



ABCI Research
China Alternative Energy Sector

Focus on Nuclear Power

Oct 4, 2019

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China's Alternative Energy Sector Focus on nuclear power

- Power output jumped 21%/14% YoY for China's nuclear/wind energy in Aug 2019.
- Nuclear power remains the key alternative energy source of China; expect output to expand at 14% CAGR in 2018-2020E.
- Wind power: subsidy-free tariff policy and tightened wind power tender requirement would favor large operators.
- NEUTRAL** sector outlook; prefer **Longyuan Power (916 HK)** and **CGN Power (1816 HK)**

Power output jumped 21%/14% YoY for China's nuclear/wind energy in Aug 2019.

According to National Bureau of Statistics (NBS), in Aug, nuclear/wind power output grew 21%/14% YoY; for 8M19, the figure rose 22%/6%YoY, surpassing the overall energy growth rate of 3% YoY for the same period. The country is a step closer to fulfilling the government's long-term shift to renewable energy.

Nuclear power remains the key alternative energy source of China; expect output to expand at 14% CAGR in 2018-2020E. Due to nuclear power's clean nature and high reliability, it will be the key alternative energy source of China. We expect China to ramp up nuclear power capacity to 58GW by end-2020E (CAGR: 14% in 2018-2020E) and power output would expand at 14% CAGR during the period, partially attributable to its low base (contributed to 4.2% of China's 2018 total power output).

Wind power: Subsidy-free tariff policy and wind power tender requirement policy would favor large operators. National Development and Reform Committee (NDRC) announced in May 2019 that the government will no longer subsidize onshore wind power facility projects approved after 2020. In addition, National Energy Administration (NEA) announced in May 2019 that the government would only select qualified wind power operators for the bidding of wind power tenders in the future. The two new policies signal the government's preference for large wind power operators.

NEUTRAL sector outlook; prefer Longyuan and CGN. While alternative energy will continue to expand going forward, we expect China's power demand growth will remain at mid-single-digit level; hence, we have a **NEUTRAL** sector outlook. With the subsidy-free tariff policy and tender requirement in place, we believe large wind power players, such as **Longyuan Power (916 HK)**, would outperform the smaller counterparts. Nuclear power would continue report strong growth. The industry leader, **CGN Power (1816 HK, 003816 CH)**, would be the key beneficiary.

Event-driven trade: Huaneng Renewables (958 HK). Huaneng Renewables called for H-share privatization on Sep 2, the offering price to be HK\$ 3.17/shr (1x 2019E P/B), which implies an upside of ~19% to the last closing price on 3 Oct. We estimate the deal is likely to succeed.

Risks. 1) Revenue risk due to wind tariff cut; 2) Decreased power demand may hinder alternative energy development; 3) Wind power curtailment may worsen and reduce utilization hour; 4) Safety issues related to nuclear power; 5) High initial investment for nuclear power may drive up net gearing.

Sector Valuation Summary (data as of Oct 3, 2019)

Company	Ticker	Rating	TP (HK\$)	FY19E P/E(x)	FY20E P/E (x)	FY19E P/B (x)	FY20E P/B (x)	FY19E Yield(%)	FY20E Yield(%)
CGN Power - H	1816 HK	BUY	2.45	9.3	8.5	1.0	0.9	3.8	4.1
CGN Power - A	003816 CH	HOLD	4.00	22.0	20.1	2.4	2.1	1.6	1.7
Longyuan Power	916 HK	BUY	5.30	7.0	6.7	0.6	0.6	2.8	3.0
Huaneng Renewables	958 HK	BUY	3.17	6.6	6.1	0.8	0.8	2.3	2.5
Datang Renewable	1798 HK	HOLD	0.80	4.2	4.3	0.4	0.4	2.9	2.8

Source(s): Bloomberg, ABCI Securities estimates

Sector Report Oct 4, 2019 NEUTRAL

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Key Data

Avg.20E P/E (x)	6.37
Avg.20E P/B (x)	0.64
Avg.20E Dvd. Yield (%)	3.10

Source(s): Bloomberg, ABCI Securities

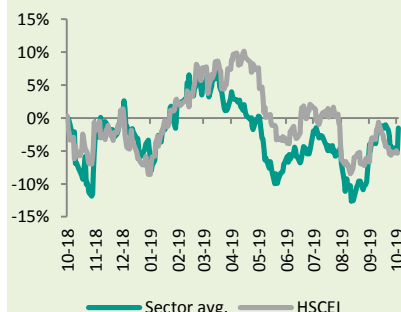
Sector Performance

	Absolute	Relative*
1-mth	5.72%	4.56%
3-mth	(2.28%)	4.32%
6-mth	(8.17%)	3.49%

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

1-Year sector performance (%)



Source(s): Bloomberg, ABCI Securities



Alternative energy: Growth continues despite modest power demand

Alternative energy in China has been maintaining a strong growth in the past decade (2008-18) despite overall power output only grew at 7.3% CAGR during the period. Nuclear power output rose at 15.6% CAGR, while wind power output and solar power output expanded at 39.5% CAGR and 107.3% CAGR. The robust growth was a result of the government's resolution to combat against air pollution as well as reserving the use of coal for strategic use in China. We believe alternative energy output would undergo robust expansion in the next decade despite our forecast that the country's overall power output growth would be at the single-digit level.

Contributions of nuclear power, wind power, and solar power to China's overall electricity output were 4.2%/5.2%/2.5% in 2018, which is low compared to coal-fired power at 70.4%. The use of alternative energy is yet to develop further

Nuclear power: The most-preferred energy source with robust capacity and output growth, though rising debt is a concern

The most feasible alternative energy source to coal-fired power in China

Nuclear power is the most feasible alternative to coal-fired power due to its 1).high utilization hour; 2).low production cost, 3).clean nature, with no greenhouse gas being emitted in power generation. In advanced countries, nuclear power accounted for ~31% of total power output as of end-2018; for countries such as France, the figure neared 75%. In China, the unit production cost for nuclear power is ~RMB 0.307/kWh, which is lower than coal-fired power at RMB0.32/kWh. Unlike other alternative energy sources, the low cost of nuclear power means the industry does not require subsidy.

Nuclear power output remains low in the overall energy structure

We believe China's switch to renewables (e.g. wind, solar, and nuclear) will continue. Nuclear power accounted for only 4.2% to China's overall power output in 2018, which was far lower than the average at ~31% among developed countries. We believe the government will construct more nuclear power plants.

China's nuclear power output expanded by 22%YoY in 8M19

According to NBS, nuclear power output reached 32.9bn kWh in Aug 2019, up 21.2% YoY. For 8M19, the figure was 224.2bn kWh, up 21.9%YoY. Nuclear power output has been growing strong at 15.6% CAGR in 2008-18. We expect the figure would continue to rise based on the continuous shift to cleaner energy sources.

Subsidy-free tariff policy will have limited impact on the nuclear power industry

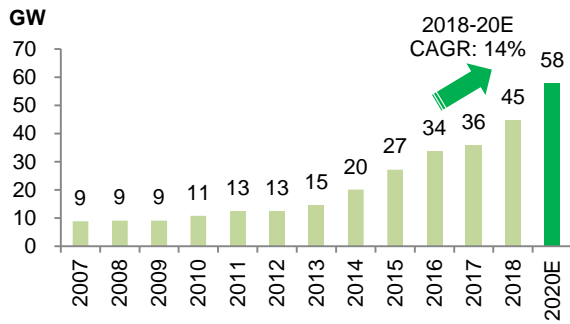
National Development and Reform Committee (NDRC) announced in May 2019 that the government will no longer subsidize onshore wind power facilities commencing operation after 2020. We believe this would have limited impact to nuclear players since the industry is not subsidized in China.

China's nuclear power capacity and power output would expand at 14% CAGR in 2018-20E.

