

Concord New Energy Group Ltd.(0182.hk)

—— An Experienced Wind & Solar Developer and Operator

2018 Annual Results Presentation

28th Feb 2019



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	Unit : RMB	As of 31 th Dec 2018	As of 31 th Dec 2017	Change Rate
Balance Sheet	Net assets	5,546.74 mil	5,255.15 mil	+5.55%
	Cash and cash equivalent	1,366.31mil	1,110.80mil	+23.00%
	Liability/Asset ratio (Total Liabilities divided by Total Assets)	69.88%	64.51%	+5.37%
	Unit : RMB	As of 31 st Dec 2018	As of 31 th Dec 2017	Change Rate
Consolidated P&L	Revenue	1,414.07mil	1,035.97mil	+36.50%
	Profit Attributable to Owners of the Company	502.41mil	200.04mil	+151.16%
	Fully diluted EPS	5.87cents	2.33 cents	+151.93%
Segment Revenue	Power generations¹	1,251.11mil	717.55mil	+74.36%
	Others	162.96mil	318.42mil	-48.82%
Segment Result²	Power generations	781.02mil	467.15mil	+67.19%
	Others	12.78mil	-97.21mil	+113.15%

1. Power generation revenue from consolidated power plants

2. The Segment Result are the earnings before interest and tax and disposal gain. The power generation includes the power generation, URP release, deferred tax contribution and shared profits of joint ventures.

Significant Growth in Power Generation Revenue and Net Profit

	Power Generation Revenue (RMB '000)			Attributable Power Generation Net Profit (RMB '000)			Attributable Power Generation Output (GWh)		
	2018	2017	Change Rate	2018	2017	Change Rate	2018	2017	Change Rate
<u>Total Wholly-owned Power Plants</u>	1,251,109	717,548	74.36%	511,276	233,871	118.61%	2,295.97	1,215.38	88.91%
Wholly-owned Wind Power Plants	906,206	366,295	147.40%	419,089	145,630	187.78%	1,865.43	783.22	138.17%
Wholly-owned PV Power Plants	344,903	351,253	-1.81%	92,187	88,241	4.47%	430.54	432.16	-0.37%
<u>Total Associates and JV Power Plants</u>	-	-	-	149,619	127,186	17.64%	1,339.80	1,232.08	8.74%
Associates and JV Wind Power Plants	-	-	-	140,654	121,222	16.03%	1,322.48	1,213.95	8.94%
Associates and JV PV Power Plants	-	-	-	8,965	5,964	50.32%	17.32	18.13	-4.47%

Remark: Attributable Net Profit refers to the sum of net profit of power plants based on attributable calculation. The income of associates and JV power plants are not consolidated.

Rapid Increase in Attributable Installed Capacity

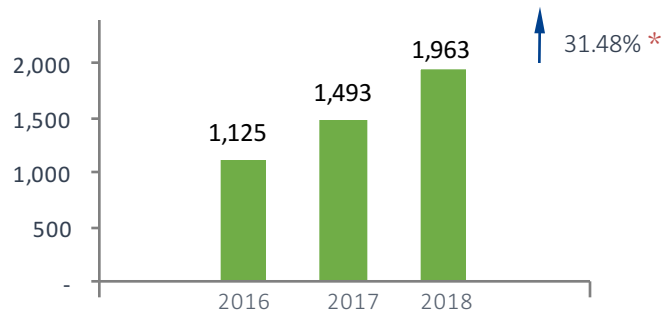
	As of 31 th Dec 2018	As of 31 th Dec 2017	Change
Newly Added Attributable Installed Capacity	471MW	439MW	7.29%
Wholly-owned Wind Power Plants	470MW	384MW	22.40%
Wholly-owned PV Power Plants	1MW	55MW	--
Operational Attributable Installed Capacity	2,277MW	1,806MW	26.08%
Wholly-owned Wind Power Plants	1,308MW	838MW	56.09%
Associates and JV Wind Power Plants	655MW	655MW	-
Wholly-owned PV Power Plants	303MW	302MW	-
Associates and JV PV Power Plants	11MW	11MW	-

Significant Improvement of Power Plants Operational Indicators

Operational Indicators	As of 31 th Dec 2018	As of 31 th Dec 2017	Change Rate
<u>Weighted Average Utilization Hours</u>			
Wind Plants (attributable)	2,148 Hours	1,921Hours	11.82%
Wind Plants (wholly-owned)	2,288Hours	2,072Hours	10.42%
PV Plants (attributable)	1,379Hours	1,367Hours	0.88%
PV Plants (wholly-owned)	1,356Hours	1,313Hours	3.27%
<u>Weighted Average Tariff (traded power adjustment considered)</u>			
Wind Plants (attributable)	0.5595/kWh	0.5582/kWh	0.23%
Wind Plants (wholly-owned)	0.5948/kWh	0.5830/kWh	2.02%
PV Plants (attributable)	0.9446/kWh	0.9698/kWh	-2.60%
PV Plants (wholly-owned)	0.9073/kWh	0.9357/kWh	-3.04%
<u>Total Attributable Average Grid Curtailment</u>	4.78%	8.93%	Drop 4.15 percentage
Wind Plants (attributable)	4.03%	9.10%	Drop 5.07 percentage
Wind Plants (wholly-owned)	0.06%	0.19%	Drop 0.13 percentage
PV Plants (attributable)	12.35%	7.49%	Increase 4.86 percentage
PV Plants (wholly-owned)	13.60%	8.31%	Increase 5.29 percentage

