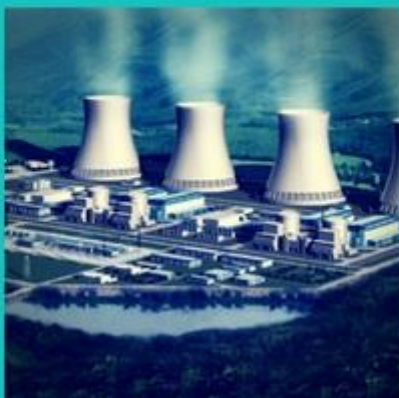


# China's Alternative Energy Sector

Energy Restructuring:  
the Growth Turbine for Clean Energy





# China's Alternative Energy Sector Energy restructuring: the growth turbine for clean energy

- The Chinese government is likely to continue to promote alternative energy during the 13<sup>th</sup> FYP period (2015-20)
- China's nuclear power capacity would expand by 15% CAGR during 2016-20
- China targets to expand wind power output by 15% CAGR during 2016-20, presenting great opportunities for operators
- **OVERWEIGHT** sector outlook; we prefer Longyuan Power (916 HK, **BUY**) and CGN Power (1816 HK, **BUY**)

**China's nuclear power capacity would expand by 15% CAGR in 2016-20.** The Chinese government is likely to promote the use of nuclear energy nationwide. Based on China's "Strategic action plan of energy development (2014-20)" (The Plan) announced in June 2014, the government targets a nuclear power capacity of 58GW in 2020, representing a 72% jump from 2016 or a 4-year CAGR of 15% from 34GW in 2016. The Chinese government reiterated the same nuclear power capacity target in the "13th Five-Year Plan for Power" announced on Nov 7, 2016.

**China targets to expand wind power output by 15% CAGR during 2016-20.** The government has been considering shifting China's energy structure from traditional coal-fired power to renewable and other sustainable alternative energy sources. Historically, China has been heavily dependent on fossil energy (coal-fired power accounted for ~70% of total output in 2016) but rising concern over air pollution drives the need for new energy sources. According to the "13th Five-Year Plan for Renewable Energy" issued by National Development and Reform Commission (NDRC) in Dec, 2016, the Chinese government targets to attain no less than 210GW of wind power capacity by end-2020, representing a 41% jump from 149GW level in 2016 or 9% CAGR in 2016-20. Also specified in the plan is that wind power generation should reach at least 420bn kWh by end-2020, which represents a 74% jump from 241bn kWh by end-2016 or 15% CAGR during 2016-20. We believe the increased output would accelerate earnings for the wind power operators.

**Current valuation is attractive.** Alternative energy players are likely to deliver double-digit or even mid-teens earnings growth in 2017E on the back of capacity expansion with improved utilization hour. The sector is trading at 9.6x 2017 P/E and below 2017E book value – a valuation we deem as attractive. Further supportive policies by the government or better-than-expected operational performance may trigger rerating.

**OVERWEIGHT sector outlook; prefer Longyuan and CGN.** We like Longyuan Power (Longyuan, 916 HK, **BUY**) for its capacity growth and prime wind power assets. We also prefer CGN Power (CGN, 1816 HK, **BUY**) for its leading status in the nuclear industry and quality assets.

**Risks.** 1) Wind power tariff cut over the long run will reduce profit; 2) Decreased power demand may hinder wind power development; 3) Wind power curtailment may worsen and reduce utilization hour; 4) Safety issues related to nuclear power

### Sector Valuation Summary (data as of May 25, 2017)

Company	Ticker	Rating	TP (HK\$)	FY17E P/E(x)	FY18E P/E (x)	FY17E P/B (x)	FY18E P/B (x)	FY17E Yield(%)	FY18E Yield(%)
CGN Power	1816	BUY	3.00	11.0	8.3	1.4	1.3	2.7	3.6
Longyuan Power	916	BUY	7.40	10.5	10.2	1.0	0.9	1.9	2.0
Huaneng Renewables	958	BUY	3.50	7.0	6.7	1.0	0.9	2.2	2.3
Datang Renewable	1798	HOLD	0.80	9.9	12.0	0.5	0.4	2.0	1.7

Source(s): Bloomberg, ABCI Securities estimates

## Sector Report

May 26, 2017

# OVERWEIGHT

Analyst : Kelvin Ng

Tel: (852) 2147 8869

Email: kelvinng@abci.com.hk

### Key Data

Avg.17E P/E (x)	9.60
Avg.17E P/B (x)	0.98
Avg.17E Dividend Yield (%)	2.20

Source(s): Bloomberg, ABCI Securities

### Sector Performance

	Absolute	Relative*
1-mth	(2.48%)	(4.94%)
3-mth	(4.93%)	(6.40%)
6-mth	4.21%	(3.77%)

\*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

### 1-Year sector performance (%)



Source(s): Bloomberg, ABCI Securities



## Key positives and outlook

China's energy structure will continue to shift from traditional coal-fired power to sustainable alternative energy sources such as nuclear, wind, and solar, etc. on rising pollution concerns and depleting fossil reserves (e.g. oil and coal). Given coal-fire energy still contributes to ~70% of China's power output, the government will continue to promote the development of alternative energy.

We believe nuclear power and wind power should be the preferred alternative energy choices because: 1) no pollutant is emitted in the process of power generation; 2) higher utilization hour (nuclear at ~6,000hr and wind at ~1,800hr, higher than solar's ~1,300hr), which can lower the average cost of power generation.

## Nuclear power

### China's nuclear power capacity would expand by 15% CAGR in 2016-20.

We believe nuclear power should be one of the major energy sources in China due to its lower production cost and its clean nature, meaning that no greenhouse gas is emitted in the process of power generation.

- ◆ **Lower production cost.** According to the industry data, unit production cost of nuclear power is RMB 0.28/kWh, similar to RMB 0.3/kWh for hydro but much lower than RMB 0.4/kWh for coal-fired, RMB 0.5/kWh for wind, and RMB 0.9/kWh for solar.
- ◆ **No greenhouse gas emitted.** Unlike the generation of coal-fired power, water is the only by-products of the nuclear power generation.

The Chinese government is likely to promote the use of nuclear energy nationwide. Based on China's "Strategic Action Plan of Energy Development (2014-20)" (The Plan) announced in June 2014, the government targets a nuclear power capacity of 58GW in 2020, representing a 72% jump from 2016 or a 4-year CAGR of 15% from 34GW. In the recently announced "13th Five-Year Plan for power" on Nov 7, 2016, the Chinese government reiterated the same nuclear power capacity target for end-2020.

## Wind power

### China targets to expand wind power output by 15% CAGR during 2016-20

According to the "13th Five-Year Plan for Renewable Energy" issued by National Development and Reform Commission (NDRC) in Dec, 2016, the Chinese government targets to attain no less than 210GW wind power capacity by end-2020, a 41% jump from 149GW level by end-2016, or 9% CAGR during 2016-20E. In addition, the plan also indicated wind power generation should reach at least 420bn kWh by end-2020, a 74% jump from 241bn kWh at end-2016 and suggests a 15% CAGR in 2016-20E. This target implies wind power utilization hour to improve from 1,742hr in 2016 to 2,000hr in 2020. We believe the sharp increase in output would accelerate earnings for the wind power operators.

### China's new policies to support non-hydro renewable power capacity growth during 2016-20

The Chinese government has launched slew of supportive policies to encourage more SOEs to participate in the development of renewable energy. Under the government's new policy approved in the National People's Congress in Mar 2016, the proportion of non-hydro renewable energy (e.g. wind and solar) generated in each Independent Power Producers (IPP) will account for no less than 9% of their total power generation by end-2020. In Apr 2016, National Energy Administration announced that non-hydro renewable energy should account further from 9% to 15% of overall power generation in all coal-fired IPP groups (e.g. Huaneng, Datang, Huadian, etc.) by end-2020. These new policies will boost output of renewable energy in the SOEs.

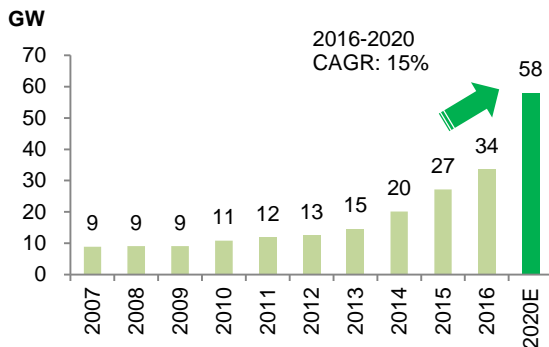
### Decreasing equipment unit cost continues to be a plus in promoting wind power.

Due to technological advancement, the unit cost of wind power equipment has been decreasing over the years and hence reducing the production cost. According to the industry data, unit cost of wind power equipment in China declined by 30% from RMB 5.8/W at end-2008 to RMB 4/W at end-2016, indicating a negative CAGR of 5% during the period. We believe the cost would continue to trend down, reducing capital expenditure of wind power operators and boosting adoption nationwide.

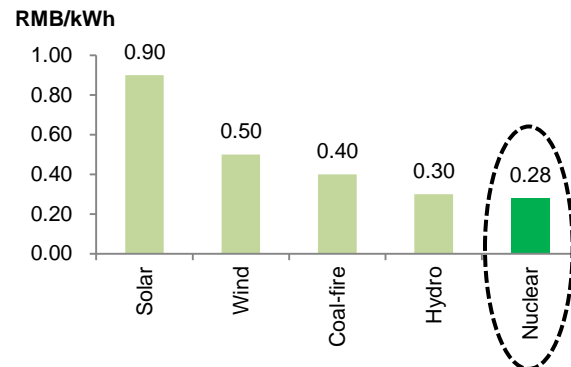


**Increasing direct sales of electricity to alleviate impacts of wind power curtailment**

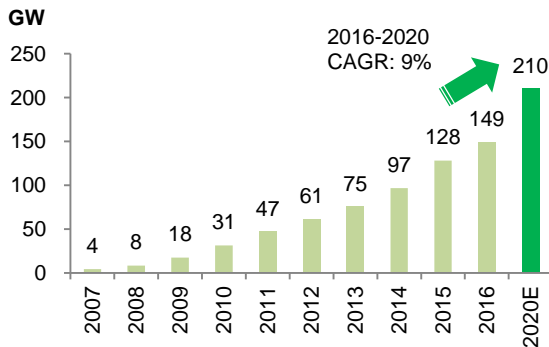
Curtailment remains a key problem in wind power transmission. Increase in direct sales of electricity, however, may help alleviate the issue. Direct sales means wind power producer could sell power to customers without passing through the State Grid system (where bottleneck occurs and results in power curtailment), although the tariff is at a 20-30% discount to the national one. According to the power industry data, the proportion of power direct sales (coal-fired, wind, solar and all power sources) to overall power output nationwide trended up from 0.2% (8,040GWh) at end-2010 to 5.4% (303,394GWh) at end-2015, suggesting direct sales may eventually become the main way of selling.

**Exhibit 1: China's nuclear power capacity would grow rapidly in 2016-20**


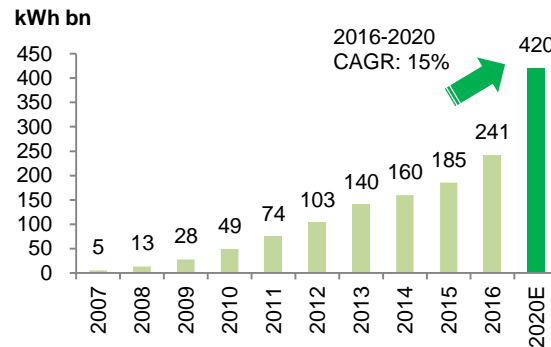
Source(s): NDRC, ABCI Securities estimates

**Exhibit 2: Nuclear power has cost advantage over other energy sources**


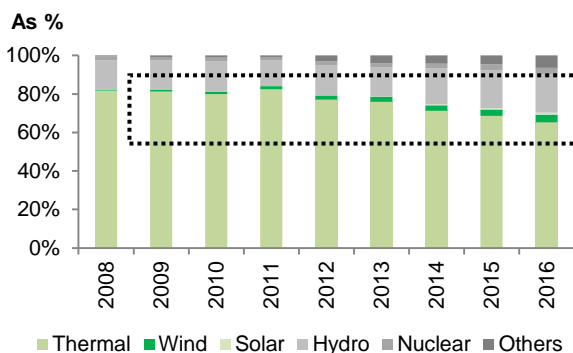
Source(s): HDFX, ABCI Securities

**Exhibit 3: China's wind power capacity would expand in 2016-20**


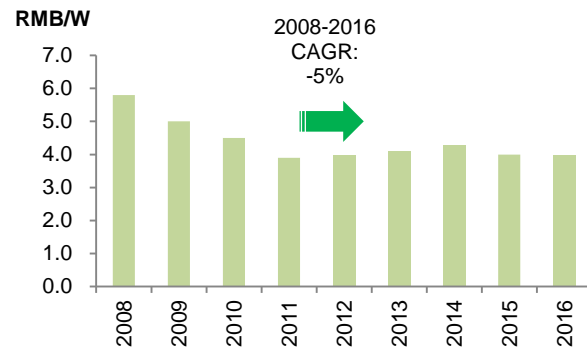
Source(s): NDRC, ABCI Securities estimates

**Exhibit 4: China's wind power output should grow at 15% CAGR in 2016-20**


Source(s): NDRC, ABCI Securities estimates

**Exhibit 5: The proportion of renewable energy in China's energy mix has been growing**


Source(s): NEA, ABCI Securities

**Exhibit 6: China's wind power equipment unit cost maintain downward trend**


Source(s): bjx.com, ABCI Securities

## Overhangs of the alternative energy

Power curtailment, decreasing power demand, safety issue, and declining wind power tariff are the key constraints in the adoption of alternative energy.

### Wind power tariff cut will be a long-term trend.

Wind power tariff in China will maintain a downtrend going forward because: 1) A lower wind power tariff would encourage the switch from coal-fired to wind energy; 2) China is likely to enforce more policies to reduce financial burden of industrial enterprises to boost production. We advise investors to focus on capacity growth, all-in unit capacity cost, net gearing ratio, and other financial indicators when evaluating the earnings potential of a wind power operator.

### Decreased power demand may hinder wind power development.

Slowdown in industrial activities would slash power demand and hinder alternative energy development. According to National Energy Administration data, China's power consumption grew 0.5%YoY in 2015, the lowest in recent years. This was mainly due to the waning industrial production where ~ 70% of China's power consumption came from the industrial sector. According to the Bloomberg data, China's industrial production growth decreased from 19.2% in Nov 2009 to 6.0% in Dec 2016, and rebounded slightly to 6.5% in Apr 2017.

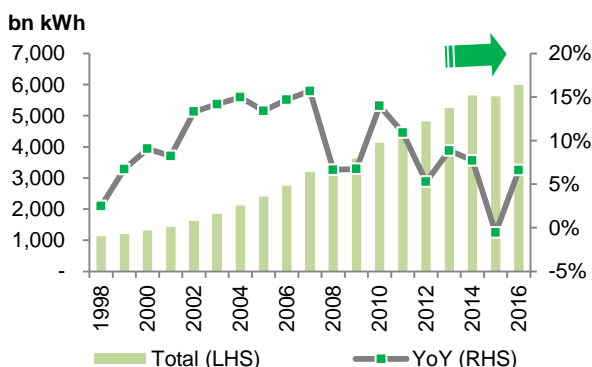
### Wind power curtailment may worsen, reducing utilization hour.