We believe China's nuclear power capacity would continue to expand swiftly due to its low contribution to the overall power output. According to 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 30% jump from 2018 or a 2-year CAGR of 14% from 45GW. Driven by capacity growth, nuclear power output would continue to expand. Together with the high utilization hour (usually ~ 7,000hrs; much higher than 5,000hrs for coal-fired, 2,000hrs for wind and 1,500hrs for solar) and priority dispatch to the power grid, we believe nuclear power output would expand at 14% CAGR in 2018-20E.

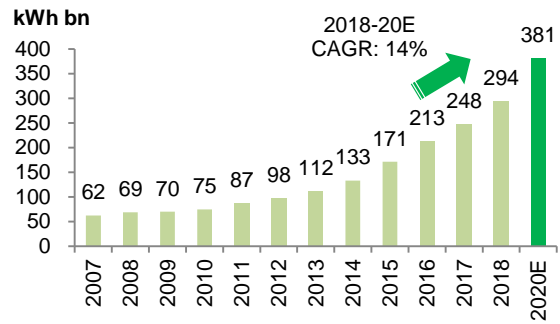


Exhibit 1: China's nuclear power capacity would continue to grow strongly



Source(s): NEA, CEC, ABCI Securities estimates

Exhibit 2: China's nuclear power output would expand at 14% CAGR in 2018-20E



Source(s): Bloomberg, ABCI Securities estimates



Wind power: Pick the sizable and low-cost operators

As expected, China will cancel the tariffs paid to for wind and solar power operators. NDRC announced in May 2019 that the government will no longer subsidize onshore wind and solar power facilities approved before end-2018 but remain unfinished by end-2020; no subsidy will be made to onshore wind power facilities approved between Jan 1, 2019 and end-2020 but remain unfinished by end-2021. Starting from Jan 1, 2021, no subsidy will be provided to newly approved onshore wind power facilities. We believe the subsidy-free policy would urge wind power operators to enhance competitiveness.

Low-cost SOEs would be the winners

We believe low-cost operators would outperform, especially those with a state-owned background. Operators with the following characteristics would have additional competitive edges.

- ◆ **Low operating cost.** With no feed-in subsidy, operators with lower operating cost would have a higher level of free cash flow and a stronger balance sheet
- ◆ **Higher utilization hour.** Operators with higher utilization hours usually have a lower operating cost due to greater efficiency.
- ◆ **Located in economically vibrant regions.** Capacity located in affluent regions with higher power demand would help reduce default risk and power curtailment (since distant transmission is not required)

We believe SOE operators would perform better than their private counterparts because the former have 1) better relationships with local governments, which may facilitate approval for wind farm construction; 2) low financing cost, which could reduce interest expenditure.

New tender requirements favor sizable operators

According to National Energy Administration (NEA) announced on May 28, 2019, China would only select qualified wind power operators for project bidding in the future. The guidelines for applicant selection include:

- ◆ **Business capability.** The government would consider the total registered capital, net assets and ROE of applicants
- ◆ **Equipment advancement.** Assessment on the capacity, utilization rate and efficiency of single wind turbines of applicants.
- ◆ **Technical solutions.** The intelligent design of wind farm and also the future demolition plan of wind farm.
- ◆ **Preliminary research.** The government would consider whether the applicants have started the wind resource assessment and feasibility study design reports.
- ◆ **Dispatched capability.** Evaluation of the applicants' project access system and consumption capacity assessment research program.
- ◆ **Tariff.** Assessment of the applied tariff of applicants.

We believe the new policy issued by NEA shows strong preference for sizable and experienced enterprises in the wind power generation industry; hence, we advise investors to stay with the sizable SOE players.

China's wind power output expanded by 6.3%YoY in 8M19

According to NBS, China wind power output was 22.2 bn kWh in Aug 2019, up13.7%YoY. For 8M19, wind power output was 233.5 bn kWh, up 6.3%YoY. Wind power output rose at 39.5% CAGR in 2008-18, and we believe the upward trend would extend.



National utilization hour would stay at the 2,000-level going forward

We believe industry competition may ease as the government gradually reduces feed-in tariff and raises qualification for tender applicants. Wind power utilization in China has been trending up since 2015. According to China Electricity Council (CEC), utilization hour was 2,095 in 2018, 13% higher than 1,857 in 2017. We believe China's long-term wind power utilization hour would stay at the 2,000-level as wind power curtailment reduces and the number of competitors decreases.

Offshore capacity: A rising trend

China's key wind power resources are located in inland areas (e.g. Inner Mongolia, northwest region); while the key demand for wind power comes from the coastal regions (e.g. Shanghai, Guangdong, etc.). Poor capability to transmit large amount of wind power from distant regions has been the key reason for power curtailment, especially in early years. Construction of offshore wind power capacity can help resolve the power curtailment issue because:

- ◆ **Close proximity to power demand regions reduces the need for distant transfer.** In China, key power demand regions are located in coastal regions such as Shanghai, Guangdong, Zhejiang, etc. Offshore wind power capacity (e.g. wind farms constructed in bodies of water such as the sea) would reduce power curtailment by eliminating the need for long-distance transmission.
- ◆ **Higher wind speed means higher utilization hours.** Wind is affected by geographical features such as mountains and forests, which may slow down wind speed and result in energy loss. Offshore facilities are able to harvest wind resources better due to the lack of geographical obstruction, which in turn support utilization hour.
- ◆ **Greater unit size indicates lower all-in unit cost.** The size of onshore wind turbine is limited by transportation capability (e.g. the size of trucks and roads); average size is restricted at ~ 2.5MW per turbine. Due to the greater transportation capability offshore (ships can transport larger turbines), average size of offshore turbine can reach 5MW. The greater turbine would help lower the all-in unit cost of capacity construction.
- ◆ **Key concern: Higher maintenance cost.** Offshore wind facilities face issues such as salt spray corrosion of sea wind, typhoons, sea ice collision, etc. Therefore, maintenance effort and cost would be higher than onshore ones.

Our stock pick: Longyuan Power (916 HK) and Huaneng Renewables (958 HK)

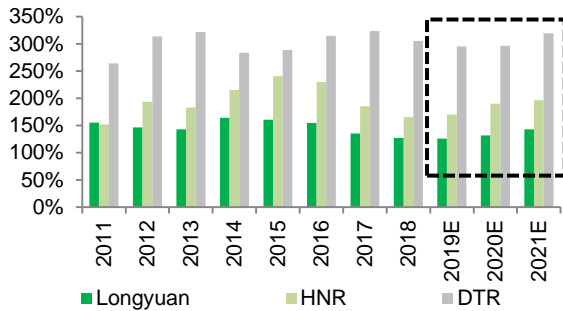
We believe **Longyuan Power (Longyuan, 916 HK)** would outperform in the forthcoming subsidy-free era due to 1). Its higher overall tariff among peers (2018: RMB 0.482/kWh vs. RMB 0.462/kWh for Huaneng Renewables and Datang Renewable); 2) its lowest net gearing ratio among peers; 3).a relatively high utilization hour.

We believe the potential privatization of **Huaneng Renewables (HNR, 958 HK)** is likely to succeed as offering price reaches HK\$ 3.17 (1x 2019E P/B), which implies a 19% upside to the last closing price on 3 Oct.

For **Datang Renewable (DTR, 1798 HK)**, we continue to remain cautious on its high net gearing ratio that could restrain its future development.