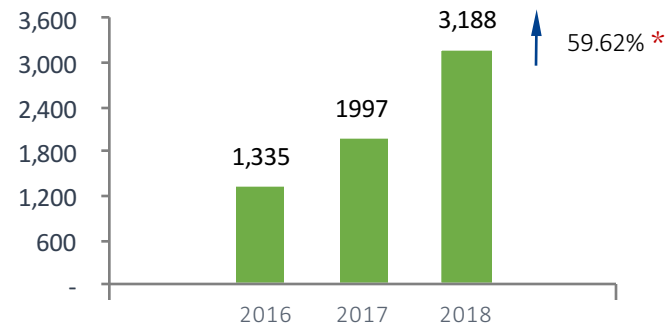
Significant Growth in Installed Capacity and Power Generation

Attributable Wind Capacity(MW)



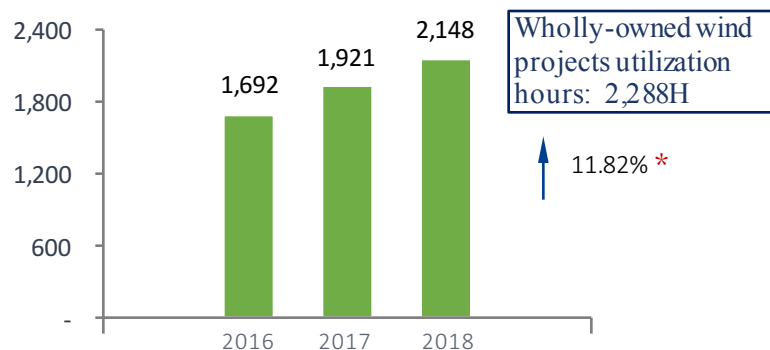
* Change% between 2018 & 2017

Attributable Wind Power Generation Output(GWh)



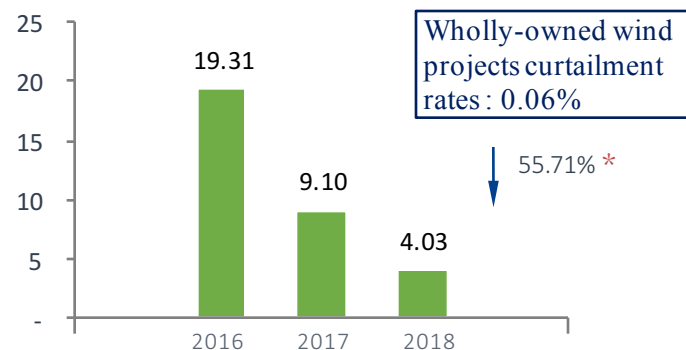
* Change% between 2018 & 2017

Wind Plants Utilization Hours



* Change% between 2018 & 2017

Average Wind Power Curtailment Rates (%)



* Change% between 2018 & 2017

List of Wind Pipeline with Secured Tariff

“5.18 Policy” * of competitive bidding for wind power projects is NOT applicable to CNE’s 1,431MW wind projects which have been approved or listed in the provincial construction plan with fixed tariff

No.	Projects	Province	Status	Capacity (MW)	Tariff (RMB/kWh)	No.	Projects	Province	Status	Capacity (MW)	Tariff (RMB/kWh)
1	Xuwulin	Hebei	Approved	48	0.5	11	Tongyu WLH D	Jilin	Approved	50	0.49
2	Baimangying	Hunan	Approved	48	0.6	12	Tongyu WLH E	Jilin	Approved	50	0.49
3	Fanshi	Shanxi	Approved	100	0.6	13	Tongyu WLH F	Jilin	Approved	50	0.49
4	Bozhouqiaodong	Anhui	Approved	50	0.6	14	Tongyu XF D	Jilin	Approved	50	0.49
5	Mengzhuling	Hunan	Approved	50	0.6	15	Guazhou Anbei	Gansu	Approved	200	0.45
6	Dongda	Hunan	Approved	48	0.6	16	Rong'an I	Guangxi	Approved	48	0.57
7	Daquan	Hubei	Approved	70	0.6	17	Rong'an II	Guangxi	Approved	42	0.57
8	Longquan	Hubei	Approved	30	0.6	18	Rong'an III	Guangxi	Approved	48	0.60
9	Shangcheng	Henan	Approved	50	0.6	19	Yushan II	Hubei	Approved	89	0.57
10	Yichuan	Henan	Approved	50	0.6	20	Daquan II	Hubei	Approved	60	0.57
						21	Lechang	Guangdong	Approved	100	0.57
						22	BozhouQiaobei	Anhui	Approved	100	0.57

* On 18th May 2018, NEA announced that the wind power projects shall be allocated through competitive bidding. Wind projects which have not been approved or included in the provincial construction plan of 2018 and former years shall all be allocated and determined through competitive bidding. Previous projects which had been approved or included in the provincial construction plan will continue to receive existing FIT for the project life.