Although severity of wind power curtailment has been alleviated by supportive policies, slowdown in power demand and rapid growth in wind power capacity in the "3-North" regions may worsen curtailment again. Wind power curtailment is a result of bottlenecks in the cross-regional transmission network that fails to transmit wind power to coastal regions with high demands. This situation is the worst in the "3-North" regions, which include northeast China, northwest China, and Inner Mongolia. While wind resources are rich in these regions, the lack of efficient facilities in transmitting electricity means that power generated in these areas is mostly wasted. According to National Energy Administration data, in 2015, 34bn kWh of wind power was lost due to the transmission network bottleneck – the lost amount was equivalent to 15% of total nationwide wind power output. According to National Energy Administration data, China's average utilization hour for wind power decreased to 1,742hr in 2016 from 2,077hr in 2009, and we believe such reduction was driven by power curtailment.

### Safety issue of nuclear power.

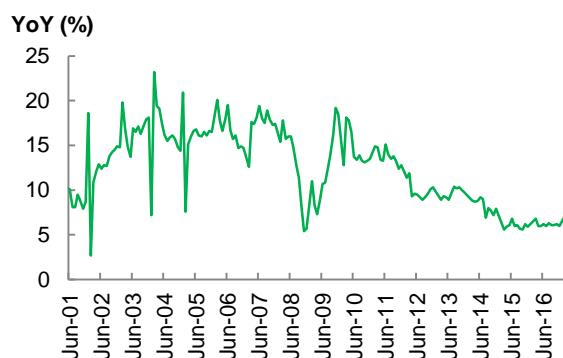
The Fukushima Dai-ichi nuclear accident in 2011 has increased public awareness on the safety of nuclear power. We believe the occurrence of any nuclear power accidents, domestic or foreign, will negatively impact the development of nuclear plants in China. Any delay in nuclear plants completion would increase construction cost and affect operators' profits.

**Exhibit 7: China's power output would expand at a single-digit level**



Source(s): NEA, ABCI Securities

**Exhibit 8: China's industrial production activities remains weak**



Source(s): Bloomberg, ABCI Securities



## CGN Power (1816 HK) Market leader with solid growth

- CGN Power (CGN)'s 1Q17 results and 3M17 operation were in line with our expectation.
- Attributed nuclear power capacity would see robust growth of 11%YoY in 2017E and 16%YoY in 2018E
- Attributed overall utilization hour to stay at above 7,000 going forward.
- Maintain **BUY** with TP of HK\$3.00, which implies 14x 2017E P/E and 1.8x 2017E P/B.

**1Q17 earnings and operation in line with our estimates.** Under IFRS GAAP, CGN's net profit was RMB3.4bn, up 86%YoY; excluding the one-off fair value gain, 1Q17 net profit was RMB1.9bn (+7%YoY), representing 22%/24% of our and Bloomberg consensus full-year estimates, similar to the historical run rate of 23%. Top line soared 30%YoY, driven by 1).solid nuclear power output growth (reached 29,428GWh, +12%YoY) and 2). EPC business contribution.

**Attributable capacity to grow 11%YoY in 2017E and 16%YoY in 2018E.** Solid capacity growth would be as the key driver to CGN's future earnings growth. According to CGN's schedule, Yangjiang Unit 4 and Taishan Unit 1 will commence operation in 2017, contributing to 1,000MW of new capacity or 11% YoY growth. In 2018, Yangjiang Unit 5 and Taishan Unit 2 will commence operation, adding another 2,000MW of new capacity to CGN and driving the Group's attributed capacity up by 16%YoY.

**Attributable utilization hour to stay at above 7,000hr going forward.** Nuclear power is likely to be one of the key future energy sources to China due to its clean nature and higher efficiency over other alternative energy sources such as wind and solar. We therefore believe CGN's attributable utilization hour to exceed 7,000 going forward.

**Maintain BUY with TP of HK\$ 3.00.** CGN's 1Q17 results and 3M17 operation data are in line with our projection. With our revised operation assumption, our DCF-derived TP is HK\$ 3.00 (previously at HK\$ 2.90) implies 14x 2017E P/E and 1.8x 2017E P/B. We believe CGN would be the leader in China's nuclear power industry who would benefit most from China's push into nuclear power. Maintain **BUY**.

**Risks:** 1) Overcapacity in power industry; 2) Falling utilization hours; 3) Operation safety risk; 4) Construction risk; 5) Fuel cost risk; 6) Tariff risk; 7) Currency and interest rate risks; 8) Fundraising activities to finance future M&A

### Results and Valuation

FY ended Dec 31	2015A	2016A	2017E	2018E	2019E
Revenue (RMB mn)	26,796	32,890	47,534	57,913	61,036
Chg (% YoY)	29.3	22.7	44.5	21.8	5.4
Adj. net profit (RMB mn)	6,647	7,829	8,384	11,097	11,487
Chg (% YoY)	43.0	17.8	7.1	32.4	3.5
Adj. EPS (RMB)	0.147	0.172	0.184	0.244	0.253
Chg (% YoY)	5.0	17.5	7.1	32.4	3.5
BVPS (RMB)	1.342	1.244	1.436	1.585	1.696
Chg (% YoY)	-29.0	-7.3	15.4	10.4	7.0
P/E (x)	13.83	11.77	10.99	8.30	8.02
P/B (x)	1.51	1.63	1.41	1.28	1.20
ROE (%)	11.55	12.89	12.85	15.41	14.91
ROA (%)	2.59	2.53	2.72	3.32	3.40
DPS (RMB)	0.042	0.051	0.055	0.073	0.076
Yield (%)	2.08	2.52	2.73	3.61	3.74
Net gearing (%)	213.3	262.4	230.7	218.8	189.1

Source(s): Bloomberg, ABCI Securities estimates

## Company Report

May 26, 2017

Rating: BUY

TP: HK\$ 3.00

Analyst : Kelvin Ng

Tel: (852) 2147 8869

Email: kelvinng@abci.com.hk

Share price (HK\$)	2.29
Est. share price return	31.0%
Est. dividend yield	2.7%
Est. total return	33.7%
Previous Rating & TP	BUY
Previous Report Date	Nov 16, 2016

Source(s): Bloomberg, ABCI Securities

### Key Data

52Wk H/L(HK\$)	2.5/2.0
Issued shares (mn)	45,449
Issued H-shares (mn)	11,164
Market cap (HK\$ mn)	104,078
H-share market cap (HK\$ mn)	25,565
3-mth avg daily turnover(HK\$ mn)	97
Major shareholder(s) (%)	
CGNPC	64.2%

Source(s): Company, ABCI Securities

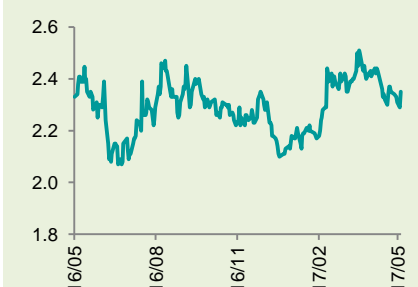
### Sector Performance

	Absolute	Relative*
1-mth	(3.38)	(5.84)
3-mth	(4.18)	(5.65)
6-mth	2.69	(5.29)

\*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

### 1-Year share price performance(HK\$)



Source(s): Bloomberg, ABCI Securities



## FY16 results highlight

### **FY16 earnings beat our estimates.**

CGN FY16 net profit was RMB7,287mn, (+4%YoY), excluding the RMB529mn net exchange loss and RMB14mn fair value change in asset, adjusted net profit was RMB 7,829mn (+18%YoY), 6%/7% better than Bloomberg consensus/our estimates. We consider these results as better than expected.

### **37%YoY growth in installed capacity was the key earnings driver**

Management said installed capacity recorded 20GW, 37%YoY higher than 15GW in 2015. The increase mainly came from the 5 new nuclear power generating units that commenced commercial operation during the year, which includes: Yangjiang Unit 3, Ningde Unit 4, Hongyanhe Unit 4, and Fangchenggang Unit 1 and 2. Increased capacity boosted on-grid power to 115,584GWh in 2016, 31%YoY higher than the 88,347GWh in 2015.

### **Power demand in Guangdong remains solid; Liaoning and Fujian speak a different story**

Utilization hour of CGN's power plants in Guangdong province reached 7,500 on average in 2016, compared to 6,700hr in Fujian and 4,500hr in Liaoning. We believe power demand in Guangdong would remain strong in the future.

## 1Q17 results and operation data highlight

### **1Q17 earnings in line with our estimates**

Under IFRS GAAP, CGN's net profit was RMB3.4bn, up 86%YoY, netting out the one-off fair value gain, 1Q17 net profit was RMB1.9bn (+7%YoY), equivalent to 22%/24% of our full-year estimates /Bloomberg consensus, similar to the historical run rate of 23%. Top line soared 30%YoY, mainly driven by 1).solid nuclear power output growth (reached 29,428GWh, +12%YoY) and 2). EPC business contribution.

### **3M17 power output in line with our estimates.**

CGN's 3M17 nuclear power output was 29,428GWh (+12%YoY), equivalent to 21% of our previous full-year estimate and in line with the historical average of 20%. Output growth as mainly driven by Ningde power plants, whose output expanded by 67%YoY and contributed to 23% of total power output in 3M17.

### **1Q17 net profit grew 7% YoY, supported by 12%YoY growth in power output**

CGN's 1Q17 revenue was up 30%YoY, mainly driven by a 12%YoY nuclear power output growth. Net profit (IFRS standard) was RMB3.4bn, up 86%YoY, thanks to the one-off fair value gain from Ningde power plant that converted from JV to subsidiary and resulted in a gain of RMB1.43bn (after tax effect). If we net out this one-off gain, net profit was RMB1.9bn (+7%YoY), in line with our estimates and market consensus.

### **Utilization hour improved**

Operating capacity (exclude outage capacity) in 1Q17 was 18,030MW (+10.8%YoY) while nuclear power output grew 12%YoY during the same period, suggesting overall utilization hour improved. CGN did not disclose a detailed breakdown of the figures, however.

### **Ningde recorded a 67%YoY power output growth, thanks to weaker hydro power output in Fujian.**

Ningde power output grew 67%YoY in 1Q17, mainly due to operational commencement of unit 4 in July 2016. In addition, management said hydro power output in Fujian province has weakened in 2017, driving up demand for nuclear power.

### **8 units with a total installed capacity of 9GW are now under construction**

CGN has 8 units are under construction with a total installed capacity of ~9GW, equivalent to 86% of CGN's operating capacity of 10.4GW by end-2016. These under-constructing facilities should serve as CGN's future earnings growth drivers.





## 2017 outlook

### **Attributable capacity to grow by 11%/16% YoY in 2017E/18E**

According to CGN's schedule, Yangjiang Unit 4 and Taishan Unit 1 would commence operation in 2017, contributing 1,000MW of new capacity (+ 11%YoY). In 2018, Yangjiang Unit 5 and Taishan Unit 2 would commence operation, adding 2,000MW of new capacity to CGN, the Group's attributable capacity would increase by 16%YoY. The solid capacity growth would be the key drivers of earnings growth.

### **Utilization hour to stay at above 7,000 going forward.**

China's modest power demand would be a temporary headwind to power operators. Nuclear power is likely to be one of the key future energy sources in China due to its clean nature and higher efficiency than other alternative energy sources such as wind and solar. We believe CGN's utilization hour to exceed 7,000 going forward.

### **Adjusted net profit growth at 7%/32%YoY for 2017E/18E**

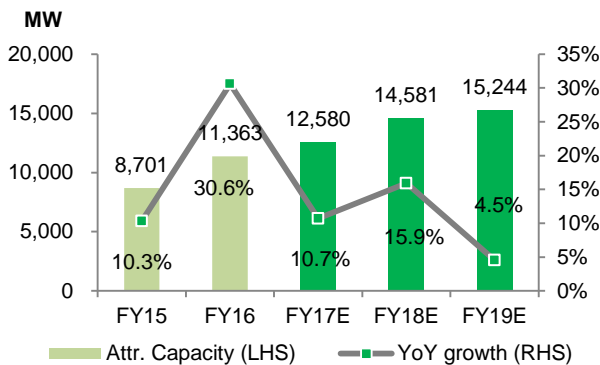
We expect CGN's adjusted net profit (excluded one-off gain or loss) to grow at 7%/32%YoY due to the solid capacity growth of 11%YoY and 16%YoY in 2017E and 2018E. CGN's future net profit growth would rely on capacity growth and improving operational cost as China's future power tariff is unlikely to increase.

### **Key assets in Guangdong suggests higher utilization hour.**

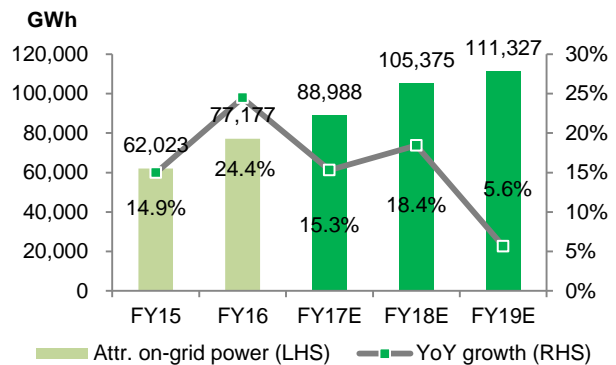
CGN's operation in Guangdong province recorded higher utilization hour than other power plants located in the inland provinces. As of end-2016, 71% of CGN's attributable nuclear power capacity came from Guangdong. Facilities in Guangdong service wealthy cities such as Hong Kong, Guangzhou, Shenzhen, etc. Utilization hour of CGN's power plants in Guangdong was higher than the national average in FY16 (~7,514hr vs. 7,042hr nationwide), partially attributable of the province's successful transition from secondary to tertiary industry. We believe CGN's operation in Guangdong would help the Group attain higher profitability.

### **Net gearing ratio would improve**

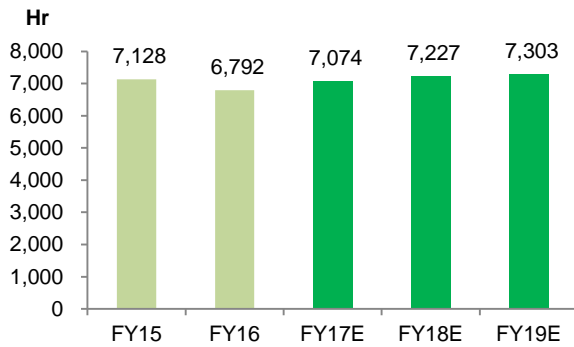
CGN plans to commence commercial operation of Yangjiang Unit 4 and Taishan Unit 1 in 2017; Yangjiang Unit 5 and Taishan Unit 2 in 2018; Yangjiang Unit 6 is planned to commence operation in 2019; Hongyanhe Unit 5 and Unit 6 are likely to commence operation in 2020 and 2021. Capital needs for CGN over the next few years will not be significant. Hence, we believe net gearing ratio would fall from 262% in 2016 to 189% in 2019E.