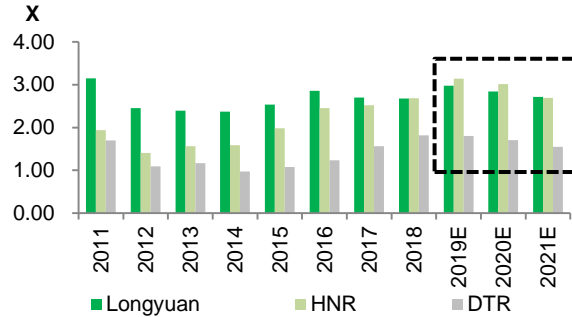


Exhibit 3: Longyuan has the lowest net gearing ratio among peers



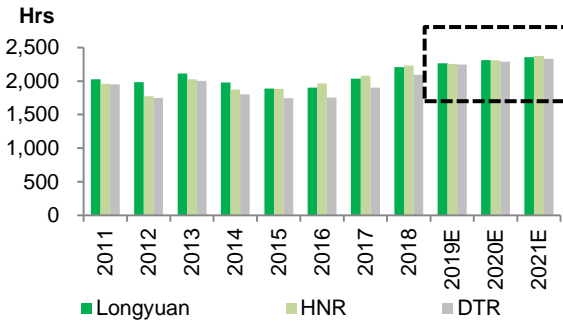
Source(s): Company data, ABCI Securities estimates

Exhibit 4: HNR's higher interest coverage ratio would suggest a lower finance cost



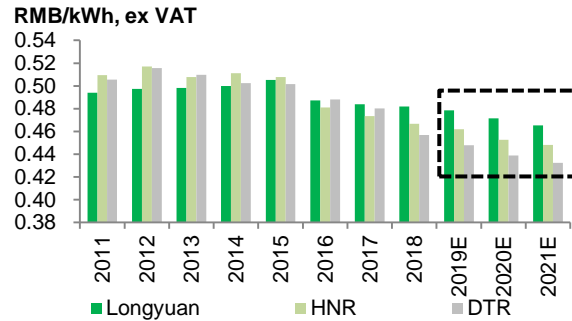
Source(s): Company data, ABCI Securities estimates

Exhibit 5: Longyuan's utilization hour is likely to stay high



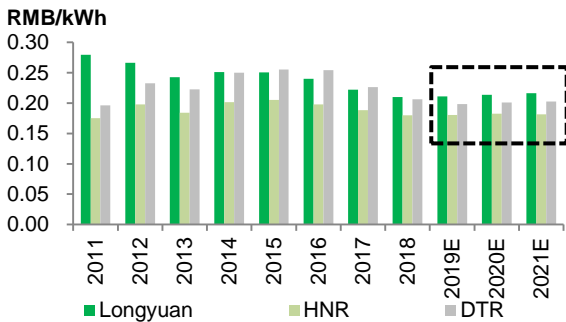
Source(s): Company data, ABCI Securities estimates

Exhibit 6: Longyuan has the highest tariff among peers



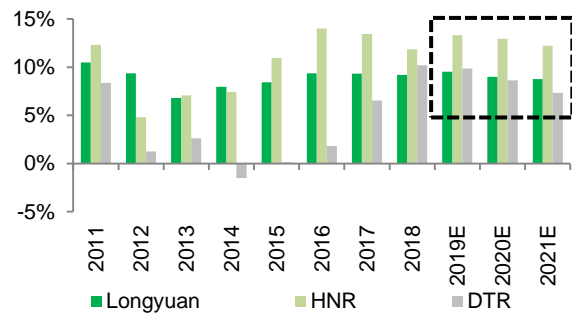
Source(s): Company data, ABCI Securities estimates

Exhibit 7: HNR has the lowest unit operating cost among peers



Source(s): Company data, ABCI Securities estimates

Exhibit 8: HNR has the highest ROAE among peers



Source(s): Company data, ABCI Securities estimates



Challenges in the alternative energy sector

We believe the industry will be facing the following challenges: 1) growth in China's power demand is likely to remain at the mid-single-digit level; 2) safety and reliability of alternative energy production are lower than that of the traditional coal-fired power.

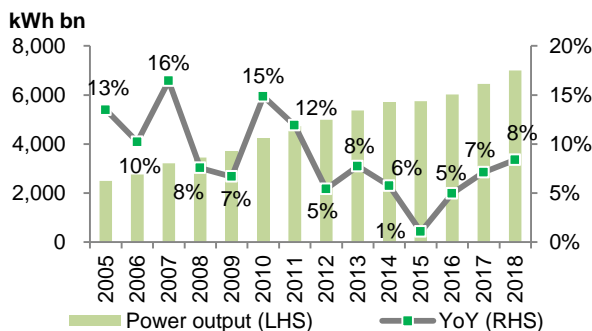
Decelerated national power demand may affect alternative energy development

Slowdown in nationwide power demand may reduce investment in alternative energy as utilization rate decreases. According to the Bloomberg data, China's industrial production growth slowed from 19.2% in Nov 2009 to 4.4% in Aug 2019. Given industrial activities consume ~70% of China's overall power production, we believe slowing industrial production activity growth may lower power demand, which includes alternative energy demand.

Safety and reliability concerns of alternative energy

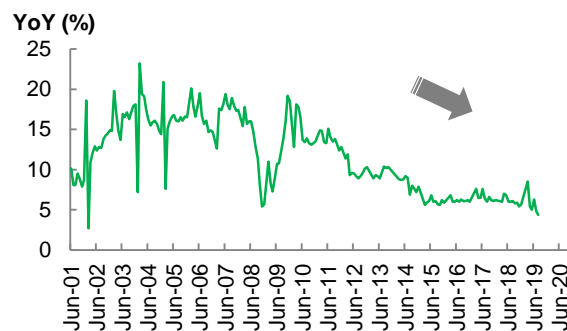
We believe safety and reliability are the main issues constraining the development of alternative energy in China. Nuclear power incidents, such as the Fukushima nuclear accident in Japan in 2011, usually result in widespread panic; increased vigilance and scrutiny over nuclear development plans would delay construction and approval for nuclear facilities. Separately, unstable wind resources, weather affecting sunshine hours, and power curtailment will affect reliability of wind and solar power generations.

Exhibit 9: China's power output would expand at a single-digit level in the next few years



Source(s): NEA, CEC, ABCI Securities

Exhibit 10: China's industrial production activities growth trends down



Source(s): Bloomberg, ABCI Securities

CGN Power (1816 HK / 003816 CH)

Leader in a rapid growing market

- China's strong demand on nuclear power would be a long-term positive to CGN.
- Subsidy cut on renewables has no impact on CGN.
- 8%/8%YoY growth in installed capacity would boost adjusted net profit by 9%/9%YoY in 2019E/20E
- Maintain **BUY** on CGN-H with revised TP of HK\$ 2.45.
- Initiate **HOLD** on CGN-A with TP of HK\$4.00

China's strong demand on nuclear power would be a long-term positive. China's nuclear power grew 15.6% CAGR in 2008-18 while 8M19 output expanded by 22% YoY. We believe the robust demand would persist. CGN, as the largest nuclear power operator in China, would continue to benefit from the rising trend.

Subsidy cut on renewables has no impact on CGN. The subsidy cut has no impact on nuclear power operators since there is no feed-in subsidy for the industry. Nuclear power has a generation cost at RMB0.307/kWh, which is lower than coal-fired power (RMB0.32/kWh).

8%/8%YoY growth in installed capacity for 2019E/20E; adjusted net profit growth would rise by 9%/9%YoY for 2019E/20E. We expect CGN to report 8%/8%YoY growth in installed capacity due to the commencement of Yangjiang Unit 6/Taishan Unit 2 in 2019 and Hongyanhe Unit 5 in 2020, which would add 1,418MW and 1,119MW of new capacity to the existing one. Thanks to the capacity growth and improved utilization hour, we expect adjusted net profit (excluded one-off impairment loss) to increase by 9%/9%YoY in 2019E/20E.

H-share TP at HK\$2.45; maintain BUY. As the industry leader and the only listed nuclear power operator in the H-share market, we believe CGN would benefit immensely from the rise of nuclear power in China. We roll over our valuation to 2020 and our TP, which is partially derived from DCF, is HK\$ 2.45 (previously at HK\$ 2.50), implying 11.6x/10.6x 2019/20E P/E and 1.26x/1.10x 2019/20E P/B. Maintain **BUY**.