CNE **Concord New Energy Group Limited**
(0182.hk)

- Total Assets: 18.41bn
- Net Assets : 5.55bn
- 2018 Net Profit : 0.51 bn
(As of 31th Dec 2018 Unit: RMB)

Power Generation



- Owns and operates 74 wind power plants (attributable capacity 2,277MW)
- Focusing on the projects investment in southern China



Other Businesses

- Consultation & Design
- Engineering Construction and Equipment Procurement
- Professional O&M, Intelligent Energy
- Energy Storage and Electricity Ancillary Service
- Finance Lease

Latest Industry Outlook

Latest Industry Outlook

❖ In 2018, total electricity consumption increased 8.5% compared with the same period last year, representing an increase of 1.9%.

❖ Curtailment of wind projects significantly improved, national wind power curtailment rate was 7%, representing a year on year drop of 5%. Inner Mongolia, Heilongjiang and Ningxia Province removed red alert.

❖ Renewable energy technology development is contributing to the rapid drop of the LCOE, competitive advantage further enhanced, and accelerate the progress of the grid parity.

❖ Latest released “5.18” wind power policy and “5.31” PV power policy implicated the renewable energy industry has entered the era of grid parity and competitive bidding ahead of schedule.

❖ On June 11 2018, NEA, NDRC and Finance Ministry released the 7th batch of subsidy catalogue.

❖ NDRC, NEA sought comments on quota system for three rounds, which means the quota system has entered the final countdown for implementation.

Latest Company Outlook

Latest Company Outlook



1

Attributable power generation significantly increased of 48.55% compared with last year and the power generation of wholly-owned wind power plants represented a year-on-year increase of 88.91%

2

The attributable installed capacity was 2,277MW, of which 1,611MW was wholly-owned power plants; the weighted average utilization hours of wind power plants was 2,148H and 2,288H of wholly-owned wind power plants

3

Vigorously developing the Energy Internet of Things, adopting “POWER+” + “Yixun” + “centralised monitoring centres” + “EAM” mode, benefiting from the intelligent O&M, the operational indicators have significantly improved and the LCOE of the operational power plants have been decreased

4

349MW wind power projects were newly approved and total 1,431MW wind projects with fixed tariff will not be impacted by the 5.18 wind power competitive bidding policy; 4 PV power projects of 55.4MW were newly approved

5

298MW projects were included in the 7th batch subsidy catalogue, of which 218MW were wind power projects and 80 MW were PV power projects

6



While focusing on main business of power generation, developing distributed wind and PV power, energy internet, energy storage, grid ancillary services and financial leasing; with BEV fund established by Bill Gates, jointly invested in Malta energy storage project incubated by Google X Lab