**Exhibit 1: CGN's attributable capacity outlook**


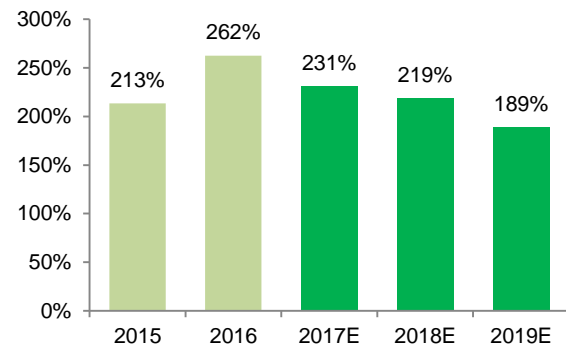
Source(s): Company, ABCI Securities estimates

**Exhibit 2: CGN's nuclear attributable power output outlook**


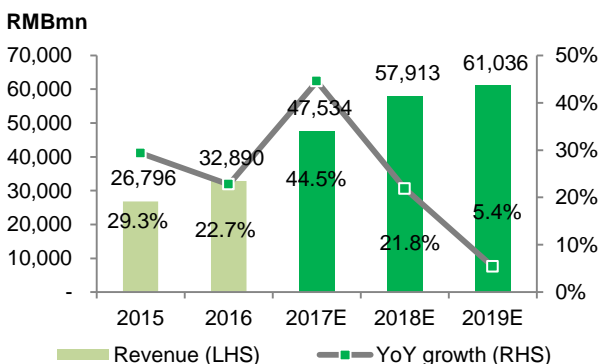
Source(s): Company, ABCI Securities estimates

**Exhibit 3: CGN's overall attributable utilization hour outlook**


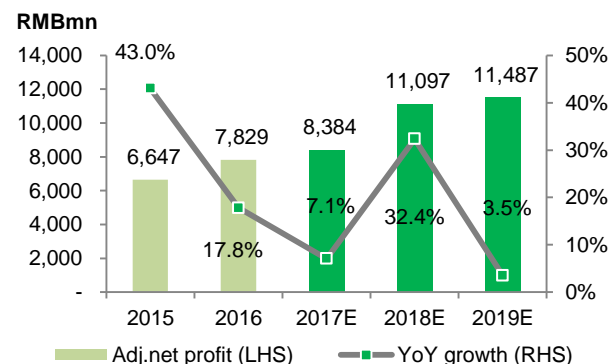
Source(s): Company, ABCI Securities estimates

**Exhibit 4: CGN's net gearing ratio**


Source(s): Company, ABCI Securities estimates

**Exhibit 5: CGN's revenue outlook**


Source(s): Company, ABCI Securities estimates

**Exhibit 6: CGN's adjusted net profit outlook**


Source(s): Company, ABCI Securities estimates



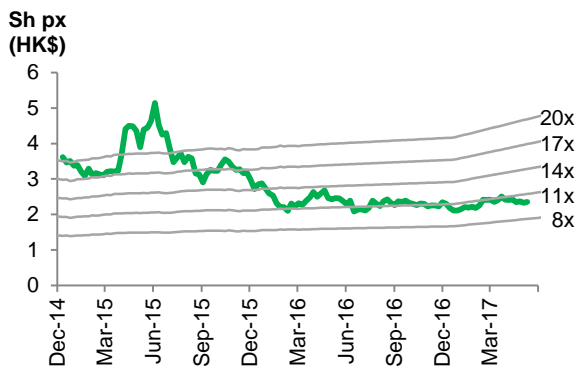
## Valuation

### TP at HK\$3.00; maintain BUY

CGN's FY16 results beat our expectation; 1Q17 results and 3M17 operation data are in line with our projections. CGN's capacity should maintain a double-digit growth in 2017E and 2018E, which should help drive up its power output to 15%YoY and 18%YoY during the same period.

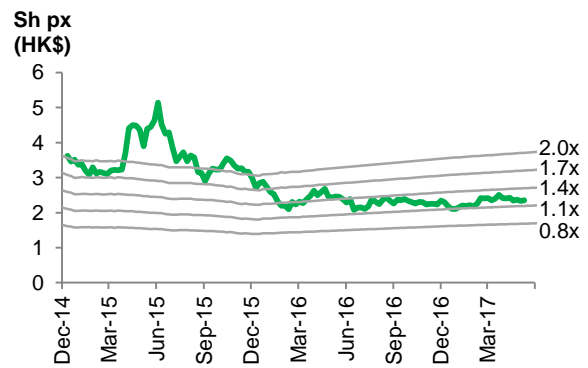
Our new DCF-derived TP at HK\$3.00 (previously at HK\$ 2.90) implies 14x 2017E P/E and 1.8x 2017E P/B, which is undemanding. CGN remains the leader of nuclear power operators in China with a 61% market share in terms of nuclear power operating capacity in 2016. Its prime facilities located in wealthy regions (such as Guangdong) would help support utilization hour. Overall, we believe the Group would benefit the most from China's push for nuclear power. Maintain **BUY**.

Exhibit 7: CGN's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 8: CGN's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



**Consolidated income statement**

<b>FY Ended Dec 31 (RMB mn)</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
<b>Revenue</b>	<b>26,796</b>	<b>32,890</b>	<b>47,534</b>	<b>57,913</b>	<b>61,036</b>
Electricity	21,542	28,115	42,617	52,700	55,498
Service revenue	3,223	2,820	2,961	3,257	3,583
Other	970	926	926	926	926
<b>Cost of sales</b>	<b>-14,775</b>	<b>-18,533</b>	<b>-27,077</b>	<b>-32,225</b>	<b>-34,263</b>
<b>Gross Profit</b>	<b>12,021</b>	<b>14,357</b>	<b>20,456</b>	<b>25,688</b>	<b>26,773</b>
SG&A expenses	-2,213	-2,358	-3,470	-4,228	-4,456
Net financial income (cost)	-2,549	-3,857	-4,609	-4,707	-4,956
Other income/ (expenses)	2,379	1,436	2,178	2,512	2,582
<b>Profit before tax</b>	<b>9,638</b>	<b>9,577</b>	<b>14,556</b>	<b>19,265</b>	<b>19,943</b>
Tax	-1,099	-653	-1,456	-1,926	-1,994
<b>Net profit</b>	<b>8,539</b>	<b>8,925</b>	<b>13,100</b>	<b>17,338</b>	<b>17,949</b>
Profit attributable to:					
Minority interest	1,510	1,638	4,716	6,242	6,462
<b>Equity shareholders of the Company</b>	<b>7,029</b>	<b>7,287</b>	<b>8,384</b>	<b>11,097</b>	<b>11,487</b>
<b>Adj. equity shareholders of the Company</b>	<b>6,647</b>	<b>7,829</b>	<b>8,384</b>	<b>11,097</b>	<b>11,487</b>
<b>Basic EPS (RMB)</b>	<b>0.155</b>	<b>0.160</b>	<b>0.184</b>	<b>0.244</b>	<b>0.253</b>
<b>Adj. basic EPS (RMB)</b>	<b>0.147</b>	<b>0.172</b>	<b>0.184</b>	<b>0.244</b>	<b>0.253</b>
<b>DPS (RMB)</b>	<b>0.042</b>	<b>0.051</b>	<b>0.055</b>	<b>0.073</b>	<b>0.076</b>

Source(s): Company, ABCI Securities estimates

**Consolidated balance sheet**

<b>As of Dec 31 (RMB mn)</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
<b>Current assets</b>	<b>45,298</b>	<b>43,825</b>	<b>52,291</b>	<b>61,441</b>	<b>65,835</b>
Cash	11,381	8,457	10,742	13,235	15,330
Pledged and restricted bank deposits	2,914	2,053	2,050	2,050	2,050
Trade and bill receivables	6,364	5,735	7,163	8,727	9,197
Other receivables and prepayments	10,196	12,662	14,416	16,407	17,006
Inventories	12,940	13,138	16,321	19,424	20,652
Other current assets	1,503	1,779	1,600	1,600	1,600
<b>Non-current assets</b>	<b>226,067</b>	<b>243,809</b>	<b>255,502</b>	<b>273,270</b>	<b>272,365</b>
Property, plant & equipment	199,177	216,509	225,792	244,680	245,966
Investment properties	659	320	320	320	320
Intangible assets	2,991	3,066	3,365	3,657	3,941
Investment in JV and associates	11,157	12,037	12,979	13,986	14,981
Deferred tax assets	1,501	1,687	1,687	1,687	1,687
Other non-current assets	10,582	10,190	11,358	8,940	5,469
<b>Total Assets</b>	<b>271,366</b>	<b>287,634</b>	<b>307,793</b>	<b>334,712</b>	<b>338,199</b>
<b>Current Liabilities</b>	<b>43,947</b>	<b>65,168</b>	<b>64,823</b>	<b>70,626</b>	<b>70,895</b>
Trade and bill payables	17,759	19,295	22,997	27,370	29,100
Other payables	3,325	1,486	631	631	631
Short term borrowings	14,134	26,407	23,298	24,728	23,266
Other current assets	8,729	17,980	17,898	17,898	17,898
<b>Non-current liabilities</b>	<b>142,099</b>	<b>140,567</b>	<b>147,634</b>	<b>155,741</b>	<b>147,457</b>
Deferred tax liabilities	1,912	1,615	1,620	1,620	1,620
Long-term borrowings	129,952	132,476	140,014	148,121	139,837
Other non-current assets	10,235	6,477	6,000	6,000	6,000
<b>Total Liabilities</b>	<b>186,046</b>	<b>205,735</b>	<b>212,458</b>	<b>226,367</b>	<b>218,352</b>
Minority interests	24,464	25,364	30,080	36,322	42,783
<b>Shareholders' equities</b>	<b>60,855</b>	<b>56,535</b>	<b>65,255</b>	<b>72,023</b>	<b>77,064</b>

Source(s): Company, ABCI Securities estimates

**Consolidated cash flow statement**

<b>FY ended Dec 31 (RMB mn)</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
Profit before tax	9,638	9,577	14,556	19,265	19,943
Change in depreciation and amortization	3,540	4,727	6,793	7,427	7,662
Change in Working Capital	-4,644	778	-3,888	-2,285	-567
Net financial cost (income)	2,549	3,857	4,609	4,707	4,956
Income tax paid	-898	-1,358	-653	-1,456	-1,926
Net interest received	0	0	0	0	0
Others	-1,882	-829	-942	-1,006	-995
<b>Operating cash flow</b>	<b>8,303</b>	<b>16,753</b>	<b>20,474</b>	<b>26,652</b>	<b>29,073</b>
Capex	-17,450	-17,297	-15,813	-26,016	-8,612
Increase in intangible assets	-534	-536	-563	-591	-620
Others	-8,725	-1,410	158	192	229
<b>Investing cash flow</b>	<b>-26,709</b>	<b>-19,243</b>	<b>-16,218</b>	<b>-26,415</b>	<b>-9,003</b>
Net Capital raise	0	0	0	0	0
Net debt financing	6,688	10,985	4,430	9,537	-9,746
Dividend payout	-4,792	-4,684	-2,318	-2,515	-3,329
Interest paid	-8,327	-8,031	-4,083	-4,766	-4,899
Others	2,789	1,142	0	0	0
<b>Financing cash flow</b>	<b>-3,642</b>	<b>-588</b>	<b>-1,971</b>	<b>2,255</b>	<b>-17,974</b>
<b>Net change in cash</b>	<b>-22,048</b>	<b>-3,078</b>	<b>2,285</b>	<b>2,493</b>	<b>2,095</b>
Cash at the beginning	33,279	11,381	8,457	10,742	13,235
Adjustment (Time deposit & FX effect)	150	154	0	0	0
<b>Cash at the end</b>	<b>11,381</b>	<b>8,457</b>	<b>10,742</b>	<b>13,235</b>	<b>15,330</b>

Source(s): Company, ABCI Securities estimates

**Key ratio**

<b>FY ended Dec 31</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
<b>Sales mixed (%)</b>					
Electricity	80.39	85.48	89.66	91.00	90.93
Service revenue	12.03	8.57	6.23	5.62	5.87
Other	3.62	2.81	1.95	1.60	1.52
<b>Total</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>98</b>	<b>98</b>
<b>Profit &amp; loss ratios (%)</b>					
Gross margin	44.86	43.65	43.04	44.36	43.86
Operating profit margin	40.20	38.57	38.34	39.66	39.16
Pre-tax margin	35.97	29.12	30.62	33.27	32.67
Net profit margin	31.87	27.13	27.56	29.94	29.41
Selling & administrative expenses/revenue	8.26	7.17	7.30	7.30	7.30
Effective tax rate	11.40	6.82	10.00	10.00	10.00
<b>Growth (%)</b>					
Revenue	29.33	22.74	44.52	21.84	5.39
Gross profit	19.30	19.44	42.48	25.57	4.22
Operating profit	6.86	17.78	43.63	26.03	4.09
Net profit	9.11	4.52	46.79	32.35	3.52
<b>Balance sheet ratios</b>					
Current ratio (x)	1.03	0.67	0.81	0.87	0.93
Quick ratio (x)	0.47	0.25	0.31	0.34	0.37
Cash ratio (x)	0.33	0.16	0.20	0.22	0.25
Trade and bill receivables days	86.69	63.65	55.00	55.00	55.00
Trade and bill payables turnover days	438.71	380.00	310.00	310.00	310.00
Inventory turnover days	319.67	258.74	220.00	220.00	220.00
Total debt / equity ratio (%)	236.77	281.04	250.27	239.99	211.65
Net debt / equity ratio (%)	213.28	262.44	230.66	218.77	189.09
<b>Returns (%)</b>					
ROAA	2.6	2.6	2.8	3.5	3.4
ROAE	11.4	12.4	13.8	16.2	15.4
Payout ratio	27.16	31.81	30.00	30.00	30.00

Source(s): Company, ABCI Securities estimates



## China Longyuan Power (916 HK) Prime assets with solid capacity growth

- Longyuan Power (Longyuan) announced its 1Q17 results in Apr and 4M17 operation data in May. 1Q17 net profit grew 7%YoY, missing our estimate; however, 4M17 power output grew 20%YoY, in line with our projection
- We expect solid wind capacity growth of 10%/11%YoY for 2017E/18E
- Long-term utilization hour would be close to 2,000hr
- Maintain **BUY** with TP of HK\$7.40 (previously at HK\$ 8.00) implies 13x 2017E P/E and 1.2x 2017E P/B.

**1Q17 earnings missed consensus.** Longyuan announced 1Q17 results on Apr 27. Net profit grew 7%YoY, equivalent to 27%/26% of Bloomberg/our full-year estimates. However, the figure was lower than the historical run rate at 32%. We believe higher operation cost was the key drag.

**Apr wind power output grew 20%YoY; full-year growth of 11% YoY is likely to be attained.** Longyuan announced Apr operation data on May 9. Wind power output grew 20% YoY, mainly due to the strong growth in northeast and northwest regions (+29%YoY and +46%YoY). Jan-Apr total wind power output grew 15% YoY, equivalent to 35% of our full-year estimate and in line with the historical run rate of 34%. We believe the Group will achieve a solid 11% YoY output growth for 2017E.

**Solid wind capacity growth of 10%/11%YoY in 2017E/18E.** Management guided that Longyuan will add 1.6GW of new wind capacity in 2017, which we believe is achievable based on the Group's track record. The double-digit capacity growth would serve as the key earnings driver.

**Long-term utilization hour would be close to 2,000.** Management expects wind power utilization hour in 2017 to reach 1,960, where we believe is achievable owing to policy support. In the long term, we estimate Longyuan's utilization hour to be ~2,000, supported by the government's policies and its well-diversified wind power assets located across China, which would help reduce the impact of power curtailment.

**Maintain BUY with TP of HK\$ 7.40.** We adjust down our assumptions for Longyuan's operation as 1Q17 results missed our estimate. However, its wind power output remains strong and sequential improvement in utilization hours should help boost earnings. We believe Longyuan's well-diversified asset mix should support the Group's dominant position in the industry. Our new TP at HK\$7.40 (previous at HK\$ 8.00) implies 13x/1.2x 2017E P/E and P/B. Maintain **BUY**.