A-share TP at RMB4.00; initiate with HOLD. CGN-A is now trading at 39%/55% premium over its closest peer China National Nuclear Power (CNNP, 601985 CH, NR) on the 2019E/20E P/E basis. We believe valuation of its A-share is less attractive than H-share. Initiate with **HOLD**. Our TP of RMB 4.00 implies 20.8x/19.1x 2019/20E P/E and 2.3x/2.0x 2019/20E P/B.

Results and Valuation

FY ended Dec 31	2017A	2018A	2019E	2020E	2021E
Revenue (RMB mn)	45,633	50,828	60,031	70,832	72,849
Chg (% YoY)	38.7	11.4	18.1	18.0	2.8
Adj. net profit (RMB mn)	8,286	8,913	9,711	10,576	10,905
Chg (% YoY)	6.0	7.6	8.9	8.9	3.1
EPS (RMB)	0.182	0.196	0.192	0.209	0.216
Chg (% YoY)	6.0	7.5	-1.9	8.9	3.1
BVPS (RMB)	1.433	1.561	1.765	2.000	2.140
Chg (% YoY)	15.4	8.9	13.1	13.3	7.0
*Net Gearing (%)	205.9	183.4	147.0	123.3	109.6
P/E (x) - H shr	9.75	9.07	9.25	8.49	8.23
P/E (x) - A shr	23.08	21.47	21.88	20.09	19.49
P/B (x) - H shr	1.24	1.14	1.01	0.89	0.83
P/B (x) - A shr	2.93	2.69	2.38	2.10	1.96
ROAE (%)	15.71	12.76	12.11	11.10	10.41
ROAA (%)	2.98	2.41	2.60	2.72	2.72
DPS (HK\$)	0.068	0.072	0.067	0.073	0.075
Yield (%) - H shr	3.82	4.05	3.79	4.12	4.25
Yield (%) - A shr	1.62	1.71	1.60	1.74	1.80

* Net gearing=Net debt/Total equity;

Source(s): Bloomberg, ABCI Securities estimates

Company Report

Oct 4, 2019

Rating (H): BUY
 Rating (A): HOLD
 TP (H): HK\$ 2.45
 TP (A): RMB 4.00

Analyst : Kelvin Ng
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Price (H/A shr)	HK\$ 1.95/ RMB 4.2
Est. price return (H/A shr)	25.6%/(4.8%)
Est. dividend yield (H/A shr)	3.8%/1.6%
Est. total return (H/A shr)	29.4%/(3.2%)
Last Rating & TP (H/A shr)	BUY, HK\$ 2.5 N/A

Previous Report Date Feb 26, 2019

Source(s): Bloomberg, ABCI Securities

Key Data

52Wk H/L (HK\$) (H shr)	2.3/1.7
52Wk H/L (RMB) (A shr)	5.3/3.0
Total issued shares (mn)	50,593
Issued H shr (mn)	11,164
Issued A shr (mn)	5,050
H-shr market cap (HK\$ mn)	21,657
A-shr market cap (RMB mn)	21,210
3-mth avg daily turnover (HK\$ mn) (H shr)	65.6
3-mth avg daily turnover (RMB mn) (A shr)	
Major shareholder(s) :	
CGNPC	64.2%

Source(s): Bloomberg, ABCI Securities

Share Performance H-Share (%)

	Absolute	Relative*
1-mth	(6.28)	(5.22)
3-mth	(12.22)	(5.64)
6-mth	(7.44)	5.50

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

Share Performance A-Share (%)

	Absolute	Relative*
1-mth	(11.76)	(9.25)
3-mth	NA	NA
6-mth	NA	NA

*Relative to SZCOMP

Source(s): Bloomberg, ABCI Securities

1H19 results highlight

1H19 adjusted net profit was up 14%YoY, better than consensus but missed our estimate

1H19 net profit was RMB 5,023mn, (+10%YoY); however, netting out exchange loss and impairment loss, adjusted net profit was RMB 4,965mn (+14%YoY), representing 54%/51% of Bloomberg's and our full-year estimates. Historically, 1H earnings contributed to ~ 52% of CGN's full-year earnings on average. This set of results is better than market expectation but slightly below our forecast.

Power output boosted by commencement of Taishan power plant

Power output grew 12% YoY in 1H19 due to the commencement of Taishan Unit 1 and Yangjiang Unit 5. These plants also raised CGN's installed capacity by 13% YoY. As nuclear power plants usually need to operate for six months before reaching their full utilization rate. We believe these newly-added units would drive revenue further in 2019.

2019/20 outlook

8%/8%YoY growth in installed capacity for 2019E/20E

We expect CGN to report 8%/8%YoY growth in installed capacity due to the commencement of Yangjiang Unit 6/Taishan Unit 2 in 2019, and Hongyanhe Unit 5 in 2020, which would add 1,418MW and 1,119MW of new capacity to CGN after commencing in 2019 and 2020.

Nationwide demand for nuclear power would remain robust; 10%/14%YoY power output growth in 2019E/20E

According to NBS, China's nationwide nuclear power output in 8M19 grew 21.9% YoY, the sharpest increase among all energy sources in China; energy output in the country edged up 2.8% YoY during the period. Nuclear power is a preferred energy source because of its 1).clean nature; 2) low production cost, which renders it a feasible alternative to coal-fired power. We forecast CGN's power output would expand by 10%/14%YoY in 2019E/20E.

Impact of subsidy cut - none

Generation cost for nuclear power is relatively cheap at ~RMB 0.307/kWh, lower than the coal-fired power cost of RMB 0.32/kWh. China's moves to reduce and eventually cancel subsidy on alternative energy sources such as wind, solar, biomass, etc. would have no impact on nuclear power players since the sector has no feed-in tariff to begin with.

Net gearing ratio would improve; cash flow in 2019E/20E would be positive

Given most of CGN's projects have already entered the final construction stages, we believe CAPEX would not increase significantly in the next few years. In addition, existing operating projects would continue to generate cash flow and recent A-share listing of the Group has elevated the capital level, which in turn would improve net gearing ratio. We expect CGN's 2019E/20E net gearing ratio to trend down to 147%/123%.

Adjusted net profit growth at 9%/9%YoY for 2019E/20E, thanks to improvement in capacity and utilization hour

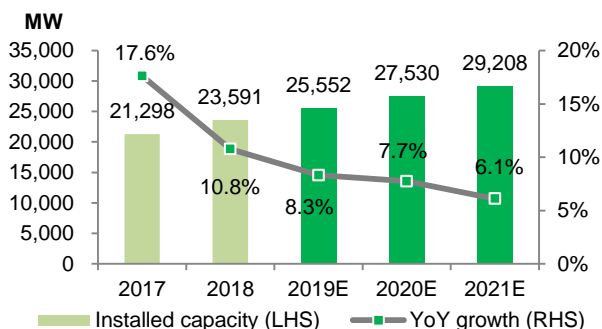
We believe CGN would continue to benefit from high demand for nuclear power. With installed capacity expanding by 8%/8%YoY and utilization hour rising by 3%/3%YoY in 2019E/20E, adjusted net profit would increase by 9%/9% YoY.

H-share (1816 HK) TP at HK\$2.45; maintain BUY

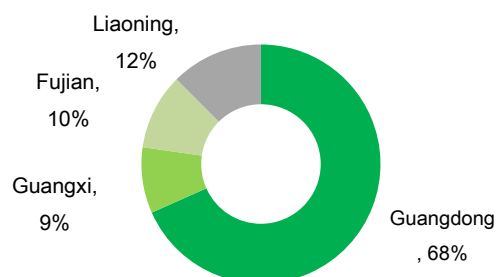
We roll over our valuation to 2020 and our TP, which is partially derived from DCF, is HK\$ 2.45 (previously at HK\$ 2.50), implying 11.6x/10.6x 2019/20E P/E and 1.26x/1.10x 2019/20E P/B. Maintain **BUY**. Being the industry leader and the only listed nuclear power operator in the H-share market, we believe CGN would benefit immensely from the rise of nuclear power in China. In addition, the stock is now trading with a dividend yield of 3.7%/4.0% based on our estimates, which is attractive amid slowdown in China's economy growth.

