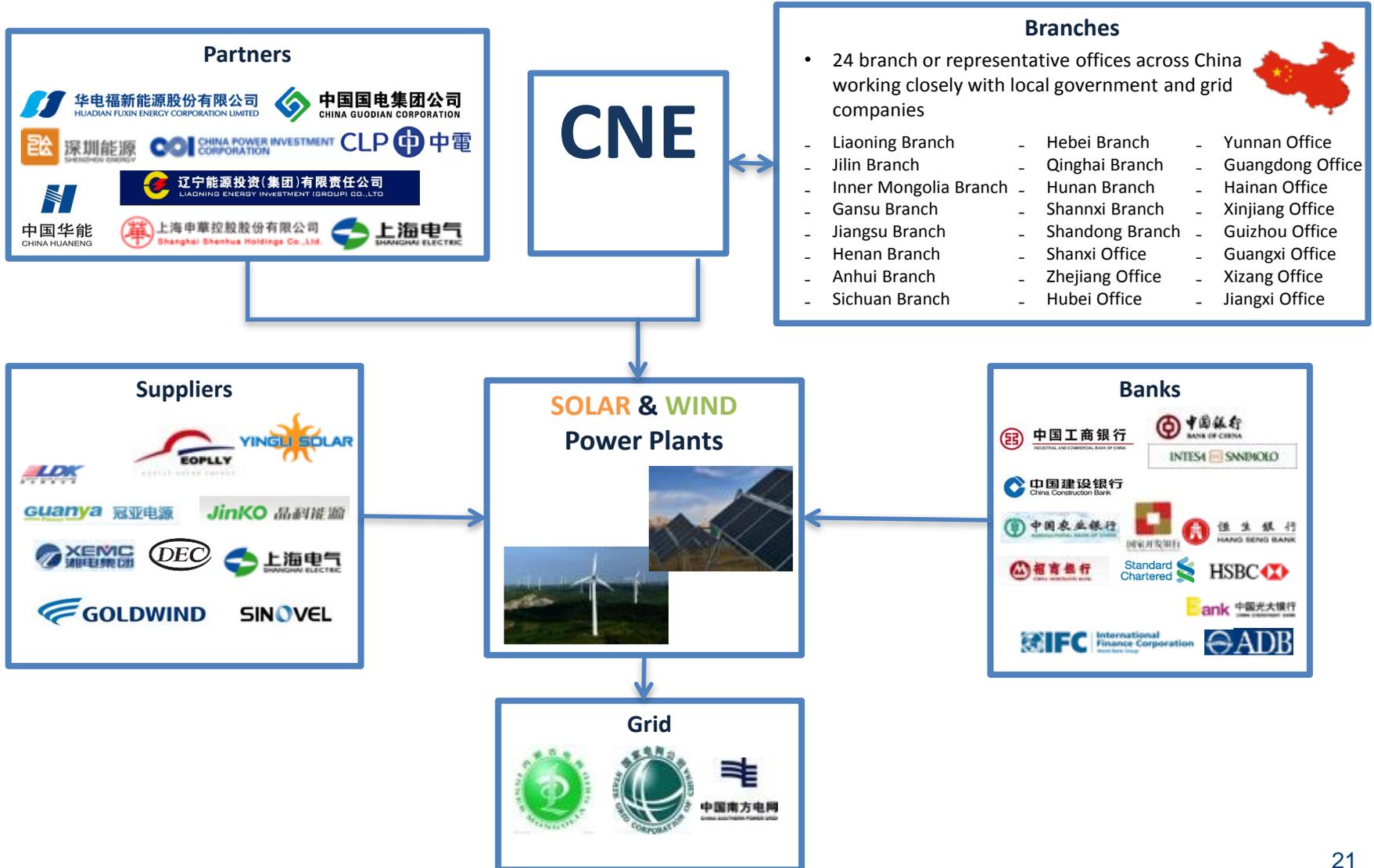
### Excellent financing capacity:

- Group successfully registered the first Green Note in the PRC with National Association of Financial Market Institutional. Investors with registered capital of RMB 500 million, which became the first Green Note from non-financial enterprises in the domestic market.
- In 1H 2016, Group registered 600 million Yuan of short-term financing bonds.
- During the reporting period, the Group's investment projects see a satisfactory progress with 7 new financing contracts worth RMB1,806 million were signed and the project financing costs remained at the benchmark rates of the corresponding period.