Development Strategy and Prospects

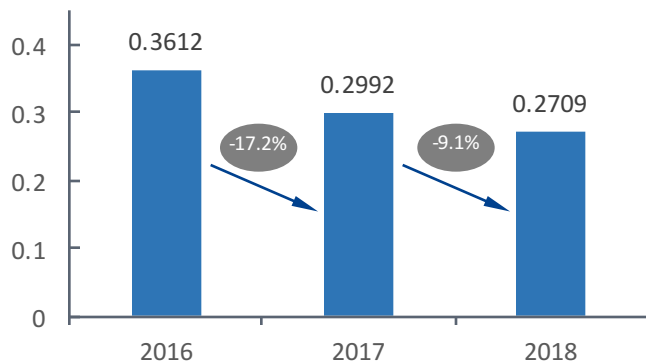


The Lowest LCOE Strategy

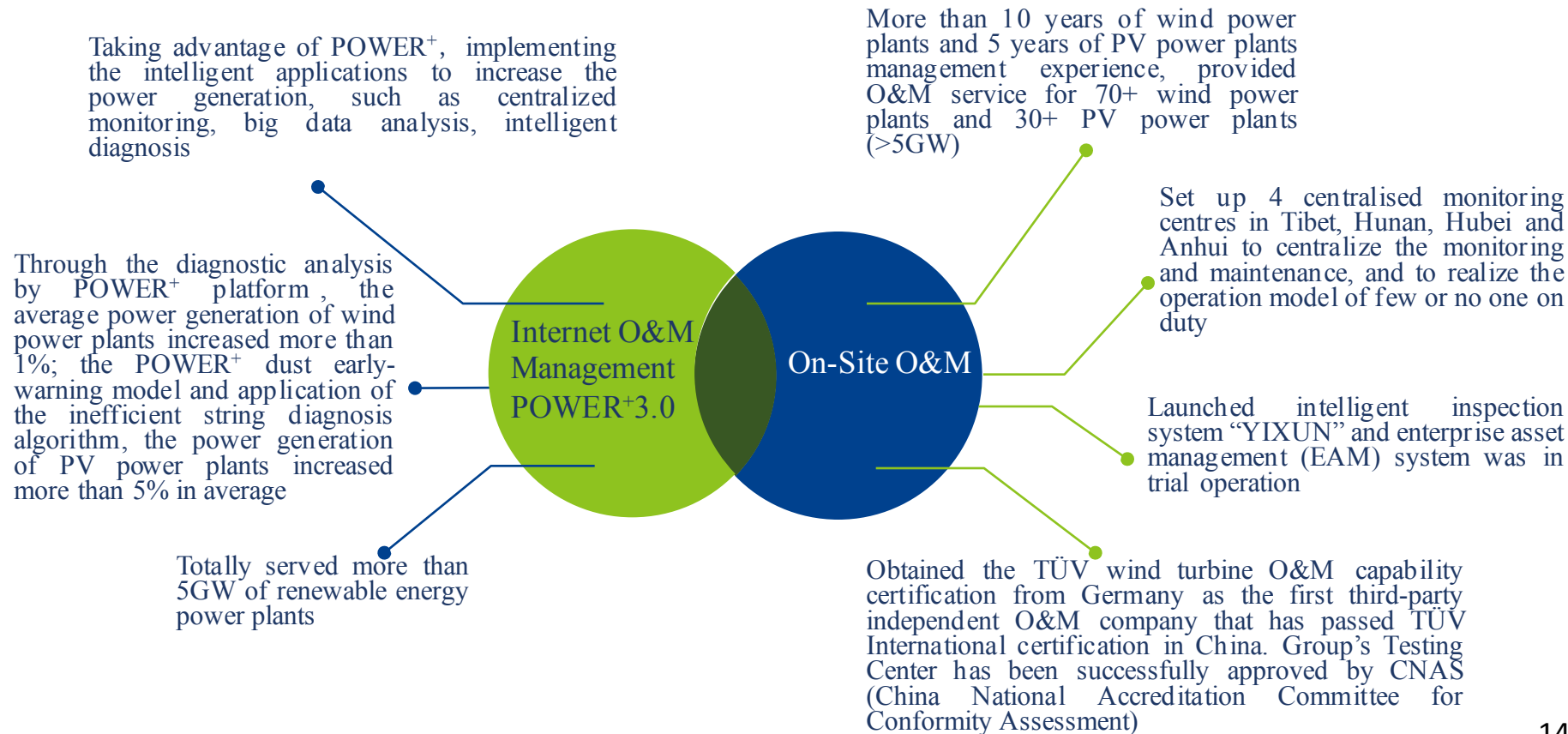
Firmly implementing the principle of “the lowest LCOE” as the Group’s core competitiveness in the era of competitive bidding and grid parity

-  I. Actively track and apply new technologies, new turbine types, and new processes in the construction of the Group’s invested projects and build high-quality, high-efficiency power plants
-  II. Comprehensively promoting the application of energy internet in power plants operation, providing the refined management, implementing few or no one on duty, to increase power generation efficiency and reduce the operation and management cost

LCOE of Wholly-owned Wind Power Plants (RMB/kWh)



Building Intelligent O&M by Energy Internet



Professional and Experienced Management Team



Executive Directors

Mr. Liu Shunxing, Chairman – an Executive Director of China Energy Council. He once worked in NDRC and China Energy Conservation Investment Corporation

Ms. Liu Jianhong, Vice Chairperson – former Chief Legal Officer of China Energy Conservation Investment Corporation, possessing over 10 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

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

Mr. Gui Kai, Vice President – 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

Mr. Shang Li, CTO – holds a Ph. D degree in Princeton University, USA. He was formerly the Chief Architect and Vice President of Intel China Research and an Associate Professor in University of Colorado

Mr. Liu & Management Team

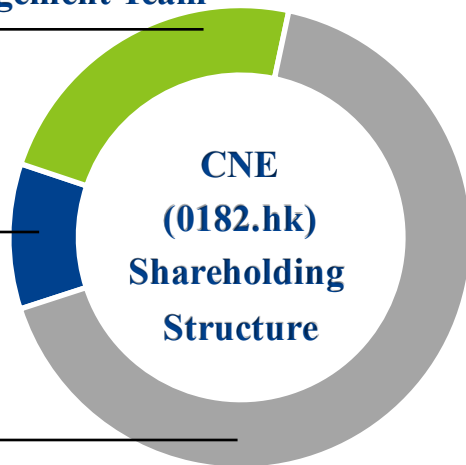
23.93%

Huadian Fuxin

10.29%

Others

65.78%



Professional and Experienced Management Team

Non-Executive Director

Mr. Wang Feng—currently works for Huadian Fuxin Energy Limited Company

Independent Non-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. He is also an independent non-executive director of DVN (Holdings) Limited

Ms. Huang Jian – partner of Ruihua Certified Public Accountants

Dr. Jesse, Zhixi Fang— holds a doctor degree in University of Nebraska-Lincoln. He was the global vice president of Intel and founded Intel Labs China, ILC as its first dean

Mr. Zhang Zhong— holds a Master degree in Renmin University of China. He is currently a partner of Zhong Lun Law Firm

Other Management Team

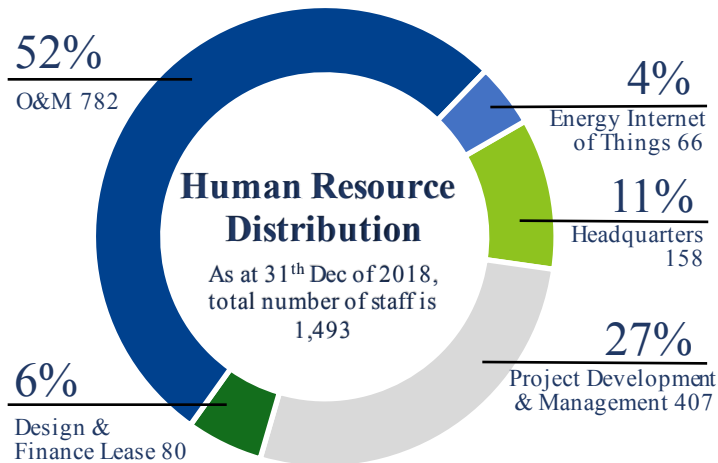
Mr. Jiang Yingjiu, Vice President — Joined the company in 2006, he had worked for Beijing Municipal Commission of Housing and Urban-Rural Development and China Energy Conservation Investment Corporation