A-share (003816 CH) TP at RMB 4.00; initiate with HOLD

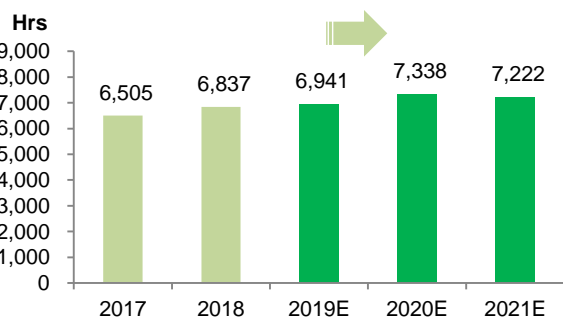
We initiate our average on CGN-A with TP of RMB 4.00, which implies 20.8x/19.1x 2019/20E P/E and 2.3x/2.0x 2019/20E P/B based on our estimate. Unlike H-share, CGN's A-share is trading at 22x/20x 2019E/20E P/E and has a 39%/55% premium over its closest peer China National Nuclear Power (CNNP, 601985 CH, NR). We believe valuation of CGN-A is less attractive than CGN-H and advise investors to focus on the latter.

Exhibit 11: CGN's attributable nuclear power capacity outlook


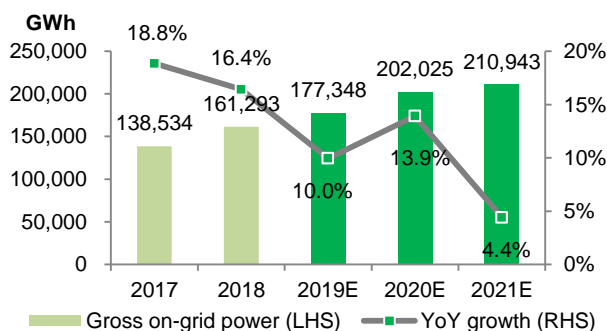
Source(s): Company, ABCI Securities estimates

Exhibit 12: CGN's capacity location by provinces (2018)


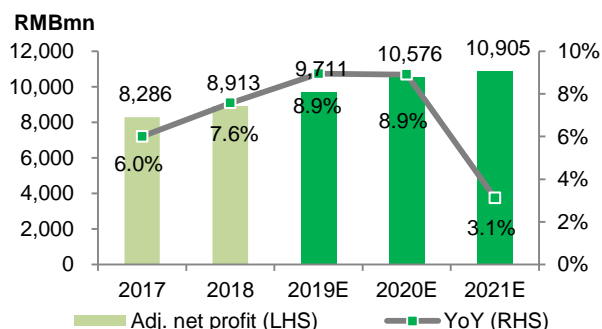
Source(s): Company, ABCI Securities

Exhibit 13: CGN's utilization hour would stay at above 7,000 going forward


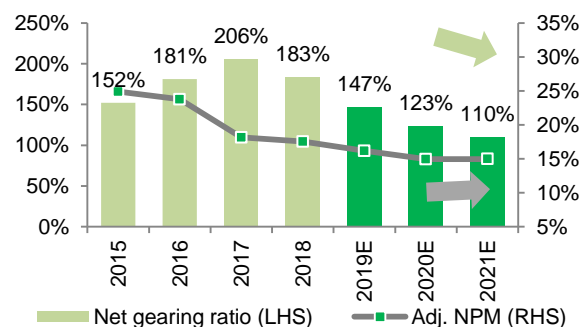
Source(s): Company, ABCI Securities estimates

Exhibit 14: CGN's gross power output outlook


Source(s): Company, ABCI Securities estimates

Exhibit 15: CGN's adjusted net profit growth outlook


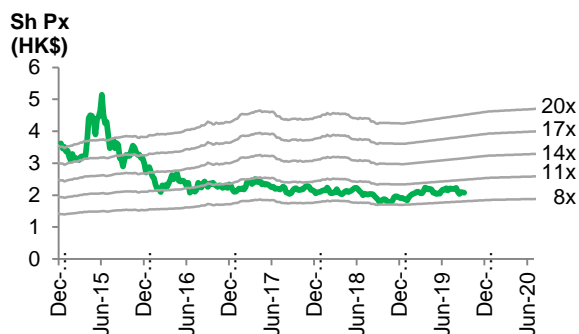
Source(s): Company, ABCI Securities estimates

Exhibit 16: CGN's net gearing ratio would continue to trend down


Source(s): Company, ABCI Securities estimates

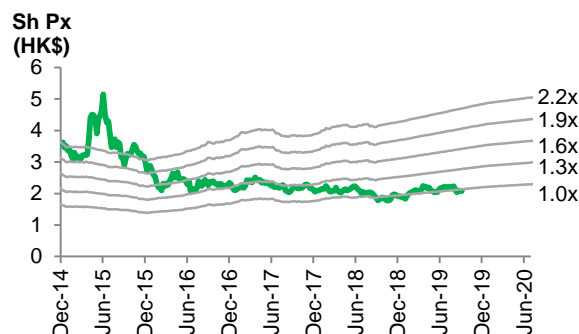


Exhibit 15: CGN-H's fwd P/E chart



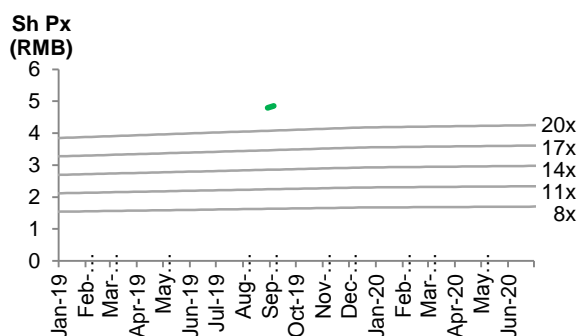
Source(s): Bloomberg, ABCI Securities estimates

Exhibit 16: CGN-AHs fwd P/B chart



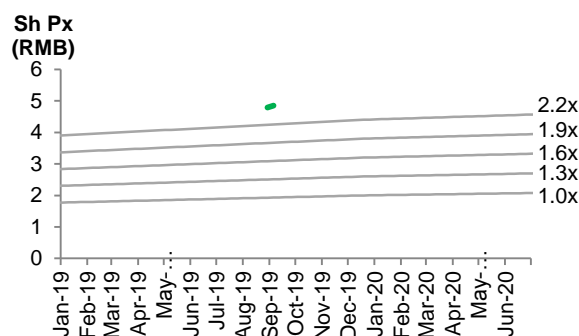
Source(s): Bloomberg, ABCI Securities estimates

Exhibit 17: CGN-A's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 18: CGN-A's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



農銀國際

ABC INTERNATIONAL

ABC SECURITIES COMPANY LIMITED

CGN Power (1816 HK, BUY / 003816 CH; HOLD)

China Alternative Energy Sector- NEUTRAL

Oct 4, 2019

CGN Power (1816 HK, BUY; 003816 CH, HOLD)

Consolidated income statement

FY Ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Revenue	45,633	50,828	60,031	70,832	72,849
Electricity	41,543	46,072	52,087	59,583	59,618
Service revenue	2,680	3,179	5,721	8,582	10,299
Other	687	856	1,284	1,540	1,694
Cost of sales	(25,813)	(29,137)	(35,375)	(41,505)	(43,443)
Gross Profit	19,821	21,691	24,656	29,327	29,406
SG&A expenses	(2,375)	(2,465)	(3,122)	(3,683)	(3,788)
Net financial income (cost)	(5,898)	(5,689)	(6,853)	(9,195)	(8,978)
Other income/ (expenses)	2,620	1,362	2,561	2,991	3,407
Profit before tax	14,168	14,899	17,242	19,441	20,046
Tax	(1,444)	(1,218)	(2,069)	(2,916)	(3,007)
Profit after tax	12,724	13,682	15,173	16,524	17,039
Profit attributable to:					
Minority interest	3,160	4,979	5,462	5,949	6,134
Equity shareholders of the Company	9,564	8,703	9,711	10,576	10,905
Adj. equity shareholders of the Company	8,286	8,913	9,711	10,576	10,905
Basic EPS (RMB)	0.210	0.191	0.192	0.209	0.216
Adj. basic EPS (RMB)	0.182	0.196	0.192	0.209	0.216
DPS (RMB)	0.068	0.072	0.067	0.073	0.075