**Variety of financing method, Financing ability significantly increased**

# Established Relationships and Platforms

Long established relationships and platforms ensuring effective and continuous power plant development



# Shareholding Structure & Management Team

## Shareholding Structure:



## Executive Directors & Management:

**Mr. Liu Shunxing, Chairman** – An Executive of China Energy Council, the Vice President of China Energy Research Institute and a Deputy Director of Energy Conservation and Enterprise Energy Management Committee. He once worked in NDRC and China Energy Conservation Investment Corporation.

**Mr. Yang Zhifeng, Co-Vice Chairperson** – Former General Manager of Asset Management and Operation Dept in China Energy Conservation Investment Corporation, possesses >9 years of experiences in renewable industry.

**Ms. Liu Jianhong, Co-Vice Chairperson** – Former Chief Legal Officer of China Energy Conservation Investment Corporation, possessing 9 years of experiences in renewable energy industry.

**Mr. Yu Weizhou, CEO** – Former Deputy Chief Engineer of Guohua Energy Investment Ltd. Also previously served at State Electricity Regulatory Commission of the PRC (SERC) and the Nation’s Electric Dept. Possesses strong power industry knowledge and many years of experience in renewable energy project development.

**Mr. Gui Kai, Vice President** – Mr. Gui has more than 20 years experience in power system. He was General Manager of Shenhua Trading Group and vice general manager of Guohua Energy Investment Co., Ltd.

# Management Team

## Non-Executive Director:

**Mr. Gao Fuchun**—Deputy Director of Hydropower and New Energy Industries of Huadian Fuxin, a 10.07% shareholder of the Company. Mr. Gao is very familiar with plant operation management, equipment management and safety management.

## Independent Executive Director:

**Mr. Yap Fat Suan, Henry** – Fellow Member of the Institute of Chartered Accountant in England and Wales and an Associate Member of Hong Kong Institute of Certified Public Accountants. Mr. Yap has extensive experience in finance and accounting. He is also an independent non-executive director of DVN (Holdings) Limited.

**Dr. Wong Yau Kar, David** – Permanent Honorary President of the Chinese Manufacturers' Association of Hong Kong and Deputy Chairman of the Hong Kong Institute of Directors.

**Dr. Shang Li** – Was a Associate Professor of the Department of Electrical, Computer and Energy Engineering in University of Colorado at Boulder and the Chair Professor in Tongji University.

**Ms. Huang Jian** – was the full time member of SME Board Public Offering Review Committee of the China Securities Regulatory Commission.

## Other Management

**Mr. Zhou Zhizhong, Vice President** – He is in charge of EPC business; former Chairman of Nanjing Power Supply Bureau, the General Manager of Jiangsu Power Construction Company and the Vice President of the Golden Concord Group. National registered 1<sup>st</sup> class construction engineer. Possesses over 20 years of power engineering experience.

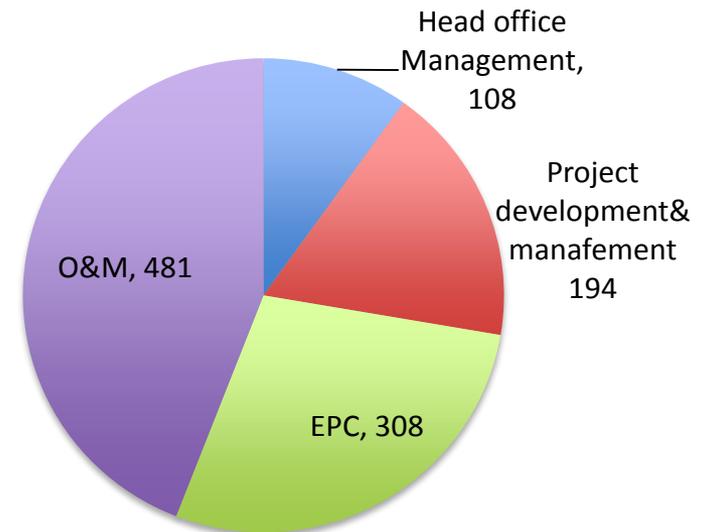
**Mr. Niu Wenhui, CFO** – has more than 20 years of financial management experience. He was the Vice President of China Ruilian Industry Group and CFO of Rainbow Group Shenzhen Branch.

**Mr. Wang Yaobo, Vice President** – Has more than 30 years experience in power system planning and engineering management. He was the Vice Chief Engineer of Jilin Electric Bureau.