Mr. Shang Xuelian, Vice President — Joined the company in 2008, he had worked for Shandong Lubei Enterprise Group Limited

Mr. Ma Suoming, Vice President — Joined the company in 2015, he had worked for dispatch center of National Grid

Mr. Wang Xigang, Vice, President — Joined the company in 2009, he had worked for AVIC

Mr. Zhang Jianfeng, Vice, President — Joined the company in 2011, he had worked for Sino-i Technology Limited



Appendix

Regional Statistic Data of Power Plants in Operation

Attributable Power Generation (GWH)

Business Segments and Regions	Attributable Power Generation in Total			Wholly-owned Power Plants		
	2018	2017	Change Rate	2018	2017	Change Rate
Wind Power Generation	3,187.91	1,997.17	59.62%	1,865.43	783.22	138.17%
Northeastern China	338.94	269.73	25.66%	-	-	-
Northern China	438.55	430.02	1.98%	-	-	-
Northwestern China	141.05	126.29	11.69%	-	-	-
Eastern China	567.37	457.47	24.02%	323.37	217.90	48.40%
Central Southern China	1,507.52	563.59	167.49%	1,347.59	415.26	224.52%
Southernwestern China	194.47	150.06	29.59%	194.47	150.06	29.59%
PV Power Generation	447.86	450.29	-0.54%	430.54	432.16	-0.37%
Northeast China	0.01	-	-	0.01	-	-
Northern China	43.32	25.64	68.95%	31.04	12.57	146.94%
Northwestern China	12.51	63.89	-80.42%	12.51	63.89	-80.42%
Eastern China	59.44	59.31	0.22%	54.40	54.26	0.26%
Southernwestern China	311.55	285.59	9.09%	311.55	285.59	9.09%
Overseas Regions	21.04	15.85	32.74%	21.04	15.85	32.74%
Total	3,635.77	2,447.46	48.55%	2,295.97	1,215.38	88.91%

Attributable Installed Capacity (MW)

Business Segments and Regions	Power Plants of the Group			Wholly-owned Power Plants		
	2018	2017	Change Rate	2018	2017	Change Rate
Wind Power Capacity	1,963	1,493	31.48%	1,308	838	56.09%
Northeastern China	162	162	0.00%	-	-	-
Northern China	186	186	0.00%	-	-	-
Northwestern China	103	103	0.00%	-	-	-
Eastern China	379	248	52.82%	261	130	100.77%
Central Southern China	1,053	714	47.48%	967	628	53.98%
Southernwestern China	80	80	0.00%	80	80	0.00%
PV Power Capacity	314	313	0.32%	303	302	0.33%
Northeast China	1	-	-	1	-	-
Northern China	26	26	0.00%	20	20	0.00%
Northwestern China	9	9	0.00%	9	9	0.00%
Eastern China	44	44	0.00%	40	40	0.00%
Southernwestern China	215	215	0.00%	215	215	0.00%
Overseas Regions	18	18	0.00%	18	18	0.00%
Total	2,277	1,806	26.08%	1,611	1,140	41.32%

Summary of Financial Statement

P&L(RMB'000)	2018	2017
Revenue	1,414,070	1,035,967
Cost of sales and services rendered	(547,600)	(643,752)
Gross profit	866,470	392,215
Other income	30,678	43,593
Other gains and losses, net	29,697	72,023
Expense		
Distribution and selling expenses	(6,854)	(530)
Administrative expenses	(235,414)	(179,018)
Finance costs	(301,210)	(184,903)
Share of profit of joint ventures	130,179	102,940
Share of profit of associates	16,594	24,246
Profit before income tax	530,140	270,566
Income tax expense	(16,291)	(63,948)
Profit for Reporting Period	513,849	206,618
Profit attributable to:		
Owners of the Company	502,406	200,036
Non-controlling interests	11,443	6,582

Asset (RMB'000)	2018	2017
Current assets	3,566,432	3,708,449
Non-current assets	14,846,376	11,098,689
Total assets	18,412,808	14,807,138
Current liabilities	(3,463,929)	(3,616,445)
Non-current liabilities	(9,402,140)	(5,935,547)
Total liabilities	(12,866,069)	(9,551,992)
Net current assets	102,503	92,004
Net Asset	5,546,739	5,255,146
Share Capital	74,049	75,164
Reserves	5,444,179	5,082,632
Cash Flow ('000)	2018	2017
Net cash from operating activities	766,261	274,632
Net cash used in investing activities	(2,113,629)	(2,136,924)
Net cash from financing activities	1,683,601	945,171
Net increase/(decrease) in cash and cash equivalents	336,233	(917,121)
cash and bank balances	1,366,305	1,110,803
Total Liability	12,866,069	
Liability with Interest		8,925,383
Weighted Average Cost		5.53%
Medium and Long Term Borrowing (>5 Years)		6,560,907