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet

As of Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Current assets	52,420	55,388	57,164	70,245	68,751
Cash	12,387	15,208	13,283	22,799	21,326
Pledged and restricted bank deposits	0	0	0	0	0
Trade and bill receivables	6,448	6,649	9,797	9,609	10,350
Other receivables and prepayments	7,489	6,037	8,936	8,404	9,378
Inventories	19,739	21,372	25,148	29,434	27,697
Other current assets	6,357	6,122	0	0	0
Non-current assets	301,841	313,168	320,604	330,380	332,903
Property, plant & equipment	159,147	210,850	219,801	226,392	227,066
Investment properties	240	210	210	210	210
Intangible assets	5,001	5,139	4,794	4,861	4,920
Investment in JV and associates	8,495	10,203	11,563	13,138	15,088
Deferred tax assets	1,587	1,775	1,775	1,775	1,775
Other non-current assets	127,371	84,990	82,460	84,004	83,843
Total Assets	354,261	368,556	377,768	400,625	401,654
Current Liabilities	56,942	60,625	44,889	50,829	45,897
Trade and bill payables	17,345	18,247	18,582	24,629	20,599
Other payables	7,877	6,819	1,429	1,433	1,429
Short term borrowings	30,464	34,589	24,875	24,763	23,866
Other current assets	1,256	970	3	3	3
Non-current liabilities	196,022	194,805	196,100	195,194	187,931
Deferred tax liabilities	1,208	1,177	1,177	1,177	1,177
Long-term borrowings	190,508	188,128	189,525	188,619	181,357
Other non-current assets	4,306	5,500	5,397	5,397	5,397
Total Liabilities	252,964	255,430	240,988	246,023	233,828
Minority interests	36,051	42,011	47,473	53,422	59,556
Shareholders' equities	65,246	71,115	89,307	101,181	108,269

Source(s): Company, ABCI Securities estimates



Consolidated cash flow statement

FY ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Profit before tax	13,841	14,899	17,242	19,441	20,046
Change in depreciation and amortization	7,186	9,194	9,261	9,771	10,115
Change in Working Capital	3,658	575	(9,827)	2,487	(4,013)
Net financial cost (income)	6,080	5,689	6,853	9,195	8,978
Income tax paid	(1,324)	(1,444)	(1,218)	(2,069)	(2,916)
Net interest received	0	0	0	0	0
Others	(2,644)	(504)	(1,360)	(1,575)	(1,950)
Operating cash flow	26,797	28,410	20,951	37,249	30,261
CAPEX	(18,319)	(15,058)	(17,739)	(15,855)	(10,246)
Increase in intangible assets	(704)	(354)	(547)	(574)	(603)
Others	(5,504)	(970)	274	239	410
Investing cash flow	(24,527)	(16,382)	(18,013)	(16,190)	(10,438)
Net Capital raise	0	0	12,669	0	0
Net debt financing	8,317	33,220	(8,317)	(1,017)	(8,160)
Dividend payout	(4,669)	(3,091)	(3,272)	(3,399)	(3,701)
Interest paid	(10,001)	(6,105)	(5,944)	(7,127)	(9,434)
Others	6,103	(34,935)	0	0	0
Financing cash flow	(250)	(10,910)	(4,864)	(11,543)	(21,295)
Net change in cash	2,020	1,118	(1,925)	9,516	(1,473)
Cash at the beginning	8,457	12,387	15,208	13,283	22,799
Adjustment (Time deposit & FX effect)	1,911	1,704	0	0	0
Cash at the end	12,387	15,208	13,283	22,799	21,326

Source(s): Company, ABCI Securities estimates

Key ratio

FY ended Dec 31	2017A	2018A	2019E	2020E	2021E
Sales mixed (%)					
Electricity	91.04	90.64	86.77	84.12	81.84
Service revenue	5.87	6.25	9.53	12.12	14.14
Other	3.09	3.10	3.70	3.76	4.03
Total	100.0	100.0	100.0	100.0	100.0
Profit & loss ratios (%)					
Gross margin	43.43	42.68	41.07	41.40	40.37
Operating profit margin	39.85	38.90	37.87	38.20	37.17
Pre-tax margin	31.05	29.31	28.72	27.45	27.52
Net profit margin	27.88	26.92	25.28	23.33	23.39
Selling & administrative expenses/revenue	5.20	4.85	5.20	5.20	5.20
Effective tax rate	10.19	8.17	12.00	15.00	15.00
Growth (%)					
Revenue	38.74	11.38	18.11	17.99	2.85
Gross profit	38.06	9.44	13.67	18.95	0.27
Operating profit	43.48	8.71	15.00	19.03	0.05
Net profit	42.57	7.52	10.90	8.91	3.12
Balance sheet ratios					
Current ratio (x)	0.92	0.91	1.27	1.38	1.50
Quick ratio (x)	0.33	0.36	0.51	0.64	0.69
Cash ratio (x)	0.22	0.25	0.30	0.45	0.46
Trade and bill receivables days	48.73	47.03	50.00	50.00	50.00
Trade and bill payables turnover days	259.05	222.93	190.00	190.00	190.00
Inventory turnover days	232.45	257.50	240.00	240.00	240.00
Total debt / equity ratio (%)	338.67	313.18	240.07	210.89	189.55
Net debt / equity ratio (%)	205.91	183.43	147.04	123.27	109.58
Returns (%)					
ROAA	2.98	2.41	2.60	2.72	2.72
ROAE	15.71	12.76	12.11	11.10	10.41
Payout ratio	32.31	37.60	35.00	35.00	35.00

Source(s): Company, ABCI Securities estimates

Longyuan Power (916 HK)

The alpha wind power operator

- Subsidy cut and tightened tender requirement would benefit industry leader such as Longyuan
- 0.8%/1.8%YoY drop in Longyuan's wind power tariff in 2019E/20E - the lowest decline among peers
- 9%/11%YoY growth in wind power capacity in 2019E/20E would fuel earnings growth
- Maintain **BUY** with TP of HK\$ 5.30, implying 8.5x/8.1x 2019E/20E P/E and 0.75x/0.70x 2017E/18E P/B

Subsidy cut and tightened tender requirement would benefit industry leader. NDRC's subsidy cut would discourage newcomers for the industry due to the substantial drop in wind power tariff post-2020/21. Tightened tender requirement by NEA would mean small players would find it increasingly harder to compete with sizeable industry leaders.

0.8%/1.8%YoY drop in wind power tariff in 2019E/20E - the lowest decline among peers. Impending subsidy cut will only be applicable to new capacity to be approved and commenced operation after 2020 while old capacity would enjoy the old tariff rate. Blended tariff of Longyuan, who has the longest history in China's wind power industry, would continue to be the highest among peers. Under our estimate, Longyuan's overall wind power tariff would fall by 0.8%/1.8% YoY in 2019E/20E, which represents the slightest decline among peers (HNR: -1%/-2%YoY for 2019E/20E; DTR: -2%/-2% for 2019E/20E).

9%/11%YoY growth in wind power capacity in 2019E/20E. We believe Longyuan would accelerate its wind power capacity construction as the subsidy cut is applicable to capacity approved and commencing after 2020. The Group would add 1.6GW/2.3GW of new capacity in 2019E/20E, representing 9%/11%YoY growth in total wind power capacity. A solid capacity growth would help support earnings growth.