**Mr. Liu Ruiqing, President Assistant** –was the chief engineer of Guohua (Hebei) New Energy Corporation, and Vice General Manager of Huadian New Energy Development Co. Ltd.(Mengdong Branch).

## **Human Resource Distribution:**

*As at 30 June of 2016, total number of staff is 1,091*



# Appendix

## Summary of Financial Statements

<b>P&amp;L (HK\$'000)</b>	<b>1H 2016</b>	<b>1H 2015</b>
<b>Revenue</b>	1,052,071	2,174,462
<b>Other Income</b>	38,692	20,044
<b>Other gains, net</b>	7,643	7,508
<b>Expenses</b>		
- Cost of construction and inventories sold	(540,218)	(1,717,709)
- Employee benefit expense	(72,300)	(62,823)
- Depreciation and amortization	(121,061)	(68,066)
- Operating lease payments	(15,352)	(12,155)
- Other expenses	(69,217)	(69,803)
- Finance costs	(75,399)	(59,794)
<b>Share of results of Associates</b>	13,813	7,329
- share of results before provision for receivable	67,754	58,055
<b>Profit before income tax</b>	286,426	277,048
<b>Income tax expense</b>	(6,196)	(24,125)
<b>Profit for the period</b>	280,230	252,923
<b>Basic earning/(loss) per share (HK cents)</b>	3.24	2.83

<b>Asset (HK\$'000)</b>	<b>1H 2016</b>	<b>FY2015</b>
Current assets	5,963,982	5,811,012
Non-current assets	9,462,647	8,609,313
Total assets	15,426,629	14,420,325
Current liabilities	5,276,614	5,245,959
Non-current liabilities	4,263,492	3,418,791
Total liabilities	9,540,106	8,664,750
Net current assets	687,368	565,053
Net Asset	5,886,523	5,755,575
Share Capital	87,341	89,462
Reserves	5,677,357	5,545,800

<b>Cash Flow (HK\$'000)</b>	<b>1H 2016</b>	<b>1H 2015</b>
Net cash from operating activities	102,648	151,110
Net cash used in investing activities	(1,376,203)	(1,017,582)
Net cash from financing activities	876,374	1,440,373
Net increase/(decrease) in cash and cash equivalents	(397,181)	573,901
Cash and cash equivalents	1,480,840	1,685,301

# Solar Power Plant Economics (sample)

## Solar Power Plant Economics Assumptions:

1. Capacity of solar farm = 30MW	5. Module = RMB 3.9/watt, BOS = RMB 3.6/watt	9. Capital = RMB 48.0mil (20%)
2. Capacity factor = 1,500hours	6. Total Investment = RMB 240.00mil	10. Bank Loan = RMB 192.0mil (80%)
3. Tariffs = RMB0.88/kWh (include VAT)	7. CAPEX = RMB 216mil	11. Interest rate = 5.145%(4.9%×1.05)
4. Solar Module annual degradation=1% (20years)	8. VAT for CAPEX = RMB 31.38mil	12. Construction period = 6 months

## Project Income Statement:

(in RMB mil)			Year0	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10	
Net Electricity tariffs (exclude 17%VAT)				36.50	36.13	33.17	32.83	32.49	32.15	31.82	31.48	31.14	30.80	
Total revenue				36.50	36.13	33.17	32.83	32.49	32.15	31.82	31.48	31.14	30.80	
Depreciation	(a)	20 years		10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	
O & M costs		RMB 0.02/kWh		0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	
Repair costs		3% growth rate/yr				0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	
Operating expense		3% growth rate/yr		1.50	1.55	1.59	1.64	1.69	1.74	1.79	1.84	1.90	1.96	
Insurance		0.1% total investment		0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	
Land costs		RMB 5mil/ yr		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
Total				17.75	17.79	18.12	18.17	18.22	18.27	18.32	18.38	18.44	18.50	
Operating profit				18.75	18.35	15.05	14.66	14.27	13.88	13.49	13.10	12.70	12.30	
Loan balance at end of the year			180	167.14	154.29	141.43	128.57	115.71	102.86	90.00	77.14	64.29	51.43	
Interest expense		15 years 5.145%	4.63	8.93	8.27	7.61	6.95	6.28	5.62	4.96	4.30	3.64	2.98	
Profit before tax				9.82	10.08	7.44	7.71	7.99	8.26	8.53	8.80	9.06	9.33	
Tax		25%		0.00	0.00	0.00	0.96	1.00	1.03	2.13	2.20	2.27	2.33	
Profit after tax			(b)	9.82	10.08	7.44	6.75	6.99	7.23	6.40	6.60	6.80	7.00	
Capital			45.00											
VAT offset	(c)	29.42		3.10	3.07	5.64	5.58	5.52	5.47	1.04	-	-	-	
Loan repayment	(d)	15 years		-12.86	-12.86	-12.86	-12.86	-12.86	-12.86	-12.86	-12.86	-12.86	-12.86	
Cash Flow			(a)+(b)+(c)+(d)	-45.0	10.19	10.42	10.35	9.60	9.78	9.96	4.70	3.87	4.07	4.26
20-year equity IRR				<b>19.35%</b>										
20-year project IRR				<b>9.08%</b>										
ROE				21.82%	22.40%	16.53%	15.00%	15.53%	16.06%	14.22%	14.66%	15.11%	15.55%	