2,857MW-total capacity ; 1,963MW-attributable capacity

Associates and JV Projects: 655MW attributable installed capacity

Year	Projects	Regions*	Province	Capacity (MW)	CNE's stake	Tariff (RMB/kWh)	Attributable Capacity
2006	Chantu Phase I	NE	Liaoning	50.25	25%	0.64	12.56
2008	Taiqi Phase I	N	Inner Mongolia	49.5	49%	0.52	24.26
2008	Erlanhaote Phase I	N	Inner Mongolia	21	49%	0.52	10.29
2009	Linchang Phase I	NE	Jilin	49.5	49%	0.61	24.26
2009	Mazongshan	NE	Liaoning	49.5	24.5%	0.61	12.13
2009	Qujiagou	NE	Liaoning	49.5	24.5%	0.61	12.13
2009	Zhaqi Phase I	N	Inner Mongolia	49.5	49%	0.54	24.26
2009	Heiyupao Phase I	NE	Jilin	49.5	49%	0.61	24.26
2010	Wuchuan	N	Inner Mongolia	49.5	46%	0.51	22.77
2010	Huadeng Phase I	N	Inner Mongolia	49.5	32%	0.54	15.84
2010	Huadeng Phase II	N	Inner Mongolia	49.5	32%	0.54	15.84
2010	Zhalute Phase II	N	Inner Mongolia	49.5	32%	0.54	15.84
2010	Zhalute Phase III	N	Inner Mongolia	49.5	32%	0.54	15.84
2010	Guazhou	NW	Gansu	201	51.5%	0.52	103.52
2011	Touzhijian	N	Inner Mongolia	49.5	51%	0.51	25.25
2011	Kailu	N	Inner Mongolia	49.5	32%	0.54	15.84
2011	Maniuhu	NE	Liaoning	49.5	30%	0.61	14.85
2011	Gulibengao	NE	Liaoning	49.5	30%	0.61	14.85
2012	Heiyupao Phase III	NE	Jilin	49.5	32%	0.58	15.84
2012	Heiyupao Phase IV	NE	Jilin	49.5	32%	0.58	15.84
2012	Tianchang	E	Anhui	48	49%	0.62	23.52
2013	Chaoyang Wanjia	NE	Liaoning	49.5	30%	0.61	14.85
2013	Guanshan	E	Anhui	48	49%	0.61	23.52
2013	Suzhou Fuli	E	Anhui	48	49%	0.61	23.52
2013	Jianghua	CS	Hunan	48	59%	0.61	28.32
2014	Zilingpu	CS	Hubei	48	59%	0.61	28.32
2014	Huolonggang	CS	Henan	49.5	59%	0.61	29.21
2014	Yantai Gaotong	E	Shandong	48	49%	0.61	23.52
2016	Lingshan	E	Anhui	48	49%	0.61	23.52

Wholly-owned Projects: 1,308MW attributable installed capacity

Year	Projects	Regions*	Province	Capacity (MW)	CNE's stake	Tariff (RMB/kWh)	Attributable Capacity
2015	Feixi	E	Anhui	34	100%	0.61	34
2015	Dongtian	CS	Hunan	48	100%	0.61	48
2016	Jiepai	CS	Hunan	48	100%	0.61	48
2016	Jiagou	E	Anhui	48	100%	0.61	48
2016	Cangfang	SW	Yunnan	48	100%	0.61	48
2016	Fuchuan Shijia	CS	Guangxi	48	100%	0.61	48
2016	Fuchuan Chaodong	CS	Guangxi	48	100%	0.61	48
2016	Bainijing	SW	Yunnan	32	100%	0.61	32
2016	Nanzhao	CS	Henan	100	100%	0.61	100
2017	Wuhe	E	Anhui	48	100%	0.6	48
2017	Qiaotoupu	CS	Hunan	48	100%	0.6	48
2017	Tongdao Linkou	CS	Hunan	48	100%	0.6	48
2017	Yangjiawan	CS	Henan	48	100%	0.6	48
2017	Xinzao	CS	Guangxi	48	100%	0.6	48
2017	Hongtang	CS	Hunan	48	100%	0.6	48
2017	Chuansu	CS	Hunan	48	100%	0.6	48
2017	Shangjingshan	CS	Hubei	48	100%	0.6	48
2018	Tianchang II	E	Anhui	48	100%	0.6	48
2018	Shenzhagatang	CS	Hunan	48	100%	0.61	48
2018	Huayuan	CS	Henan	100	100%	0.6	100
2018	Jingtang	CS	Hunan	48	100%	0.6	48
2018	Yushan	CS	Hubei	48	100%	0.61	48
2018	Zaoyang	CS	Hubei	47	100%	0.61	47
2018	Lixi	CS	Hubei	48	100%	0.6	48
2018	Jindashan	E	Anhui	50	100%	0.6	50
2018	Qinshan	E	Anhui	33	100%	0.6	33

* NE-Northeastern China, N-Northern China, NW-Northwestern China, E-Eastern China, CS-Central Southern China, SW-Southwestern China