TP at HK\$5.30; maintain BUY. We roll over our valuation to 2020 and our DCF-based TP is HK\$5.30 (previously at HK\$ 7.50), which implies 8.5x/8.1x 2019/20E P/E and 0.75x/0.70x 2019E/20E P/B. The subsidy-free policy will affect all power operators, including Longyuan. We trim our overall tariff assumptions by 0.5%/1.0% for 2020E/21E. Longyuan, as the industry leader, would benefit from new policies eliminating smaller and less competitive operators. Maintain **BUY**.

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

Results and Valuation

FY ended Dec 31	2017A	2018A	2019E	2020E	2021E
Revenue (RMB mn)	24,592	26,388	27,796	30,476	33,166
Chg (% YoY)	10.3	7.3	5.3	9.6	8.8
Net profit (RMB mn)	3,688	3,924	4,562	4,813	5,035
Chg (% YoY)	8.0	6.4	16.3	5.5	4.6
EPS (RMB)	0.472	0.552	0.568	0.599	0.627
Chg (% YoY)	14.5	17.0	2.8	5.5	4.6
BVPS (RMB)	5.118	5.506	6.416	6.895	7.396
Chg (% YoY)	8.5	7.6	16.5	7.5	7.3
P/E (x)	8.47	7.23	7.04	6.67	6.38
P/B (x)	0.78	0.73	0.62	0.58	0.54
ROAE (%)	9.33	9.19	9.52	9.00	8.77
ROAA (%)	2.59	2.69	2.93	2.79	2.63
DPS (RMB)	0.092	0.098	0.114	0.120	0.125
Yield (%)	2.30	2.45	2.84	3.00	3.14
Net gearing (%)	135.6	127.0	125.9	132.0	143.2

Source(s): Bloomberg, ABCI Securities estimates

Company Report

Oct 4, 2019

Rating: **BUY**

TP: **HK\$ 5.30**

Analyst : Kelvin Ng
Tel: (852) 2147 8869
kelvinn@abci.com.hk

Share price (HK\$)	4.39
Est. share price return	20.7%
Est. dividend yield	2.8%
Est. total return	23.6%
Previous Rating	BUY
Previous Report Date	Feb 26, 2019

Source(s): Bloomberg, ABCI Securities

Key Data

52Wk H/L(HK\$)	6.8/4.0
Issued shares (mn)	8,036
Issued H-shares (mn)	3,340
Market cap (HK\$ mn)	36,324
H-share Market cap (HK\$ mn)	15,097
3-mth avg daily turnover(HK\$ mn)	61
Major shareholder(s) (%)	
Guodian Corp.	57.3%

Source(s): Company, ABCI Securities

Share Performance (%)

	Absolute	Relative*
1-mth	2.73	3.79
3-mth	(12.74)	(6.17)
6-mth	(15.47)	(2.52)

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

1-Year share price performance(HK\$)



Source(s): Bloomberg, ABCI Securities

1H19 results highlight

Earnings edged up 0.5%YoY, beat consensus but lower than our estimate

Longyuan's 1H19 net profit was RMB 3,087mn (+0.5%YoY), which was 4.6% lower than Bloomberg consensus (2 observations), achieving 64%/60% of Bloomberg and our full-year estimates. Historically, 1H earnings contributed to ~62% of Longyuan's full-year earnings on average. This set of results is better than market expectation but slightly below our forecast.

Wind capacity growth at 3% YoY in 1H19 was mainly due to deleveraging; expansion should pick up in 2H

Wind power capacity only grew 3%YoY because of deleveraging, but we believe Longyuan would ramp up capacity in 2H19, 2020 and 2021 as the government will eliminate subsidy by end-2020 and end-2021.

1%YoY decrease in utilization hour due to poor wind resource in China

Longyuan recorded 1,172 in utilization hour for 1H19, down 1% YoY, mainly due to poor wind resource during the period. We believe this situation would improve in Sep-Dec, which is usually the peak season for wind power operators.

Net gearing ratio continues to improve on deleveraging across China

Longyuan's net gearing ratio was 128% in 1H19, down 5ppt from 133% by end-2018. The trend of deleveraging has been obvious, as evidenced by the Group's falling net gearing ratio from 164% in 2014, 161% in 2015, 155% in 2016, 136% in 2017 and 127% in 2018.

2019 /20 outlook

9%/11%YoY growth in wind power capacity for 2019E/20E

As mentioned, China's wind power industry will enter the subsidy-free era, of which new wind power capacity to be completed after 2020 would not enjoy any subsidy paid by the government. We believe the Group to ramp up capacity expansion to take advantage of the tariff before the deadline approaches. In our estimate, 1.6GW/2.3GW of new capacity would be added in 2019/20E, representing 9%/11%YoY growth.

Utilization hour to stay high at 2,316/2,402hrs in 2019E/20E

We believe the new "subsidy-free" policy would reduce the number of wind power operators by eliminating the less competitive ones. This should ease on-grid dispatch and reduce power curtailment. In addition, the government's continuous investment in power grid capability and policies deployed to restrain coal-fired power development would also help improve utilization hour of wind power operators. Given Longyuan's leading position in the industry (controls 10% of China's operating wind power capacity in 2018), its utilization hour is likely to stay high at 2,316/2,402hrs level, up 5%/4%YoY in 2019E/20E.

0.8%/1.8%YoY decline in Longyuan's wind power tariff in 2019E/20E due to new policy

According to the government's subsidy-free policy, benchmark wind power tariff (Type 4) would decrease by 9%/10%YoY in 2019/20, respectively. The new tariff is applicable to new capacity commencing operation after 2020 while existing capacity would enjoy the previous tariff level. Therefore, we expect the negative impact on Longyuan's overall tariff would be limited since new capacity only accounts for ~15% of the Group's existing capacity. In our estimates, Longyuan's overall wind power tariff, which would decline by 0.8%/1.8%YoY in 2019E/20E, would still be the highest among peers (2019E: RMB 0.479/kWh excl. VAT vs. the avg. of RMB 0.455/kWh in the two other companies).

Adjusted net profit growth of 3%/6%YoY in 2019E/20E

We believe Longyuan would benefit from 9%/11%YoY capacity growth in 2019/20E on the back of the subsidy-free policy after 2020 and higher utilization hour. We expect net profit to increase by 16%/6%YoY for 2019/20E, and adjusted net profit (excl. one-off impairment loss impact) would be up by 3%/6%YoY for the same period.

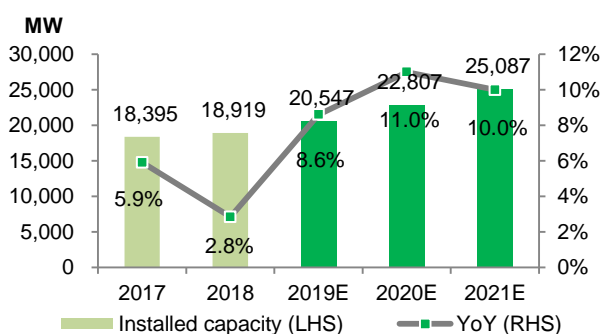
Two new policies should benefit the industry leader the most

The subsidy-free tariff policy and the more stringent requirements for project tender applicants would benefit large operators by raising the hurdle for potential entrants. Longyuan has the highest overall wind power tariff among peers (due to Longyuan's existing facilities which enjoy higher tariff set in the past), which would provide more margin buffer when bidding for new projects with less or no feed-in tariff. Its long experience in wind power industry would also increase its chance of winning new projects.