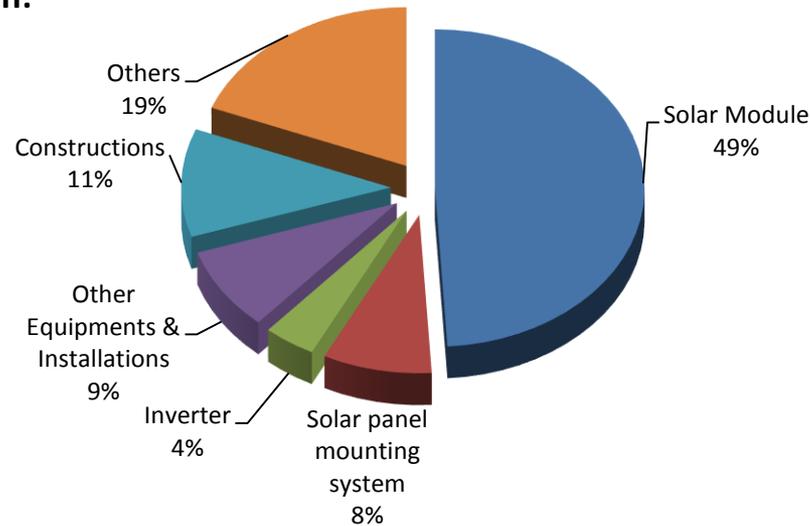
CAUTION : The numbers above are hypothetical numbers illustrating a sample financial model for a solar power plant in China. Such numbers do not derive from any solar power plant in which CNE has invested or plan to invest.

# Solar Power Plant Economics Analysis

## Sensitivity/ Scenario Analysis:

Scenario (assuming other factors held constant)	Impact on the first year Profit	Impact on Eq IRR	Eq IRR change (from base case of 19.35%)	Current level
Grid tariff reduced to RMB0.85/kWh (include VAT)	- RMB 1.25mil	-2.56%	16.79%	RMB0.85-1.1/kWh (include VAT)
Capacity factor decreased by 100 hours	- RMB 2.38mil	-4.79%	14.56%	1,400-2,000 hours
PBOC rate increased by 0.50%	- RMB 0.91mil	-1.37%	17.98%	4.9-5.9
Project cost decreased to RMB 7.0/watt	+RMB 1.28mil	+4.38%	23.73%	RMB 7-8/watt
No additional land costs	+RMB 5mil	+11.25%	30.60%	RMB2-8 mil/year/50MW

## Project Costs Distribution:



CAUTION : The numbers above are hypothetical numbers illustrating a sample financial model for a solar power plant in China. Such numbers do not derive from any solar power plant in which CWP has invested or plan to invest.

# Wind Power Plant Economics (sample)

## Wind Power Plant Economics Assumptions:

1. Capacity of wind farm = 48MW	4. Total Investment = RMB 374.4mil (RMB7.8/watt)	9. Bank Loan = RMB 299.5mil (80%)
2. Capacity factor = 2,000hours (0.228)	5. CAPEX = RMB 318.2mil	10. Interest rate = 5.145%(4.9%×1.05)
3. Tariffs = RMB0.60/kWh (include VAT)	6. VAT for CAPEX = RMB 46.2mil	11. Construction period = 12 months
	7. Capital = RMB 74.9mil (20%)	12. VAT for CAPEX offset by VAT for power sales