PV Projects in Operation

332MW-total installed capacity; 314MW-attributable installed capacity

Year	Projects	Regions	Province	Capacity (MW)	CNE's stake	Tariff (RMB/kWh)	Attributable Capacity
Associates and JV Projects: 10.78MW attributable installed capacity							
2011	Suqian	E	Jiangsu	8.88	49%	2.4	4.35
2015	Zhaer	N	Inner Mongolia	20	32.16%	0.95	6.43
Controlled Projects: 303.02MW attributable installed capacity							
2011	Wuwei	NW	Gansu	9	100%	1.15	9
2012	Hawaii(Hoko)	—	US	0.9	80%	USD 0.44 (2-3% increase/Y)	0.72
2013	Yongren	WS	Yunnan	50	100%	1	50
2013	Wisconsin(Jefferson)	—	US	1	100%	USD 0.21 (1% increase/Y)	1
2014	Naidong	WS	Tibet	20	100%	1.15	20
2014	Pingyuan	E	Shandong	40	100%	1.2	40
2015	Indiana	—	USA	10	100%	USD 0.20	10
2015	Huaping	WS	Yunnan	50	100%	0.95	50
2015	Eryuan	WS	Yunnan	30	100%	0.95	30
2015	Yanyuan	WS	Sichuan	30	100%	0.95	30
2015	Rhode Island(Johnston)	—	USA	1.5	100%	USD 0.175	1.5
2015	Rhode Island (North kingstown)	—	USA	0.5	100%	USD 0.19	0.5
2016	Ohio(Minster)	—	USA	4.3	100%	USD 0.07 (2% increase/Y)	4.3
2017	Cuomei	WS	Tibet	20	100%	1.15	20
2017	Haixing	N	Hebei	20	100%	1.18	20
2017	Jiangzi	WS	Tibet	15	100%	1.15	15
2018	Haerbin	NE	Heilongjiang	1	100%	0.7012	1

* NE- Northeastern China, N-Northern China, NW-Northwestern China, E-Eastern China, CS-Central and Southern China, WS-Western and Southern China



Wind Power Plant Economics (Hunan Project)

Wind Power Plant Economics Assumptions:

1. Capacity of wind farm = 48MW	4. Subsidy delay=2 years	8. Bank Loan = RMB 223.30mil (70%)
2. Utilization Hours = 2,300hours	5. Total Investment = RMB 319mil (RMB6.6/watt)	9. Interest rate = 5.4%
3. Tariffs = RMB0.57/kWh (include VAT)	6. VAT for CAPEX = RMB 37.40mil	10. Construction period = 12 months
	7. Capital = RMB 95.70mil (30%)	11. VAT for CAPEX offset by VAT for power sales

Project Income Statement:

(in RMB mil)		Year 0	Year 1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year 10
Net Electricity tariffs (exclde VAT)			5,470	5,470	5,470	5,470	5,631	5,908	5,908	5,908	5,908	5,908
VAT Refund			-	-	-	-	161	438	438	438	438	438
Total revenue			5,470	5,470	5,470	5,470	5,631	5,908	5,908	5,908	5,908	5,908
Depreciation (a)	20Years		1,323	1,323	1,323	1,323	1,323	1,323	1,323	1,323	1,323	1,323
O & M costs			250	258	265	273	281	310	319	329	339	349
Repair costs			40	40	40	40	41	66	67	129	69	70
Others			72	72	72	72	72	72	72	72	72	72
Operating expense			80	82	85	87	90	93	96	98	101	104
Total			1,765	1,775	1,785	1,795	1,807	1,864	1,877	1,951	1,904	1,918
Operating profit			3,705	3,695	3,685	3,675	3,824	4,044	4,031	3,957	4,004	3,990
Loan balance at end of the year	10Years	22,330	20,097	17,864	15,631	13,398	11,165	8,932	6,699	4,466	2,233	-
Interest expense	10Years 5.4%		1,146	1,025	904	784	663	543	422	301	181	60
Profit before tax			2,560	2,670	2,780	2,890	3,129	3,414	3,521	3,567	3,735	3,842
Tax			-	-	-	361	391	427	880	892	934	960
Profit after tax (b)			2,560	2,670	2,780	2,529	2,738	2,987	2,641	2,675	2,802	2,881
Capital		9,570										
VAT offset (c)			875	875	875	875	553	-	-	-	-	-
Loan repayment (d)	10Years		2,233	2,233	2,233	2,233	2,233	2,233	2,233	2,233	2,233	2,233
Cash Flow (a)+(b)+(c)+(d)	(Subsidy delay 2 years)	-9,570	1,375	1,486	5,043	2,495	2,381	2,079	1,732	1,766	1,892	1,972
20-year equity IRR		25.37%										
20-year project IRR		14.67%										
LCOE (RMB/kWh)		0.2829										
ROE			26.75%	27.90%	29.05%	26.43%	28.61%	31.21%	27.60%	27.96%	29.27%	30.11%

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

Wind Power Plant Economics (sample)

Assumptions: Tariff = Desulfurization Coal-fire Benchmark tariff, actual settlement tariff by the Power Grid Corp