**Risks.** 1) Power curtailment; 2) Wind resources risk; 3) Tariff risk; 4) Construction risks; 5) Fundraising risk; 6) Government policy to deleverage may constrain future growth

### Results and Valuation

FY ended Dec 31	2015A	2016A	2017E	2018E	2019E
Revenue (RMB mn)	19,683	22,304	26,324	29,932	32,967
Chg (% YoY)	8.0	13.3	18.0	13.7	10.1
Net profit (RMB mn)	2,878	3,415	4,023	4,124	4,863
Chg (% YoY)	12.7	18.7	17.8	2.5	17.9
EPS (RMB)	0.358	0.425	0.501	0.513	0.605
Chg (% YoY)	12.7	18.7	17.8	2.5	17.9
BVPS (RMB)	4.373	4.716	5.428	5.938	6.510
Chg (% YoY)	6.2	7.8	15.1	9.4	9.6
P/E (x)	14.67	12.36	10.50	10.24	8.68
P/B (x)	1.20	1.11	0.97	0.88	0.81
ROE (%)	8.19	9.01	9.22	8.64	9.30
ROA (%)	2.15	2.46	2.70	2.55	2.82
DPS (RMB)	0.072	0.085	0.100	0.103	0.121
Yield (%)	1.36	1.62	1.91	1.95	2.30
Net gearing (%)	203.9	194.9	176.0	169.5	162.1

Source(s): Bloomberg, ABCI Securities estimates

## Company Report

May 26, 2017

Rating: **BUY**

TP: **HK\$ 7.40**

Analyst : Kelvin Ng

Tel: (852) 2147 8869

Email: kelvinng@abci.com.hk

Share price (HK\$)	5.93
Est. share price return	24.8%
Est. dividend yield	1.9%
Est. total return	26.7%
Previous Rating & TP	BUY
Previous Report Date	Apr 10, 2017

Source(s): Bloomberg, ABCI Securities

### Key Data

52Wk H/L(HK\$)	7.3/5.3
Issued shares (mn)	8,036
Issued H-shares (mn)	3,340
Market cap (HK\$ mn)	47,656
H-Share Market cap (HK\$ mn)	19,806
3-mth avg daily turnover(HK\$ mn)	91
Major shareholder(s) (%)	
Guodian Corp.	57.3%

Source(s): Company, ABCI Securities

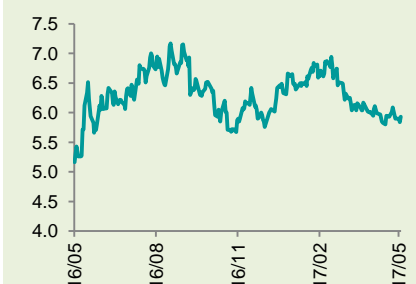
### Sector Performance

	Absolute	Relative*
1-mth	(2.95)	(5.41)
3-mth	(11.62)	(13.09)
6-mth	0.68	(7.30)

\*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

### 1-Year share price performance(HK\$)



Source(s): Bloomberg, ABCI Securities



## 1Q17 results highlight

### 1Q17 earnings missed our estimates.

Longyuan has announced 1Q17 results on Apr 27. Longyuan's 1Q17 revenue was RMB6bn (+14%YoY), equivalent to 25%/23% of Bloomberg/ our full-year estimates, similar to the historical run rate of 24%. Net profit was RMB 1,138mn (+7%YoY), equivalent to 27%/26% of Bloomberg/ our full-year estimates, below the historical average run rate of 32%. We believe the higher administration cost was the key drag to net profit. Wind capacity grew 9% YoY and wind power output was up 12% YoY, which we believe was the key driver to earnings growth.

### Increased operation cost eroded margins.

Longyuan's revenue growth was in line with market forecasts but net profit was slightly below expected, mainly due to the 18%YoY increase in its operation cost dragging OPM from 40% in 1Q16 to 37% in 1Q17.

### 9%YoY growth in wind capacity boost earnings.

Installed wind power capacity was 17,369MW (+9%YoY) in 1Q17, hence wind power output expanded by 12% YoY. We believe this was the key driver to the 7%YoY earnings growth in 1Q17.

### 3%YoY increase in utilization hour

According to our calculation, Longyuan's 1Q17 wind power utilization hour was 510, 3% higher than 494 in 1Q16, owing to the government's effort in tackling curtailment.

### 1Q17 power output suggests 11% YoY output growth for 2017E is achievable

Longyuan's 1Q17 wind power output, which grew 12% YoY, was equivalent to 25% of our 2017 full-year estimate and was in line with its historical run rate at 25%. Based on the current progress, we expect the Group to achieve a 11% YoY output growth in wind power. Longyuan's fundamentals remain solid, and we believe even a moderate improvement in operation expense would provide a sufficient boost to earnings.

## Operation data for Apr

Longyuan announced its Apr operation data on May 9. Gross wind power generated was 3,347GWh (+20% YoY) mainly due to the strong growth in northeast (+29% YoY) and northwest regions (+46%YoY).

### Output in northeast and northwest regions grew 29%/46% YoY

Wind power output in northeast and northwest regions grew 29% and 46%YoY in Apr, contributing to 29% and 46% of Longyuan's total wind power output. We believe strong performance in the "3-North" regions can be attributed to improved power curtailment and increased direct sales of electricity.

### Wind power output in eastern region jumped 48%YoY, contributing to 14% of overall output.

Strong performance in eastern region was a result of strong energy demand in the region supported by successful economic transformation. We believe better grid construction and stronger economic growth in eastern and southern regions would continue to benefit Longyuan in the long term.

### Jan-Apr total power output grew 15%YoY, 11%YoY growth in output for 2017E is highly achievable

Jan-Apr total wind power output reached 11,590GWh (+15%YoY), equivalent to 35% of our full-year estimate and was in line with the historical run rate of 34%. The Group's is on track to achieve 2017E output growth at 11% YoY.

## 2017 outlook

### Solid wind capacity growth of 10%/11%YoY in 2017E/18E.

Management guided that Longyuan targets to add 1.6GW of new wind capacity in 2017, which we believe is achievable based on the Group's track record. The double-digit capacity growth would serve as the key earnings driver.



**Long-term utilization hour would be close to 2,000.**

Management expects wind power utilization hour in 2017 to reach 1,960, where is achievable based on the government's supportive policy that encourages the local governments and State Grid to enforce priority dispatch of renewable energy to the grid. In the long term, we estimate Longyuan's utilization hour to be ~2,000, supported by 1) the government's policies that help increase utilization hour; 2) its well-diversified wind power assets located nationwide that help reduce power curtailment.

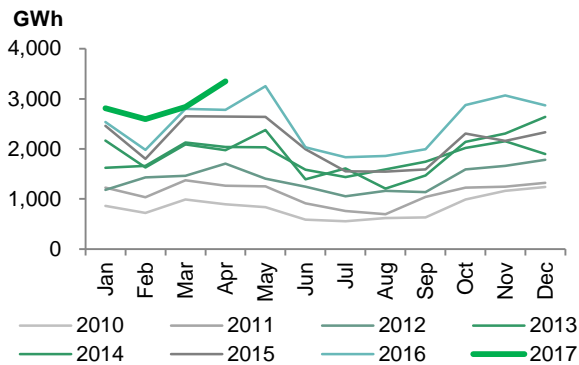
**Net gearing ratio should continue to improve**

Longyuan would slow down its wind power capacity expansion pace due to 1) its existing high base. Currently, Longyuan is the largest wind power operator by capacity in China; 2) rapid increase in capacity may compromise balance sheet. Longyuan's long-term capacity would stay at ~10% YoY, which means its capital need would gradually decrease. We therefore expect its net gearing ratio to come down to ~100% in the future.

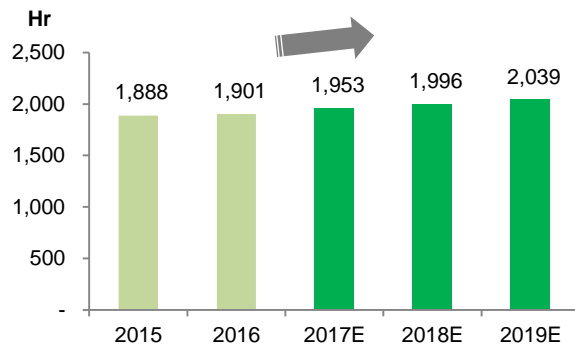
**Major concern: wind power tariff would decline by 5% YoY in 2018E**

China National Energy Administration (NEA) announced on Dec 26, 2016 that wind power on-grid tariff would be revised down by 5%-15%, depending on the region and effective on Jan 1, 2018. As we believe the government's long-term goal is to lower the wind power subsidy so as to reduce the government's financial burden, further reduction in on-grid tariff for wind power will likely continue. For FY18E, we estimate Longyuan's average wind power tariff would decline by 5%YoY, hence net profit growth would be down 3%YoY for the period.

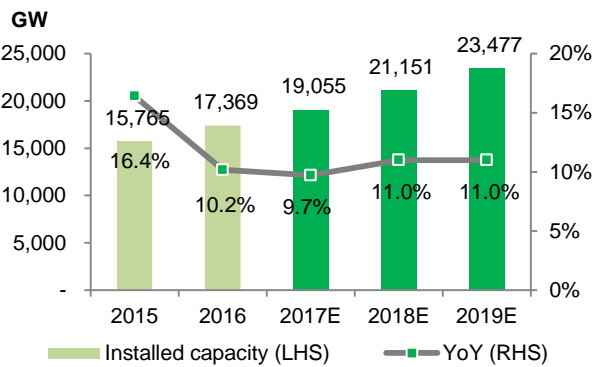


**Exhibit 1: Longyuan's monthly operation data**


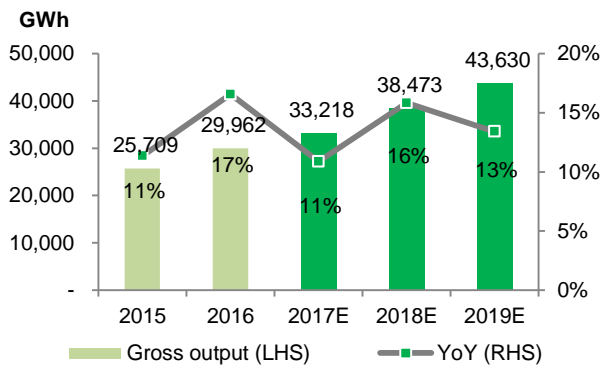
Source(s): Company, ABCI Securities

**Exhibit 2: Longyuan's utilization hour will continue to improve**


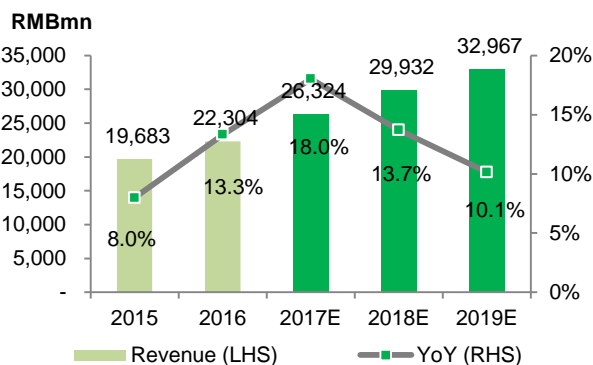
Source(s): Company, ABCI Securities estimates

**Exhibit 3: Longyuan's installed capacity**


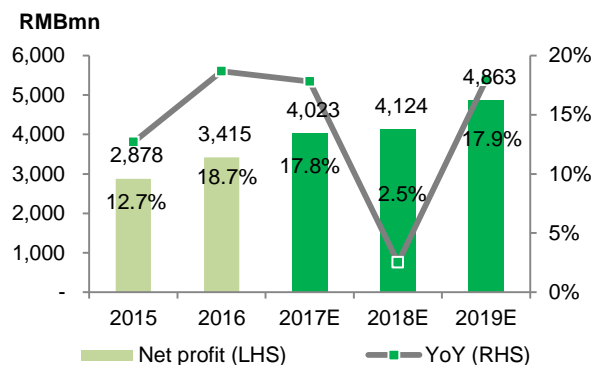
Source(s): Company, ABCI Securities estimates

**Exhibit 4: Longyuan's wind power output**


Source(s): Company, ABCI Securities estimates

**Exhibit 5: Longyuan's revenue outlook**


Source(s): Company, ABCI Securities estimates

**Exhibit 6: Longyuan's net profit outlook**


Source(s): Company, ABCI Securities estimates



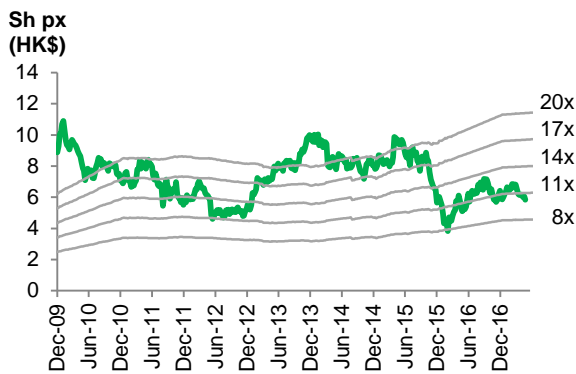
## Valuation

### TP at HK\$7.40; maintain BUY

Longyuan's 1Q17 results missed our estimate due to increased operation cost, yet its wind power output in Apr remains on track with our full-year growth estimate of 11%YoY. We adjust our operation assumptions, and estimate net profit to expand by 18%/3%YoY for 2017E/18E. Our DCF-derived TP at HK\$7.40 (previously at HK\$ 8.00) implies 13x 2017E P/E and 1.2x 2017E P/B.

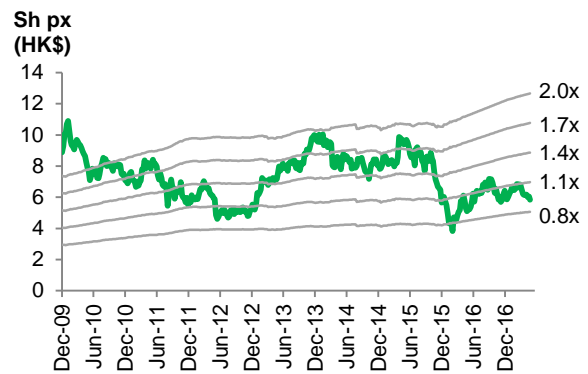
Despite earnings growth would slow in 2018 due to the tariff cut, higher utilization hour and solid capacity growth at ~10%YoY each year going forward would help boost net profit. Longyuan's strength lies on its well-diversified wind power assets located nationwide and its leading position in wind power industry. Together with the government's supportive policies, we believe the Group will benefit strongly from China's shift to renewable energy during the 13<sup>rd</sup> FYP period. Maintain **BUY**.