## Project Income Statement:

(in RMB mil)		Year0	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year 10
Net Electricity tariffs (exclude 17%VAT)			49.23	49.23	49.23	49.23	49.23	49.23	49.23	49.23	49.23	49.23
VAT Refund (8.5%)								1.99	4.18	4.18	4.18	4.18
Total revenue			49.23	49.23	49.23	49.23	49.23	51.22	53.42	53.42	53.42	53.42
Depreciation	(a) 23 years		13.84	13.84	13.84	13.84	13.84	13.84	13.84	13.84	13.84	13.84
O & M costs	0.03/kWh		2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
Repair costs	3% of elec tariff rev		1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Operating expense			1.54	1.59	1.63	1.68	1.73	1.79	1.84	1.89	1.95	2.01
Total			19.73	19.78	19.83	19.88	19.93	19.98	20.03	20.09	20.14	20.20
Operating profit			29.50	29.45	29.40	29.35	29.30	31.24	33.38	33.33	33.27	33.21
Loan balance at end of the year		300	275	250	225	200	175	150	125	100	75	50
Interest expense	12 years 5.145%		15	13	12	11	10	8	7	6	4	3
Profit before tax			14.37	15.97	17.20	18.44	19.67	22.89	26.32	27.55	28.78	30.00
Tax	25%		-	-	-	1.98	2.13	2.35	5.86	6.17	6.47	6.78
Profit after tax	(b)		8.33	15.97	17.20	16.13	17.21	20.03	19.74	20.66	21.58	22.50
Capital		74.9										
VAT offset	(c) 46.2		8.37	8.37	8.37	8.37	8.37	4.39	-	-	-	-
Loan repayment	(d) 12 years		-24.96	-24.96	-24.96	-24.96	-24.96	-24.96	-24.96	-24.96	-24.96	-24.96
Cash Flow	(a)+(b)+(c)+(d)	-74.9	11.97	13.21	14.45	13.38	14.46	13.30	8.62	9.54	10.46	11.38
20-year equity IRR			<b>18.94%</b>									
20-year project IRR			<b>10.31%</b>									
ROE			19.67%	21.32%	22.98%	21.55%	22.99%	26.75%	26.36%	27.59%	28.82%	30.05%

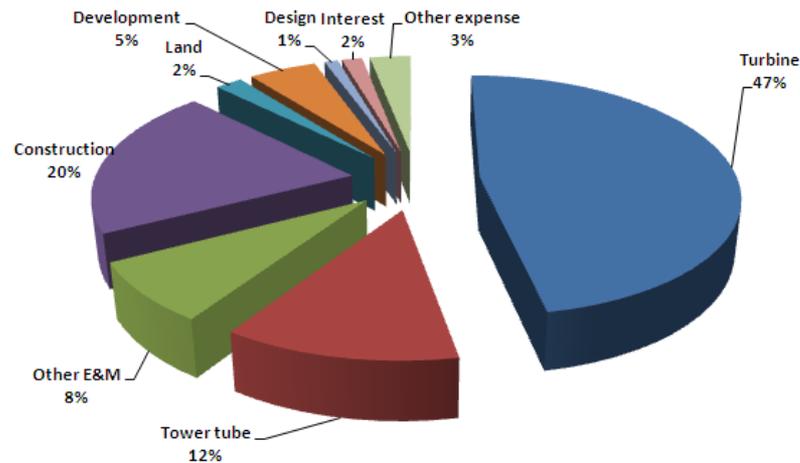
CAUTION : The numbers above are hypothetical numbers illustrating a sample financial model for a wind farm in China. Such numbers do not derive from any wind power plant in which CNE has invested or plan to invest.

# Wind Power Plant Economics Analysis

## Sensitivity/ Scenario Analysis:

Scenario (assuming other factors held constant)	Impact on Profit	Impact on IRR	IRR change (from base case of 18.94%)	Current level
Grid tariff decreased by 1 cent	- RMB 0.80mil	-0.89%	18.05%	RMB0.49- 0.61/kWh (include VAT)
Capacity factor decreased by 100 hours	- RMB 2.24mil	-2.50%	16.44%	1,700-2,500 hours
PBOC rate increased by 0.50%	- RMB 1.51mil	-0.98%	17.96%	4.9-5.9
Project cost increased to RMB 8,000/kw	- RMB 0.73mil	-1.22%	17.72%	RMB 7-8/watt

## Project Costs Distribution:



CAUTION : The numbers above are hypothetical numbers illustrating a sample financial model for a wind farm in China. Such numbers do not derive from any wind power plant in which CWP has invested or plan to invest.

Thank you for your interest in CNE

*[www.cnegroup.com](http://www.cnegroup.com)*



Please feel free to contact us for any inquiries:

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