1. Capacity of wind farm = 48MW

2. Capacity factor = 2,300hours

3. Tariffs = Desulfurization Coal-fire Benchmark tariff

4. Total Investment = RMB 319mil (RMB6.6/watt)

5. VAT for CAPEX = RMB 37.40mil

6. Capital = RMB 95.70mil(30%)

7. Bank Loan = RMB 223.3mil(70%)

8. Interest rate = 5.4%

9. Construction period = 12 months

10. VAT for CAPEX offset by VAT for power sales

Project Cash Flow

Province	Benchmark tariff (RMB)	Project IRR	Equity IRR	Cash Flow (in: RMB)										
				Year0	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year 10
Guangxi	0.4207	9.47%	13.61%	-9570	862	973	1,083	1,012	1,108	1,165	713	623	749	828
Hunan	0.4500	10.57%	15.95%	-9570	1,189	1,299	1,409	1,303	1,399	1,397	813	847	973	1,053
Hubei	0.4161	9.30%	13.25%	-9570	811	922	1,032	966	1,062	1,119	707	587	713	793
Anhui	0.3844	8.09%	10.83%	-9570	458	569	679	651	747	805	669	345	471	550
Henan	0.3779	7.84%	10.35%	-9570	386	497	607	586	682	740	661	295	421	501

Wind power projects are much less relied on subsidies than PV and the cash flow will be positive without subsidies

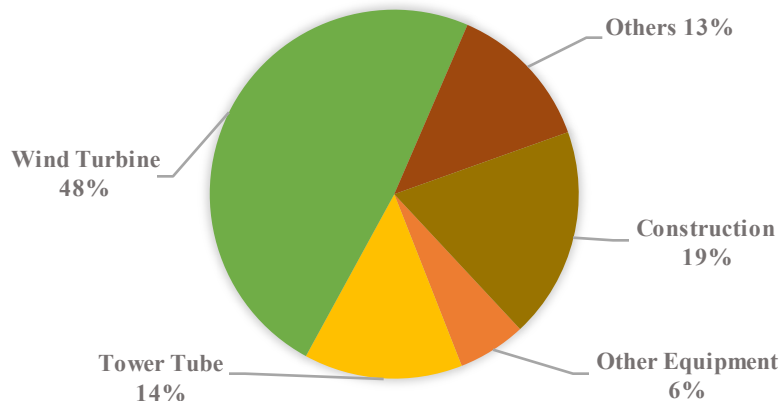
CAUTION : The numbers above are hypothetical numbers illustrating a sample financial model for a wind farm in China. Such numbers do not derive from any wind power plant in which CNE has invested or plan to invest.

Wind Power Plant Economics Analysis

Sensitivity/ Scenario Analysis:

Scenario (assuming other factors held constant)	Impact on 1 st Year Profit	Impact on IRR (Compared with 25.37%)	Equity IRR	Current Level
Grid tariffs decreased by 5 cent	-RMB 4.80mil	-4.31%	21.06%	RMB 0.40-0.60/kWh (include VAT)
Capacity factor increased by 200 hours	+RMB 4.75mil	4.5%	29.87%	2,000-3,200 hours
PBOC rate increased by 0.50%	-RMB 1.07mil	-0.60%	24.77%	4.9-5.9%
Project cost decreased to RMB 6,100/kw	+RMB 2.00mil	3.87%	29.24%	RMB 6.0—7.0RMB/watt

Project Costs Distribution:



Area	Tariffs	Grid Curtailment Situation	Utilization Hours	Interest Rate	Equity IRR	Project IRR
I	0.40	N	2,700	5.4%	17.02%	11.44%
		Y	1,900		7.06%	6.14%
II	0.45	N	2,500	5.4%	18.36%	12.10%
		Y	1,900		9.92%	7.78%
III	0.49	N	2,300	5.4%	17.68%	11.56%
		Y	2,000		13.05%	9.32%
IV	0.57	N	2,300	5.4%	23.97%	14.28%

Historical Development of Wind & PV Power Industry

Year of Operation		2013	2014	2015	2016	2017	2018
National installed wind power capacity (GW)		7,652	9,581	12,934	14,864	16,400	18,400
Tariff (RMB/kWh)	Area I	0.51	0.51	0.49	0.47	0.47	0.40
	Area II	0.54	0.54	0.52	0.50	0.50	0.45
	Area III	0.58	0.58	0.56	0.54	0.54	0.49
	Area IV	0.61	0.61	0.61	0.60	0.60	0.57
Cost(RMB/kW)	Overall Cost(North)	6,690	6,850	6,890	6,600	6,400	6,100
	Overall Cost(South)	7,350	7,445	7,420	7,330	7,150	6,650
	Direct Drive	4,022	4,025	4,450	4,280	3,780	3,380
	Double-Fed	3,846	4,250	4,250	4,080	3,700	3,360

Year of Operation		2013	2014	2015	2016	2017	2018
National installed PV power capacity (GW)		1,589	2,486	4,158	7,742	13,000	17,400
Tariff (RMB/kWh)	Area I	0.90	0.90	0.90	0.80	0.65	0.50
	Area II	0.95	0.95	0.95	0.88	0.75	0.60
	Area III	1.00	1.00	1.00	0.98	0.85	0.70
Cost(RMB/kW)	Overall Cost(plane area)	7,650	7,002	6,760	5,891	5,700	4,600
	Overall Cost(hill area)	7,800	7,458	6,920	6,017	5,900	4,900
	Inverter(centralized)	410	319	260	240	180	120
	Module	4,300	4,250	4,140	3,920	2,700	2,000



Thank you for your Interest in CNE

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