Exhibit 7: Longyuan's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 8: Longyuan's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



Consolidated income statement

FY Ended Dec 31 (RMB mn)	2015A	2016A	2017E	2018E	2019E
<b>Revenue</b>	<b>19,683</b>	<b>22,304</b>	<b>26,324</b>	<b>29,932</b>	<b>32,967</b>
Wind power	12,365	13,950	15,604	17,172	19,475
Coal-fire power	5,896	7,270	9,059	10,964	12,161
Other	1,422	1,085	1,662	1,796	1,332
<b>Cost of sales</b>	<b>-12,045</b>	<b>-14,456</b>	<b>-16,668</b>	<b>-19,450</b>	<b>-21,024</b>
<b>Gross Profit</b>	<b>7,638</b>	<b>7,848</b>	<b>9,657</b>	<b>10,482</b>	<b>11,943</b>
SG&A expenses	-373	-429	-658	-748	-824
Net financial income (cost)	-3,039	-2,774	-3,314	-3,446	-3,630
Other income/ (expenses)	441	505	321	296	275
<b>Profit before tax</b>	<b>4,669</b>	<b>5,150</b>	<b>6,006</b>	<b>6,583</b>	<b>7,763</b>
Tax	-601	-660	-781	-856	-1,009
<b>Net profit</b>	<b>4,068</b>	<b>4,490</b>	<b>5,225</b>	<b>5,728</b>	<b>6,754</b>
Profit attributable to:					
Minority interest	1,189	941	1,045	1,432	1,689
Perpetual medium-term note holders	0	133	157	172	203
<b>Equity shareholders of the Company</b>	<b>2,878</b>	<b>3,415</b>	<b>4,023</b>	<b>4,124</b>	<b>4,863</b>
<b>Basic EPS (RMB)</b>	<b>0.358</b>	<b>0.425</b>	<b>0.501</b>	<b>0.513</b>	<b>0.605</b>
<b>DPS (RMB)</b>	<b>0.072</b>	<b>0.085</b>	<b>0.100</b>	<b>0.103</b>	<b>0.121</b>

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet

As of Dec 31 (RMB mn)	2015A	2016A	2017E	2018E	2019E
<b>Current assets</b>	<b>12,704</b>	<b>13,333</b>	<b>15,395</b>	<b>17,594</b>	<b>18,881</b>
Cash	2,887	1,905	1,643	2,033	1,859
Pledged and restricted bank deposits	387	28	28	28	28
Trade and bill receivables	4,243	5,901	7,212	8,201	9,032
Other receivables and prepayments	3,070	3,644	4,327	4,920	5,419
Inventories	1,081	1,040	1,370	1,599	1,728
Other current assets	1,036	814	814	814	814
<b>Non-current assets</b>	<b>121,164</b>	<b>125,328</b>	<b>133,842</b>	<b>143,836</b>	<b>153,763</b>
Property, plant & equipment	98,997	105,598	111,778	120,359	128,805
Investment properties	5	4	4	4	4
Intangible assets	8,699	8,860	8,946	9,036	9,131
Investment in JV and associates	4,822	4,483	4,957	5,495	6,089
Deferred tax assets	155	151	151	151	151
Other non-current assets	8,486	6,232	8,007	8,791	9,582
<b>Total Assets</b>	<b>133,867</b>	<b>138,661</b>	<b>149,237</b>	<b>161,430</b>	<b>172,644</b>
<b>Current Liabilities</b>	<b>56,000</b>	<b>55,807</b>	<b>60,025</b>	<b>64,877</b>	<b>68,321</b>
Trade and bill payables	1,902	2,550	2,283	2,664	2,880
Other payables	9,121	8,747	10,679	12,432	13,424
Short term borrowings	44,977	44,472	47,063	49,780	52,016
Other current assets	0	39	0	0	0
<b>Non-current liabilities</b>	<b>33,293</b>	<b>35,067</b>	<b>34,654</b>	<b>36,466</b>	<b>37,957</b>
Deferred tax liabilities	106	138	138	138	138
Long-term borrowings	29,970	31,327	31,375	33,187	34,678
Other non-current assets	3,217	3,602	3,141	3,141	3,141
<b>Total Liabilities</b>	<b>89,293</b>	<b>90,874</b>	<b>94,680</b>	<b>101,342</b>	<b>106,277</b>
<b>Minority interests</b>	<b>6,439</b>	<b>6,896</b>	<b>7,941</b>	<b>9,373</b>	<b>11,062</b>
<b>Perpetual medium-term note</b>	<b>2,991</b>	<b>2,991</b>	<b>2,991</b>	<b>2,991</b>	<b>2,991</b>
<b>Shareholders' equities</b>	<b>35,145</b>	<b>37,899</b>	<b>43,624</b>	<b>47,724</b>	<b>52,314</b>

Source(s): Company, ABCI Securities estimates



Consolidated cash flow statement

FY ended Dec 31 (RMB mn)	2015A	2016A	2017E	2018E	2019E
Profit before tax	4,676	5,150	6,006	6,583	7,763
Change in depreciation and amortization	5,554	6,342	6,962	7,662	8,388
Change in Working Capital	4,175	483	-658	324	-252
Net financial cost (income)	2,671	2,602	2,889	3,327	3,427
Income tax paid	-525	-634	-941	-1,045	-1,432
Net interest received	0	0	0	0	0
Others	-227	-411	-474	-539	-593
<b>Operating cash flow</b>	<b>16,325</b>	<b>13,533</b>	<b>13,782</b>	<b>16,314</b>	<b>17,300</b>
Capex	-15,264	-13,990	-12,643	-15,720	-16,286
Increase in intangible assets	0	0	-584	-613	-644
Others	-1,055	2,781	211	97	84
<b>Investing cash flow</b>	<b>-16,319</b>	<b>-11,209</b>	<b>-13,015</b>	<b>-16,237</b>	<b>-16,847</b>
Net Capital raise	0	0	0	0	0
Net debt financing	4,837	792	2,639	4,528	3,727
Dividend payout	-1,174	-1,306	-683	-805	-825
Interest paid	-3,368	-3,149	-2,985	-3,411	-3,530
Others	212	379	0	0	0
<b>Financing cash flow</b>	<b>507</b>	<b>-3,284</b>	<b>-1,029</b>	<b>313</b>	<b>-627</b>
<b>Net change in cash</b>	<b>513</b>	<b>-961</b>	<b>-262</b>	<b>389</b>	<b>-173</b>
Cash at the beginning	2,396	2,887	1,905	1,643	2,033
Adjustment (Time deposit & FX effect)	-21	-21	0	0	0
<b>Cash at the end</b>	<b>2,887</b>	<b>1,905</b>	<b>1,643</b>	<b>2,033</b>	<b>1,859</b>

Source(s): Company, ABCI Securities estimates

Key ratio

FY ended Dec 31 (RMB mn)	2015A	2016A	2017E	2018E	2019E
<b>Sales mixed (%)</b>					
Wind power	62.82	62.54	59.27	57.37	59.07
Coal-fire power	29.95	32.59	34.41	36.63	36.89
Other	7.23	4.86	6.31	6.00	4.04
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Profit &amp; loss ratios (%)</b>					
Gross margin	38.81	35.19	36.68	35.02	36.23
Operating profit margin	36.23	33.84	33.60	31.71	32.76
Pre-tax margin	23.72	23.09	22.81	21.99	23.55
Net profit margin	20.67	20.13	19.85	19.14	20.49
Selling & administrative expenses/revenue	1.89	1.92	2.50	2.50	2.50
Effective tax rate	12.87	12.82	13.00	13.00	13.00
<b>Growth (%)</b>					
Revenue	7.98	13.32	18.03	13.70	10.14
Gross profit	9.43	2.75	23.05	8.54	13.94
Operating profit	8.70	5.83	17.21	7.29	13.80
Net profit	14.76	10.38	16.37	9.62	17.92
<b>Balance sheet ratios</b>					
Current ratio (x)	0.23	0.24	0.26	0.27	0.28
Quick ratio (x)	0.13	0.14	0.15	0.16	0.16
Cash ratio (x)	0.06	0.03	0.03	0.03	0.03
Trade and bill receivables days	78.67	96.57	100.00	100.00	100.00
Trade and bill payables turnover days	57.65	64.38	50.00	50.00	50.00
Inventory turnover days	32.75	26.26	30.00	30.00	30.00
Total debt / equity ratio (%)	213.25	200.00	179.80	173.85	165.72
Net debt / equity ratio (%)	203.93	194.90	175.97	169.53	162.11
<b>Returns (%)</b>					
ROAA	2.2	2.5	2.8	2.7	2.9
ROAE	8.4	9.4	9.9	9.0	9.7
Payout ratio	20.02	20.00	20.00	20.00	20.00

Source(s): Company, ABCI Securities estimates



# Huaneng Renewables (958 HK)

## Rising utilization hour to lift margins

- Huaneng Renewables (HNR) announced its Apr operation data on May 11, 2017.
- 4M17 power output grew 23%YoY, equivalent to 37% of our previous full-year estimate.  
Power output is likely to grow by 18%YoY for 2017E
- Wind capacity growth would be 9%YoY for 2017E and 10%YoY each for 2018E/19E.
- Long-term utilization hour would exceed 2,000; Net profit margin should improve to 33%.
- Maintain **BUY** with TP of HK\$3.50 implies 9x 2017E P/E and 1.3x 2017E P/B.

**4M17 power output grew 23%YoY; full-year output growth is likely to grow by 18%YoY.** HNR released Apr operation data on May 11. Wind power output grew 8% YoY and 4M17 power output grew 23%YoY, equivalent to 37% our previous full-year estimate and above the historical run rate of 35%. Based on the current development, full-year output growth would expand by 18%YoY.

**Wind capacity growth would be 9%YoY for 2017E and 10%YoY for 2018E/19E.** Management guided that HNR is targeting to add 0.9GW of new wind capacity in 2017, representing a 9% YoY capacity growth. The tamed expansion could be a result of the government's latest policy that prohibits wind power new capacity to be added in red alert regions (mainly the "3-North" regions). HNR would resume capacity growth after 2017 and we expect to see a 10% YoY growth each in 2018E and 2019E.

**Long-term utilization hour would exceed 2,000; net profit margin would improve.** Management expect wind power utilization hour in 2017 to exceed 2,000, which we believe is achievable based on supportive government policy that encourages local governments and State Grid to enforce priority dispatch of renewable energy to the grid. HNR recorded the highest utilization hour in 2016 (1,966hrs) among peers. We believe the Group's utilization hour would exceed 2,000 in the future with the continuous support from government policies. In addition, increased utilization hour would help improve HNR's net profit margin (which should grow 33% in 2017 from 29% in 2016) and trigger re-rating of the counter.

**Maintain BUY with TP of HK\$3.50.** Overall, HNR's 4M17 power output is better than expected. Hence, we revise up our power output projection and balance sheet assumptions to take into account of the recent share placement. We expect HNR's EPS to increase by 24%/5% YoY for 2017 E/18E. Our DCF-derived TP at HK\$3.50 (HK\$3.30 previously) implies 9x/1.3x 2017E P/E and P/B.

**Risks.** 1) Power curtailment; 2) Wind resources risk; 3) Tariff risk; 4) Construction risks; 5) Fundraising risk; 6) Government policy to deleverage may constrain future growth.

## Company Report

May 26, 2017

Rating: BUY

TP: HK\$ 3.50

Analyst : Kelvin Ng

Tel: (852) 2147 8869

Email: kelvinn@abci.com.hk

Share price (HK\$)	2.65
Est. share price return	32.1%
Est. dividend yield	2.2%
Est. total return	34.2%
Previous Rating & TP	BUY
Previous Report Date	Apr 11, 2017

Source(s): Bloomberg, ABCI Securities

### Key Data

52Wk H/L(HK\$)	3.2/2.3
Issued shares (mn)	10,567
Issued H-shares (mn)	5,031
Market cap (HK\$ mn)	28,001
H-share Market cap (HK\$mn)	13,333
3-mth avg daily turnover(HK\$ mn)	72
Major shareholder(s) (%)	
Huaneng Group	54.0%

Source(s): Company, ABCI Securities

### Sector Performance

	Absolute	Relative*
1-mth	(2.21)	(4.68)
3-mth	(1.12)	(2.59)
6-mth	4.74	(3.24)

\*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

### 1-Year share price performance(HK\$)



Source(s): Bloomberg, ABCI Securities

### Results and Valuation

FY ended Dec 31	2015A	2016A	2017E	2018E	2019E
Revenue (RMB mn)	7,357	9,239	10,659	11,446	12,793
Chg (% YoY)	19.6	25.6	15.4	7.4	11.8
Net profit (RMB mn)	1,860	2,659	3,447	3,728	4,358
Chg (% YoY)	65.9	43.0	29.6	8.2	16.9
EPS (RMB)	0.191	0.273	0.337	0.353	0.413
Chg (% YoY)	54.3	42.9	23.5	4.6	16.9
BVPS (RMB)	1.830	2.070	2.436	2.688	3.067
Chg (% YoY)	2.8	13.1	17.7	10.4	14.1
P/E (x)	12.28	8.59	6.95	6.65	5.69
P/B (x)	1.28	1.13	0.96	0.87	0.77
ROE (%)	10.45	13.20	13.85	13.13	13.45
ROA (%)	2.25	3.11	3.78	3.85	4.14
DPS (RMB)	0.030	0.041	0.051	0.053	0.062
Yield (%)	1.28	1.75	2.16	2.26	2.64
Net gearing (%)	252.1	240.0	189.7	172.7	158.5

Source(s): Bloomberg, ABCI Securities estimates



## April operation data

Huaneng Renewables (HNR) has announced its operation data for Apr on May 11. Monthly wind power output was 2,105GWh (+8% YoY), mainly driven by strong performance in Inner Mongolia and northeast regions (+14%YoY and +10%YoY). Output in southern region, however, declined 2%YoY.

### **Strong performance in Inner Mongolia and northeast regions.**

Apr wind power output in Inner Mongolia and northeast region was up 14%/10% YoY, contributing to 22%/20% of HNR's total power output for the month. Strong performance in both regions was driven by government's new policy that helps increase utilization hour while minimizing power curtailment. Such increase helped offset the 10%YoY output decline in Yunnan (contributed to 14% of total output).

### **4M17 total power output grew 23%YoY. Output growth for 2017E is likely to increase by 18%YoY**

4M17 wind power output reached 7,812GWh (+23%YoY), equivalent to 37% of our previous FY17E estimate and ahead of the historical run rate of 35%. Based on the current development, we believe our 2017E output growth estimate at 18%YoY is likely to be achieved.

## 2017 outlook

### **Wind capacity would expand by 9% YoY for 2017E and 10% YoY for 2018E/19E**

Management guided that HNR would increase wind capacity by 0.9GW in 2017, which represents a 9% YoY capacity growth. The tamed expansion could be a result of the government's latest policy that prohibits wind power new capacity to be added in red alert regions (mainly the "3-North" regions). HNR would resume capacity growth after 2017 and we expect to see a 10% YoY growth each in 2018E and 2019E.

### **Long-term utilization hour would exceed 2,000; net profit margin would improve**

Management expects wind power utilization hour in 2017 to exceed 2,000, which we believe is achievable based on supportive government policy that encourages local governments and State Grid to enforce priority dispatch of renewable energy to the grid. HNR recorded the highest utilization hour in 2016 (1,966hrs) among peers. We believe the Group's utilization hour would exceed 2,000 in the future with the continuous support from government policies. In addition, increased utilization hour would help improve HNR's net profit margin (which should record 33% in 2017 from 29% in 2016) and trigger rerating of the counter.

### **Wind power output to grow by 18% YoY in 2017E on improved utilization hour**

We expect HNR's 2017 wind power output to increase by 18%YoY on improving utilization hour. The Group's 4M17 wind power output was 7,812GWh, up 23%YoY, equivalent to 37% of our previous estimate, running ahead of its historical average run rate of 35% during the same period of time. We see HNR's utilization hour and wind power output would continue to trend up with policy support and therefore expect the Group to record strong 18%YoY wind power output growth in 2017.

### **Placement would help reduce net gearing, which we expect would continue to improve.**

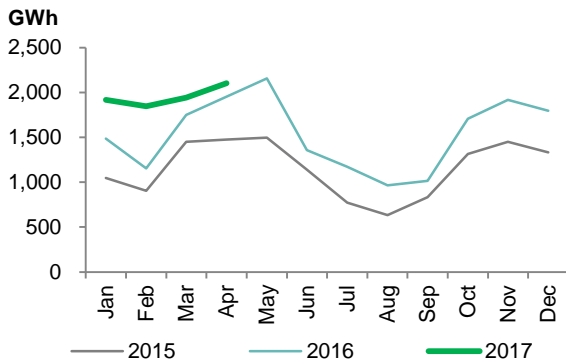
On May 11, 2017, HNR announced the issuance of 839mn of new H-shares, equivalent to 7.9% of the enlarged share capital. Offering price was \$2.61, representing a 7.4% discount to the closing price on May 10, 2017. Total net proceeds were HK\$ 2.2bn, and we estimate the funding would help reduce net gearing from 214% to 190% for 2017E. In addition, we expect HNR to slow down expansion of its wind capacity due to the government's policies that deters capacity growth in the "3-North" regions as well as the need to maintain a sound balance sheet. HNR's long-term capacity growth would stay at ~10% YoY, reducing the need for more capital. We expect HNR's long-term net gearing ratio to fall below 200% in the long run.

### **Concern 1: Wind power tariff would decline by 5% YoY in 2018E, which may drag down earnings.**

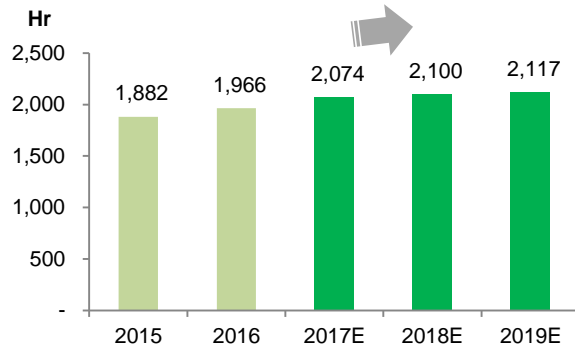
China National Energy Administration (NEA) announced on Dec 26, 2016 that on-grid tariff of wind power would be revised down by 5%-15%, depending on the region and effective on Jan 1, 2018. As we believe the long-term goal is to lower the wind power subsidy to reduce the government's financial burden, falling trend in on-grid tariff for wind power is likely to persist. However, investors should be aware that for FY18E, we estimate HNR's average wind power tariff would decline by 5% YoY; hence EPS growth would only be 5%YoY for the year.

### **Concern 2: More fundraising activities.**

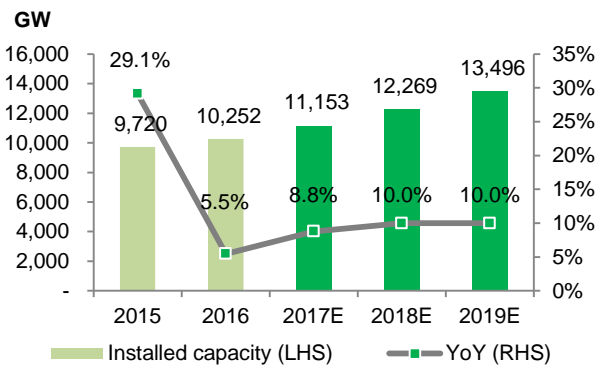
We would not negate the possibility that HNR may conduct more share placements to bring down its high net gearing ratio (2016: 240%). HNR has completed 3 new share placement in 2013, 2014 and 2017; net gearing ratios in the corresponding periods were 195%, 214% and 240%. New share issuance remains a viable option for the Group when the position of its balance sheet deteriorates.

**Exhibit 1: HNR's monthly operation data**


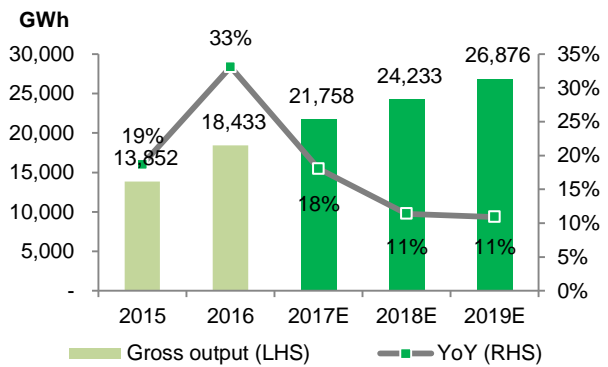
Source(s): Company, ABCI Securities

**Exhibit 2: HNR's utilization hour will continue to improve**


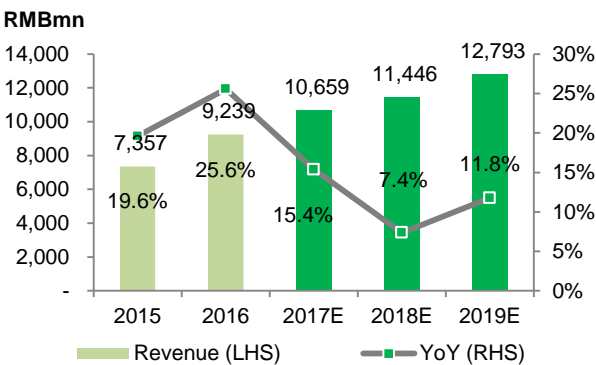
Source(s): Company, ABCI Securities estimates

**Exhibit 3: HNR's installed capacity outlook**


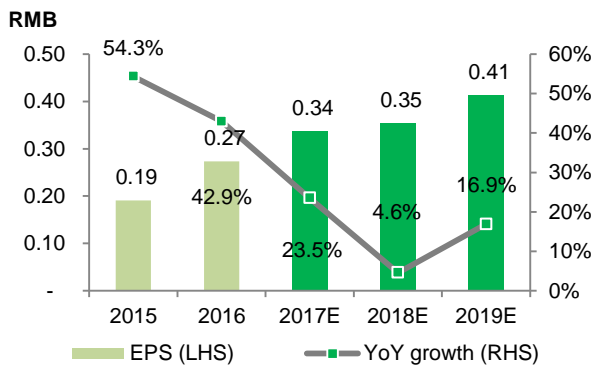
Source(s): Company, ABCI Securities estimates

**Exhibit 4: HNR's wind power output outlook**


Source(s): Company, ABCI Securities estimates

**Exhibit 5: HNR's revenue outlook**


Source(s): Company, ABCI Securities estimates

**Exhibit 6: HNR's EPS outlook**


Source(s): Company, ABCI Securities estimates



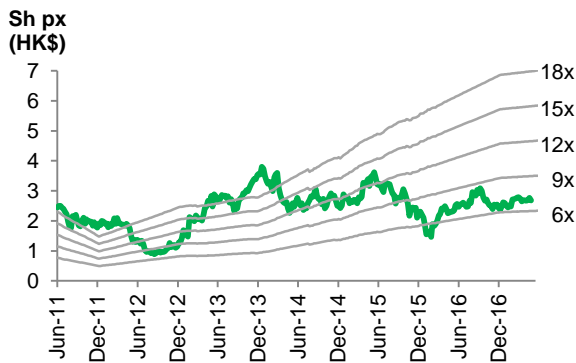
## Valuation

### TP at HK\$3.50; maintain BUY

HNR's 4M17 power output data is better than expected. Hence, we revise up our power output projections and adjust our balance sheet assumptions to take into account of the recent share placement. For 2017 E/18E, we expect HNR's EPS to increase by 24%/5%YoY for 2017 E/18E, driven by the 9%/10%YoY capacity growth and 6%/1% increase in utilization hour. Our estimated 3-year EPS CAGR would be 15% in 2016-19E. Our DCF-derived TP at HK\$3.50 (previously at HK\$ 3.30) implies 9x 2017E P/E and 1.3x 2017E P/B, which is undemanding.

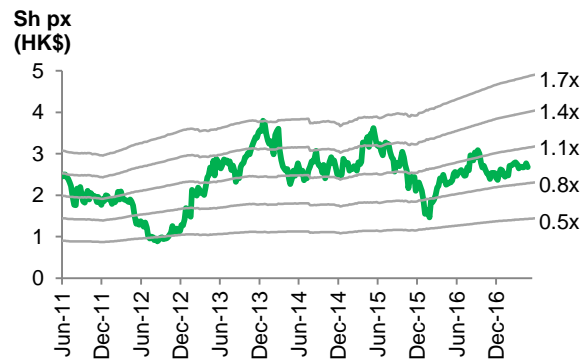
HNR's future capacity growth would fall back down to low-teens level from previous robust 30% growth each year (2010-15 capacity CAGR of 30%) while continuous increase in utilization hour would enable a mid-teens growth in wind power output for 2017E/18E. The declining net gearing ratio would also help reduce finance cost. Maintain **BUY**.

Exhibit 7: HNR's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 8: HNR's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates





**Consolidated income statement**

<b>FY Ended Dec 31 (RMB mn)</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
<b>Revenue</b>	<b>7,357</b>	<b>9,239</b>	<b>10,659</b>	<b>11,446</b>	<b>12,793</b>
Wind power	6,892	8,515	10,001	10,582	11,736
Solar power	462	718	652	858	1,051
Other	3	6	6	6	6
<b>Cost of sales</b>	<b>-3,214</b>	<b>-4,054</b>	<b>-4,194</b>	<b>-4,592</b>	<b>-5,096</b>
<b>Gross Profit</b>	<b>4,143</b>	<b>5,184</b>	<b>6,465</b>	<b>6,854</b>	<b>7,696</b>
SG&A expenses	-189	-223	-266	-286	-320
Net financial income (cost)	-2,073	-1,995	-2,240	-2,269	-2,333
Other income/ (expenses)	160	-56	-176	-208	-262
<b>Profit before tax</b>	<b>2,041</b>	<b>2,910</b>	<b>3,782</b>	<b>4,091</b>	<b>4,782</b>
Tax	-141	-202	-265	-286	-335
<b>Net profit</b>	<b>1,899</b>	<b>2,708</b>	<b>3,517</b>	<b>3,804</b>	<b>4,447</b>
Profit attributable to:					
Minority interest	40	49	70	76	89
<b>Equity shareholders of the Company</b>	<b>1,860</b>	<b>2,659</b>	<b>3,447</b>	<b>3,728</b>	<b>4,358</b>
<b>Basic EPS (RMB)</b>	<b>0.191</b>	<b>0.273</b>	<b>0.337</b>	<b>0.353</b>	<b>0.413</b>
<b>DPS (RMB)</b>	<b>0.030</b>	<b>0.041</b>	<b>0.051</b>	<b>0.053</b>	<b>0.062</b>

Source(s): Company, ABCI Securities estimates

**Consolidated balance sheet**

<b>As of Dec 31 (RMB mn)</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
<b>Current assets</b>	<b>7,652</b>	<b>8,696</b>	<b>11,554</b>	<b>11,196</b>	<b>12,795</b>
Cash	4,504	2,570	5,825	5,044	5,919
Pledged and restricted bank deposits	27	34	0	0	0
Trade and bill receivables	2,900	4,635	5,257	5,644	6,309
Other receivables and prepayments	122	1,415	438	470	526
Inventories	43	33	34	38	42
Other current assets	56	8	0	0	0
<b>Non-current assets</b>	<b>74,901</b>	<b>76,749</b>	<b>79,609</b>	<b>85,541</b>	<b>92,357</b>
Property, plant & equipment	68,658	72,107	76,004	82,175	89,077
Investment properties	0	0	0	0	0
Intangible assets	682	654	627	601	574
Investment in JV and associates	109	106	77	77	77
Deferred tax assets	4	3	3	3	3
Other non-current assets	5,448	3,879	2,897	2,685	2,626
<b>Total Assets</b>	<b>82,553</b>	<b>85,445</b>	<b>91,163</b>	<b>96,737</b>	<b>105,152</b>
<b>Current Liabilities</b>	<b>28,533</b>	<b>30,517</b>	<b>28,623</b>	<b>29,433</b>	<b>31,195</b>
Trade and bill payables	0	0	0	0	0
Other payables	9,311	7,520	7,415	7,796	8,280
Short term borrowings	18,727	22,563	21,207	21,637	22,916
Other current assets	496	435	0	0	0
<b>Non-current liabilities</b>	<b>35,395</b>	<b>33,933</b>	<b>36,733</b>	<b>37,903</b>	<b>40,461</b>
Deferred tax liabilities	20	20	20	20	20
Long-term borrowings	30,677	28,372	31,811	32,455	34,373
Other non-current assets	4,698	5,542	4,902	5,428	6,069
<b>Total Liabilities</b>	<b>63,928</b>	<b>64,451</b>	<b>65,355</b>	<b>67,335</b>	<b>71,657</b>
Minority interests	827	857	927	1,003	1,092
<b>Shareholders' equities</b>	<b>17,798</b>	<b>20,137</b>	<b>24,881</b>	<b>28,399</b>	<b>32,403</b>

Source(s): Company, ABCI Securities estimates

**Consolidated cash flow statement**

FY ended Dec 31 (RMB mn)	2015A	2016E	2017E	2018E	2019E
Profit before tax	1,899	2,708	3,517	3,804	4,447
Change in depreciation and amortization	2,720	3,447	3,598	3,983	4,412
Change in Working Capital	967	-844	-1,093	204	-80
Net financial cost (income)	2,197	2,090	2,240	2,269	2,333
Income tax paid	-126	-179	-265	-286	-335
Net interest received	141	202	0	0	0
Others	-116	-85	0	0	0
<b>Operating cash flow</b>	<b>7,682</b>	<b>7,338</b>	<b>7,998</b>	<b>9,974</b>	<b>10,778</b>
Capex	-12,644	-7,877	-7,457	-10,115	-11,275
Increase in intangible assets	0	0	-12	-12	-13
Others	130	507	52	117	101
<b>Investing cash flow</b>	<b>-12,514</b>	<b>-7,370</b>	<b>-7,417</b>	<b>-10,011</b>	<b>-11,187</b>
Net Capital raise	0	0	2,167	0	0
Net debt financing	5,285	1,312	2,084	1,073	3,198
Dividend payout	-214	-316	-517	-559	-654
Interest paid	-2,440	-2,205	-2,133	-2,292	-2,386
Others	-853	-650	169	129	221
<b>Financing cash flow</b>	<b>1,778</b>	<b>-1,858</b>	<b>1,769</b>	<b>-1,649</b>	<b>379</b>
<b>Net change in cash</b>	<b>-3,054</b>	<b>-1,889</b>	<b>2,350</b>	<b>-1,686</b>	<b>-30</b>
Cash at the beginning	6,385	3,470	2,570	5,825	5,044
Adjustment (Time deposit & FX effect)	1,173	990	905	905	905
<b>Cash at the end</b>	<b>4,504</b>	<b>2,570</b>	<b>5,825</b>	<b>5,044</b>	<b>5,919</b>

Source(s): Company, ABCI Securities estimates

**Key ratio**

FY ended Dec 31 (RMB mn)	2015A	2016A	2017E	2018E	2019E
<b>Sales mixed (%)</b>					
Wind power	93.68	92.17	93.82	92.45	91.74
Solar power	6.29	7.77	6.12	7.50	8.21
Other	0.04	0.07	0.06	0.05	0.05
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Profit &amp; loss ratios (%)</b>					
Gross margin	56.31	56.12	60.65	59.88	60.16
Operating profit margin	55.95	53.13	56.50	55.57	55.62
Pre-tax margin	27.74	31.49	35.48	35.74	37.38
Net profit margin	25.82	29.31	33.00	33.24	34.76
Selling & administrative expenses/revenue	2.57	2.42	2.50	2.50	2.50
Effective tax rate	6.93	6.93	7.00	7.00	7.00
<b>Growth (%)</b>					
Revenue	19.60	25.58	15.38	7.38	11.77
Gross profit	18.33	25.14	24.70	6.02	12.29
Operating profit	23.03	19.24	22.70	5.61	11.87
Net profit	65.61	42.59	29.89	8.16	16.90
<b>Balance sheet ratios</b>					
Current ratio (x)	0.27	0.28	0.40	0.38	0.41
Quick ratio (x)	0.26	0.24	0.39	0.36	0.39
Cash ratio (x)	0.16	0.09	0.20	0.17	0.19
Trade and bill receivables days	143.88	183.14	180.00	180.00	180.00
Trade and bill payables turnover days	0.00	0.00	0.00	0.00	0.00
Inventory turnover days	4.88	2.95	3.00	3.00	3.00
Total debt / equity ratio (%)	277.59	252.94	213.09	190.47	176.80
Net debt / equity ratio (%)	252.13	240.01	189.68	172.71	158.53
<b>Returns (%)</b>					
ROAA	2.4	3.2	3.9	4.0	4.3
ROAE	11.0	14.0	15.3	14.0	14.3
Payout ratio	15.69	15.00	15.00	15.00	15.00

Source(s): Company, ABCI Securities estimates



## Datang Renewable (1798 HK) Paper-thin margin is a concern

- Datang Renewable (DTR)'s FY16 and 1Q17 results missed Bloomberg consensus and our estimates.
- Installed wind power capacity would grow by 11%/8%YoY in 2017E/18E
- Thin net profit margin suggests bottom line can easily swing between profit and loss.
- Current valuation at 0.4x 2017E P/B is attractive
- Maintain **HOLD** with TP of HK\$0.80, which implies 9x 2017E P/E and 0.4x 2017E P/B.

**FY16 and 1Q17 results were a miss.** FY16 net profit grew 1346%YoY due to low base in 2015, missing both Bloomberg consensus/our estimates by 29%/46%. 1Q17 net profit grew 198% YoY growth, representing 21%/21% of Bloomberg consensus/our full-year estimate, below the historical run rate of 22%.

**Installed wind power capacity would expand by 11%/8%YoY in 2017E/18E.** As the Chinese government slashed wind power tariff further by 5% on Jan 1, 2018, we believe DTR would seek to expand capacity in 2017 to boost earnings. We expect DTR's capacity to grow by 11%/8% YoY for 2017E/18E.

**Thin margin suggests bottom line can easily swing from profit to loss.** DTR's thin net profit margin means it can easily swing to loss when negative and unpredictable events occur. As of end-2016, DTR has the lowest net profit margin (4%) among wind power operators in our coverage universe, compared to Longyuan's 15% and Huaneng's 29%.

**Current valuation at 0.4x 2017E P/B is attractive.** After significant correction in share price since June 2015, DTR is now trading at 0.4x 2017E P/B based on Bloomberg consensus. Its current P/B valuation is close to DTR's historical low (0.39x on Dec 15, 2016), suggesting further downside is limited.

**Maintain HOLD with TP of HK\$0.80.** High net gearing ratio and thin net profit margin suggest DTR can easily swing to loss although its cheap valuation suggests a limited downside risk. We adjust the capacity and utilization hour assumptions and our DCF-derived TP at HK\$ 0.80 (previously at HK\$0.82) implies 9x 2017E P/E and 0.4x 2017E P/B. Maintain **HOLD**.

**Risks:** 1) Power curtailment risk; 2) Wind resources risk; 3) Tariff risk; 4) Construction risks; 5) Fundraising activities to finance future projects

### Results and Valuation

FY ended Dec 31	2015A	2016A	2017E	2018E	2019E
Revenue (RMB mn)	5,588	5,786	6,824	7,133	8,209
Chg (% YoY)	7.8	3.5	17.9	4.5	15.1
Net profit (RMB mn)	14	198	511	419	775
Chg (% YoY)	n.a.	1,345.5	157.8	-18.0	85.0
EPS (RMB)	0.00	0.03	0.07	0.06	0.11
Chg (% YoY)	n.a.	1,331.6	157.8	-18.0	85.0
BVPS (RMB)	1.49	1.49	1.55	1.60	1.68
Chg (% YoY)	-0.4	0.1	3.9	3.0	5.3
P/E (x)	363.46	25.39	9.85	12.01	6.49
P/B (x)	0.46	0.46	0.45	0.43	0.41
ROE (%)	0.13	1.82	4.52	3.60	6.32
ROA (%)	0.02	0.29	0.72	0.57	0.99
DPS (RMB)	0.000	0.012	0.014	0.011	0.021
Yield (%)	0.00	1.73	2.03	1.67	3.08
Net gearing (%)	364.3	396.6	411.8	410.3	417.6

Source(s): Bloomberg, ABCI Securities estimates

## Company Report

May 26, 2017

Rating: **HOLD**

TP: **HK\$ 0.80**

Analyst : Kelvin Ng

Tel: (852) 2147 8869

Email: kelvinn@abci.com.hk

Share price (HK\$)	0.78
Est. share price return	2.6%
Est. dividend yield	2.0%
Est. total return	4.6%
Previous Rating & TP	HOLD
Previous Report Date	Nov 16, 2016

Source(s): Bloomberg, ABCI Securities

### Key Data

52Wk H/L(HK\$)	0.95/0.68
Issued shares (mn)	7,274
Issued H-shares (mn)	2,501
Market cap (HK\$ mn)	5,673
H-share market cap (HK\$ mn)	1,951
3-mth avg daily turnover(HK\$ mn)	1.6
Major shareholder(s) (%)	
Datang Group	57.4%

Source(s): Company, ABCI Securities

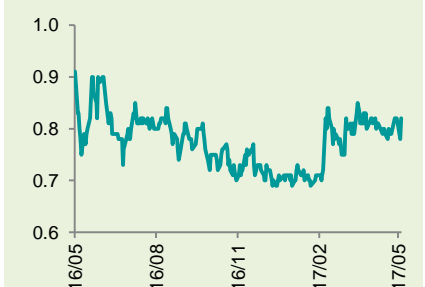
### Sector Performance

	Absolute	Relative*
1-mth	(1.27)	(3.73)
3-mth	(1.27)	(2.73)
6-mth	9.86	1.88

\*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

### 1-Year share price performance(HK\$)



Source(s): Bloomberg, ABCI Securities



## 2016 results highlight

### **FY16 earnings missed consensus and our estimates.**

FY16 net profit was RMB198mn (+1346%YoY) due to low base in 2015 (RMB14mn), missing both Bloomberg consensus and our estimate by 29% and 46%. Wind capacity, which increased 19% YoY, was the key earnings driver, but utilization hour edged up only 1% YoY, which was 1% lower than our expectation and resulted in the earnings miss.

### **19%YoY growth in wind capacity was the key earnings driver**

Installed wind power capacity recorded 8.3GW in 2016, 19%YoY higher than 7.0GW in 201. It was the key net profit driver for DTR.

### **Utilization hour was up 1% YoY, lower than our forecast**

DTR's utilization hour went up by 1% YoY in 2016, 1% below our expectation of 1,771hr. This is the key reason for the earnings miss.

### **Account Receivable Turnover days increased.**

Account receivable turnover days increased from 87days by end-2015 to 177 days in 2016. We believe this was caused by the delayed wind power subsidy payment by governments.

### **Net gearing ratio mounted to 397%.**

Net gearing ratio rose further to 397% in 2016 from 364% in 2015 due to aggressive expansion of wind power capacity. DTR's net gearing ratio would remain high in the next few years increases likelihood of fundraising activities.

## 1Q17 operation and results

### **1Q17 wind power output grew 14%YoY; below expectation**

1Q17 total wind power output was 3,342GWh (+14%YoY), equivalent to 22% of our previous full-year estimate and below its historical run rate of 24%. We attributed the laggard performance to lower-than-average output growth in northeast region, which grew only by 9%YoY and contributed to 15% of DTR's overall output.

### **1Q17 net profit grew nearly 200% due to low base, but earnings are still worse than expected**

DTR announced 1Q17 results based on China GAAP at end-Apr. 1Q17revenue was RMB1,592mn (+10%YoY), mainly driven by 14%YoY wind power output growth. Net profit was RMB123mn, up 198% YoY due to low base in 1Q16 (RMB41mn). Revenue was equivalent to 23% of our previous full-year estimate and was slightly below the historical run rate of 24%. Net profit was equivalent to 21% of our previous full-year estimate/ Bloomberg consensus estimate, slightly below the historical run rate of 22%. We regard this set of results as worse than expected.



## 2017 outlook

### **Installed wind power capacity would expand by 11%/8%YoY in 2017E/18E**

As the Chinese government slashed wind power tariff further by 5% on Jan 1, 2018, we believe DTR would seek to expand capacity in 2017 to boost earnings. Expanding by 19% YoY each in 2015/16, DTR's capacity would increase by 11%/8% YoY in 2017E/18E.

### **Utilization hour would stay at 1,801 for 2017E**

DTR's utilization hour would continue to improve on supportive policies for priority dispatch of renewable energy. Large SOE wind power cooperators like Longyuan (916 HK, BUY), Huaneng Renewables (958 HK, BUY) and DTR recorded 1%, 5% and 1% improvement in utilization hour in 2016. With the energy shift continuing in China, DTR would benefit from relevant policies and we expect utilization hour to be 1,801hr (+3%YoY) in 2017E and 1,814hr (+1%YoY) in 2018E.

### **Wind power tariff to stay at current level before falling by 5%YoY in 2018E**

DTR's 2017 wind power tariff would stay at the current level at RMB0.474/kWh (ex. VAT) since NDRC is unlikely to revise up the wind power tariff. In fact, NDRC announced on Dec 26, 2016 that wind power tariff would be lowered by 5%-15% depending on regions. The new tariff will be effective in the start of 2018. Hence, we expect DTR's wind power tariff would decline by 5% YoY.

### **158% YoY net profit growth in 2017 is foreseeable**

3% Improvement in utilization hour and solid 11%YoY growth in wind power capacity should help boosting DTR's 2017 net profit growth to see 158%YoY due to low base in 2016. Given DTR has already recorded 198%YoY (RMB123mn) net profit growth in 1Q17, achieved 24% of our new full-year estimate, we see our full-year robust 158%YoY net profit growth is likely to achieve.

### **Current valuation at 0.4x 2017E P/B where is attractive**

After significant share price correction since June 2015 which trimmed DTR's share price by nearly 40%, DTR is now trading at 0.4x 2017E P/B based on Bloomberg consensus. We see current P/B valuation is close to DTR's historical low (DTR's historical low was at 0.39x on 15 Dec 2016) suggest significant downside is unlikely.

### **Concern 1: Thin net profit margin suggests bottom line is easily fluctuating from profit to loss.**

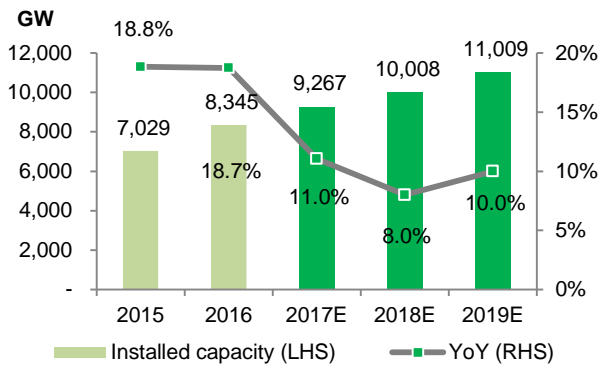
DTR's thin net profit margin is likely to turn bottom line from profit to loss when there is any unpredictable event to take place. As of end-2016, DTR has the lowest net profit margin among wind power operators we follow, which recorded 4% (vs. Longyuan's 15% and Huaneng's 29% during the same period).

### **Concern 2: 2018 net profit may record 18%YoY decline.**

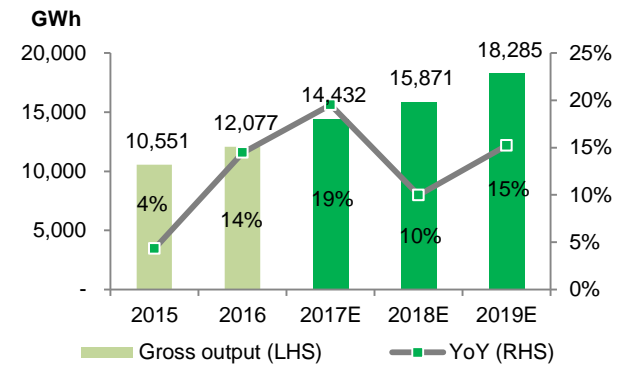
As The Chinese government has announced to cut wind power tariff by 5% on current basis and to be effective on Jan 1, 2018, we see this should have significant impact to DTR given its net thin profit margins. We expect DTR only to see 8%YoY capacity growth in 2018 as the Group is eager to boost capacity growth in 2017 to enjoy a higher tariff, a 5% decline in tariff should outweigh the positive from capacity growth and DTR is likely to record 18%YoY net profit decline in 2018 due to the high base in 2017.

### **Concern 3: Net gearing ratio to stay at 400% level.**

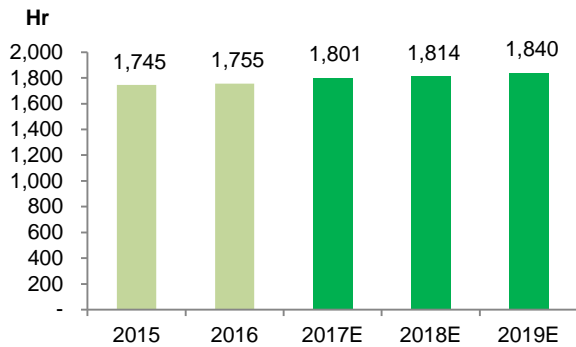
Despite DTR's capacity growth is not significant in 2017 and 2018, but its negative free cash flow should continue pressuring DTR's net gearing ratio. We expect DTR's net gearing ratio should remain high at 400% level going forward and might have fundraising exercise activities in near future.

**Exhibit 1: DTR's wind power capacity growth outlook**


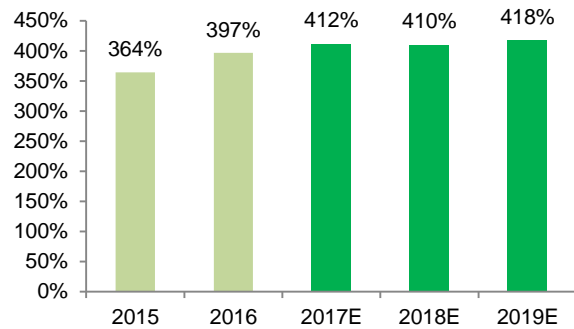
Source(s): Company, ABCI Securities estimates

**Exhibit 2: DTR's wind power output outlook**


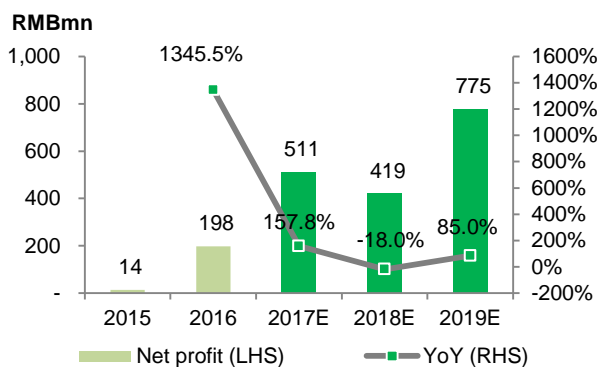
Source(s): Company, ABCI Securities estimates

**Exhibit 3: DTR's utilization hour should remain at 1,800hr level**


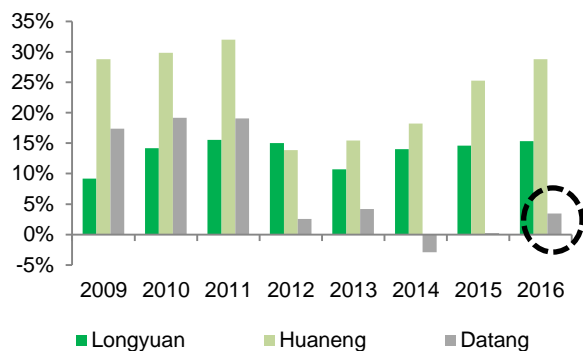
Source(s): Company, ABCI Securities estimates

**Exhibit 4: DTR's net gearing ratio to stay high at 400% level**


Source(s): Company, ABCI Securities estimates

**Exhibit 5: DTR's net profit outlook**


Source(s): Company, ABCI Securities estimates

**Exhibit 6: DTR has the lowest net profit margin among peers**


Source(s): Company, ABCI Securities



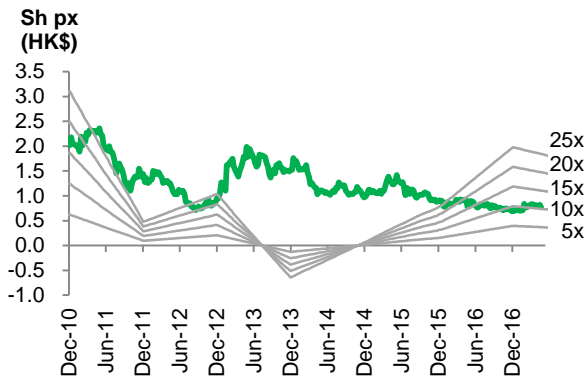
### Valuation

#### TP at HK\$0.80; maintain HOLD

We see DTR's 1Q17 results and 3M17 operation data as worse than expected, high net gearing ratio and thin net profit margin may swing DTR's bottom line from profit to loss when unpredictable event take place. We advise investors to focus on more quality wind power operators like Longyuan (916 HK, BUY) and Huaneng Renewables (958 HK, BUY)

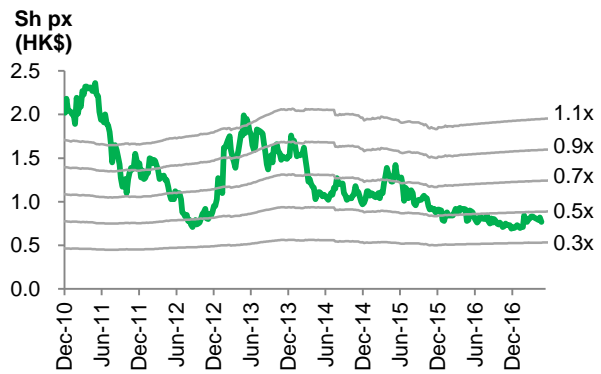
However, DTR's 2017E P/B is now trading at 0.4x level which is close to historical low level. We see further downside risk is quite limited. We fine tune our capacity and utilization hour assumptions in order to adjust the operation data and our DCF-derived TP at HK\$0.80 (previously at HK\$0.82) which implies 9x 2017E P/E and 0.4x 2017E P/B. Maintain **HOLD**.

Exhibit 7: DTR's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 8: DTR's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



**Consolidated income statement**

<b>FY Ended Dec 31 (RMB mn)</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
<b>Revenue</b>	<b>5,588</b>	<b>5,786</b>	<b>6,824</b>	<b>7,133</b>	<b>8,209</b>
Wind power	5,127	5,600	6,711	7,011	8,077
Concession construction	247	6	0	0	0
Other	214	180	114	122	132
<b>Cost of sales</b>	<b>-3,361</b>	<b>-3,529</b>	<b>-3,971</b>	<b>-4,259</b>	<b>-4,716</b>
<b>Gross Profit</b>	<b>2,227</b>	<b>2,257</b>	<b>2,854</b>	<b>2,874</b>	<b>3,494</b>
SG&A expenses	0	0	0	0	0
Net financial income (cost)	-1,939	-1,735	-1,977	-2,138	-2,188
Other income/ (expenses)	-133	-121	-78	-82	-94
<b>Profit before tax</b>	<b>155</b>	<b>401</b>	<b>798</b>	<b>655</b>	<b>1,211</b>
Tax	-92	-108	-160	-131	-242
<b>Net profit</b>	<b>63</b>	<b>293</b>	<b>639</b>	<b>524</b>	<b>969</b>
Profit attributable to:					
Minority interest	-49	-95	-128	-105	-194
<b>Equity shareholders of the Company</b>	<b>14</b>	<b>198</b>	<b>511</b>	<b>419</b>	<b>775</b>
<b>Basic EPS (RMB)</b>	<b>0.002</b>	<b>0.027</b>	<b>0.070</b>	<b>0.057</b>	<b>0.106</b>
<b>DPS (RMB)</b>	<b>0.000</b>	<b>0.012</b>	<b>0.014</b>	<b>0.011</b>	<b>0.021</b>

Source(s): Company, ABCI Securities estimates

**Consolidated balance sheet**

<b>As of Dec 31 (RMB mn)</b>	<b>2015A</b>	<b>2016A</b>	<b>2017E</b>	<b>2018E</b>	<b>2019E</b>
<b>Current assets</b>	<b>3,609</b>	<b>5,631</b>	<b>4,596</b>	<b>4,612</b>	<b>4,949</b>
Cash	1,078	1,166	1,456	1,329	1,173
Pledged and restricted bank deposits	5	12	0	0	0
Trade and bill receivables	1,337	2,801	1,776	1,857	2,137
Other receivables and prepayments	1,141	1,537	1,309	1,368	1,574
Inventories	48	114	54	58	65
Other current assets	0	0	0	0	0
<b>Non-current assets</b>	<b>57,205</b>	<b>63,161</b>	<b>66,496</b>	<b>68,608</b>	<b>73,334</b>
Property, plant & equipment	52,523	57,914	61,297	63,217	67,657
Investment properties	0	21	0	0	0
Intangible assets	1,269	1,284	1,286	1,289	1,292
Investment in JV and associates	660	686	686	686	686
Deferred tax assets	35	34	34	34	34
Other non-current assets	2,719	3,222	3,193	3,382	3,664
<b>Total Assets</b>	<b>60,815</b>	<b>68,792</b>	<b>71,092</b>	<b>73,220</b>	<b>78,283</b>
<b>Current Liabilities</b>	<b>17,062</b>	<b>20,511</b>	<b>22,827</b>	<b>23,760</b>	<b>25,709</b>
Trade and bill payables	1,318	2,362	2,393	2,567	2,842
Other payables	5,170	7,982	6,037	6,472	7,160
Short term borrowings	10,574	10,166	14,397	14,721	15,707
Other current assets	0	0	0	0	0
<b>Non-current liabilities</b>	<b>30,173</b>	<b>34,576</b>	<b>34,009</b>	<b>34,765</b>	<b>37,065</b>
Deferred tax liabilities	26	24	24	24	24
Long-term borrowings	29,724	34,160	33,594	34,349	36,649
Other non-current assets	423	391	391	391	391
<b>Total Liabilities</b>	<b>47,235</b>	<b>55,086</b>	<b>56,837</b>	<b>58,525</b>	<b>62,774</b>
Minority interests	2,814	2,826	2,954	3,059	3,253
<b>Shareholders' equities</b>	<b>10,765</b>	<b>10,879</b>	<b>11,301</b>	<b>11,636</b>	<b>12,256</b>

Source(s): Company, ABCI Securities estimates





**Consolidated cash flow statement**

FY ended Dec 31 (RMB mn)	2015A	2016E	2017E	2018E	2019E
Profit before tax	155	401	798	655	1,211
Change in depreciation and amortization	2,527	2,842	3,201	3,414	3,741
Change in Working Capital	2,794	-949	-578	338	28
Net financial cost (income)	1,928	1,727	1,735	1,973	2,140
Income tax paid	-72	-128	-95	-128	-105
Net interest received	22	14	0	0	0
Others	6	-24	-24	-25	-29
<b>Operating cash flow</b>	<b>7,360</b>	<b>3,883</b>	<b>5,039</b>	<b>6,227</b>	<b>6,987</b>
Capex	-5,218	-6,082	-6,554	-5,303	-8,149
Increase in intangible assets	0	0	-32	-34	-36
Others	154	465	0	0	0
<b>Investing cash flow</b>	<b>-5,064</b>	<b>-5,616</b>	<b>-6,586</b>	<b>-5,337</b>	<b>-8,185</b>
Net Capital raise	0	0	13	0	0
Net debt financing	-970	3,957	3,665	1,080	3,286
Dividend payout	-312	-253	-87	-102	-84
Interest paid	-2,235	-1,902	-1,753	-1,995	-2,160
Others	110	21	0	0	0
<b>Financing cash flow</b>	<b>-3,407</b>	<b>1,824</b>	<b>1,837</b>	<b>-1,017</b>	<b>1,042</b>
<b>Net change in cash</b>	<b>-1,112</b>	<b>90</b>	<b>290</b>	<b>-127</b>	<b>-156</b>
Cash at the beginning	2,190	1,078	1,166	1,456	1,329
Adjustment (Time deposit & FX effect)	-1	-2	0	0	0
<b>Cash at the end</b>	<b>1,078</b>	<b>1,166</b>	<b>1,456</b>	<b>1,329</b>	<b>1,173</b>

Source(s): Company, ABCI Securities estimates

**Key ratio**

FY ended Dec 31	2015A	2016A	2017E	2018E	2019E
<b>Sales mixed (%)</b>					
Wind power	91.74	96.79	98.34	98.28	98.39
Concession construction	4.42	0.10	0.00	0.00	0.00
Other	3.83	3.11	1.66	1.72	1.61
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Profit &amp; loss ratios (%)</b>					
Gross margin	39.86	39.01	41.82	40.29	42.56
Operating profit margin	37.30	36.55	40.32	38.79	41.06
Pre-tax margin	2.78	6.93	11.70	9.18	14.75
Net profit margin	1.13	5.06	9.36	7.34	11.80
Selling & administrative expenses/revenue	0.00	0.00	0.00	0.00	0.00
Effective tax rate	59.42	27.01	20.00	20.00	20.00
<b>Growth (%)</b>					
Revenue	7.76	3.54	17.94	4.53	15.08
Gross profit	-0.77	1.35	26.42	0.72	21.55
Operating profit	-1.85	1.46	30.10	0.58	21.80
Net profit	n.a.	364.62	118.14	-18.00	85.01
<b>Balance sheet ratios</b>					
Current ratio (x)	0.21	0.27	0.20	0.19	0.19
Quick ratio (x)	0.14	0.19	0.14	0.13	0.13
Cash ratio (x)	0.06	0.06	0.06	0.06	0.05
Trade and bill receivables days	87.32	176.66	95.00	95.00	95.00
Trade and bill payables turnover days	143.17	244.34	220.00	220.00	220.00
Inventory turnover days	5.24	11.84	5.00	5.00	5.00
Total debt / equity ratio (%)	374.33	407.44	424.66	421.71	427.18
Net debt / equity ratio (%)	364.27	396.60	411.77	410.28	417.61
<b>Returns (%)</b>					
ROAA	0.0	0.3	0.7	0.6	1.0
ROAE	0.1	1.8	4.6	3.7	6.5
Payout ratio	0.00	44.04	20.00	20.00	20.00

Source(s): Company, ABCI Securities estimates



## Disclosures

### Analyst Certification

I, Ng King Chuen Kelvin, being the person primarily responsible for the content of this research report, in whole or in part, hereby certify that all of the views expressed in this report accurately reflect my personal view about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. I and/or my associates have no financial interests in relation to the listed company (ies) covered in this report, and I and/or my associates do not serve as officer(s) of the listed company (ies) covered in this report.

### Disclosures of Interests

ABCI Securities Company Limited and/or its affiliates, within the past 12 months, have investment banking relationship with one or more of the companies mentioned in the report.

### Definition of equity rating

Rating	Definition
Buy	Stock return $\geq$ Market return rate
Hold	Market return $- 6\% \leq$ Stock return $<$ Market return rate
Sell	Stock return $<$ Market return $- 6\%$

Stock return is defined as the expected % change of share price plus gross dividend yield over the next 12 months

Market return: 5-year average market return rate

Time horizon of share price target: 12-month

### Definition of share price risk

Rating	Definition
Very high	$2.6 \leq$ 180 day volatility/180 day benchmark index volatility
High	$1.5 \leq$ 180 day volatility/180 day benchmark index volatility $<$ 2.6
Medium	$1.0 \leq$ 180 day volatility/180 day benchmark index volatility $<$ 1.5
Low	180 day volatility/180 day benchmark index volatility $<$ 1.0

We measure share price risk by its volatility relative to volatility of benchmark index. Benchmark index: Hang Seng Index.

Volatility is calculated from the standard deviation of day to day logarithmic historic price change. The 180-day price volatility equals the annualized standard deviation of the relative price change for the 180 most recent trading days closing price.

### Disclaimers

This report is for our clients only and is for distribution only under such circumstances as may be permitted by applicable law. It has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. It is published solely for informational purposes and is not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments. No representation or warranty, either expresses or implied, is provided in relation to the accuracy, completeness or reliability of the information contained herein. This report should not be regarded by recipients as a substitute for the exercise of their own judgment. Any opinions expressed in this report are subject to change without notice and may differ or be contrary to opinions expressed by other business areas as a result of using different assumptions and criteria. The analysis contained herein is based on numerous assumptions. Different assumptions could result in materially different results. The analyst(s) responsible for the preparation of this report may interact with trading desk personnel, sales personnel and other constituencies for the purpose of gathering, synthesizing and interpreting market information. ABCI Securities Company Limited is under no obligation to update or keep current the information contained herein. ABCI Securities Company Limited relies on information barriers to control the flow of information contained in one or more areas within ABCI Securities Company Limited, into other areas, units, groups or affiliates of ABCI Securities Company Limited. The compensation of the analyst who prepared this report is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues, however, compensation may relate to the revenues of ABCI Securities Company Limited as a whole, of which investment banking, sales and trading are a part. The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. The price and value of the investments referred to in this research and the income from them may fluctuate. Past performance is not necessarily indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative. Neither ABCI Securities Company Limited nor any of its affiliates, directors, employees or agents accepts any liability for any loss or damage arising out of the use of all or any part of this report. Additional information will be made available upon request.

Copyright 2017 ABCI Securities Company Limited

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of ABCI Securities Company Limited.

**Office address: ABCI Securities Company Limited, 13/F Fairmont House, 8 Cotton Tree Drive, Central, Hong Kong.**

**Tel: (852) 2868 2183**