TP at HK\$ 5.30; maintain BUY

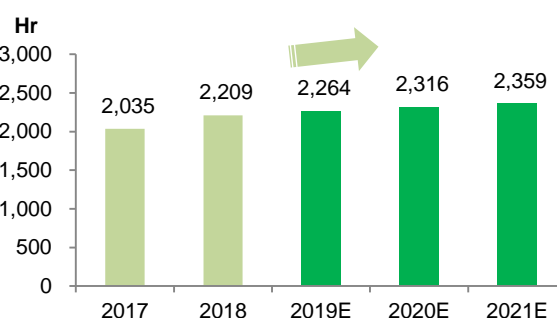
We roll over our valuation to 2020 and our DCF-based TP is HK\$ 5.30 (previously at HK\$ 7.50), which implies 8.5x/8.1x 2019/20E P/E and 0.75x/0.70x 2019E/20E P/B. We believe subsidy-free policy would have material negative impacts on wind power operators, including Longyuan. We trim our overall tariff assumptions by 0.5%/1.0% for 2020E/21E. Yet, we believe Longyuan, as the industry leader, would benefit the most from the new policies since small and less competitive operators would be eliminated. Maintain **BUY**.

Exhibit 19: Longyuan's wind power installed capacity outlook



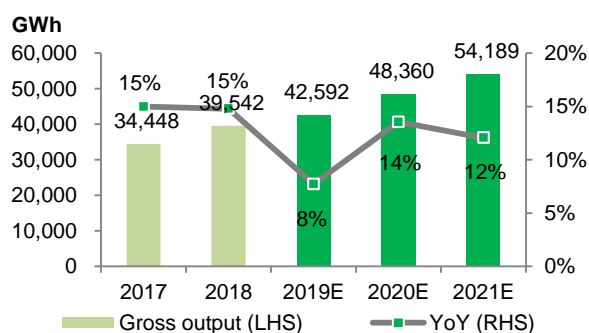
Source(s): Company, ABCI Securities estimates

Exhibit 20: Longyuan's utilization hour outlook



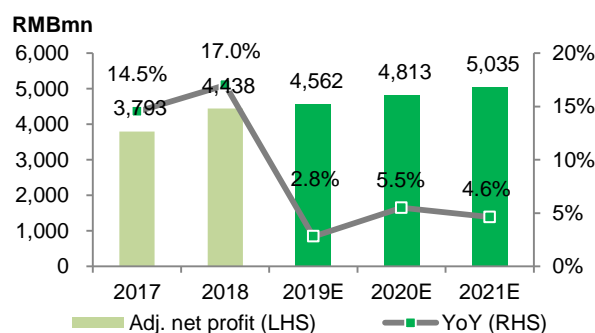
Source(s): Company, ABCI Securities estimates

Exhibit 21: Longyuan's wind power output outlook



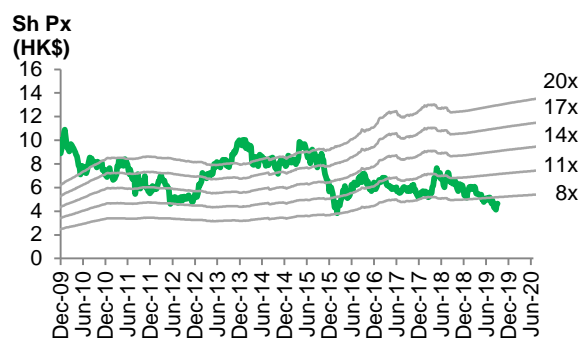
Source(s): Company, ABCI Securities estimates

Exhibit 22: Longyuan's net profit growth outlook



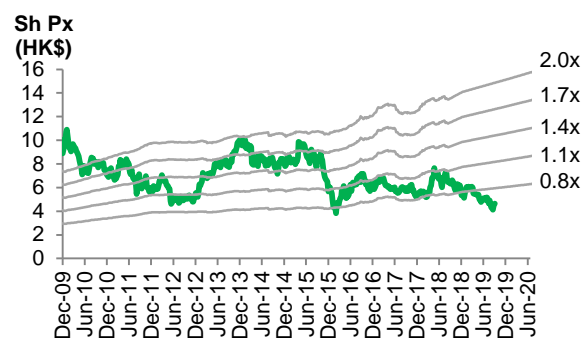
Source(s): Company, ABCI Securities estimates

Exhibit 23: Longyuan's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 24: Longyuan's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



Longyuan Power (916 HK, BUY)

Consolidated income statement

FY Ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Revenue	24,592	26,388	27,796	30,476	33,166
Wind power	15,998	18,410	19,699	22,030	24,363
Coal-fire power	7,075	6,366	6,401	6,574	6,757
Other	1,518	1,612	1,696	1,871	2,046
Cost of sales	(15,641)	(16,002)	(16,976)	(18,773)	(20,598)
Gross Profit	8,950	10,386	10,820	11,703	12,568
SG&A expenses	(542)	(588)	(584)	(640)	(696)
Net financial income (cost)	(3,215)	(3,513)	(3,490)	(3,954)	(4,442)
Other income/ (expenses)	272	(388)	167	183	199
Profit before tax	5,465	5,897	6,913	7,292	7,629
Tax	(916)	(976)	(1,210)	(1,276)	(1,335)
Profit after tax	4,550	4,921	5,703	6,016	6,294
Profit attributable to:					
Minority interest	704	755	855	902	944
Perpetual medium-term note holders	158	242	285	301	315
Equity shareholders of the Company	3,688	3,924	4,562	4,813	5,035
Basic EPS (RMB)	0.472	0.552	0.568	0.599	0.627
DPS (RMB)	0.092	0.098	0.114	0.120	0.125

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet

As of Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Current assets	17,122	17,786	21,614	20,791	25,435
Cash	5,072	2,861	2,977	2,753	3,670
Pledged and restricted bank deposits	33	253	253	253	253
Trade and bill receivables	7,155	10,542	15,351	13,037	17,857
Other receivables and prepayments	3,629	2,819	1,751	3,259	2,193
Inventories	953	852	822	1,029	1,002
Other current assets	280	460	460	460	460
Non-current assets	128,513	128,718	142,810	160,377	176,965
Property, plant & equipment	109,473	110,001	121,671	139,708	156,761
Investment properties	10	10	10	10	10
Intangible assets	8,754	8,171	7,929	7,689	7,451
Investment in JV and associates	4,472	4,549	4,716	4,899	5,098
Deferred tax assets	171	146	146	146	146
Other non-current assets	5,633	5,841	8,338	7,925	7,499
Total Assets	145,635	146,504	164,424	181,169	202,400
Current Liabilities	47,159	39,780	49,943	56,430	64,004
Trade and bill payables	1,891	2,059	2,127	2,502	2,577
Other payables	9,448	9,332	9,692	11,300	11,692
Short term borrowings	35,774	28,336	38,124	42,628	49,735
Other current assets	46	54	0	0	0
Non-current liabilities	45,176	50,158	49,748	55,253	63,939
Deferred tax liabilities	162	164	164	164	164
Long-term borrowings	41,620	46,645	46,596	52,101	60,787
Other non-current assets	3,394	3,349	2,988	2,988	2,988
Total Liabilities	92,336	89,939	99,691	111,683	127,942
Minority interests	7,173	7,329	8,185	9,087	10,031
Perpetual medium-term note	4,991	4,991	4,991	4,991	4,991
Shareholders' equities	41,135	44,245	51,557	55,408	59,436

Source(s): Company, ABCI Securities estimates



Consolidated cash flow statement

FY ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Profit before tax	5,465	5,897	6,913	7,292	7,629
Change in depreciation and amortization	6,798	7,286	8,360	9,592	10,834
Change in Working Capital	(2,221)	(1,078)	(3,283)	2,581	(3,260)
Net financial cost (income)	2,983	3,267	3,615	3,486	3,961
Income tax paid	(780)	(1,106)	(976)	(1,210)	(1,276)
Net interest received	0	0	0	0	0
Others	(115)	(10)	(167)	(183)	(199)
Operating cash flow	12,131	14,255	14,463	21,559	17,690
CAPEX	(9,104)	(8,720)	(19,533)	(27,122)	(27,368)
Increase in intangible assets	0	0	(255)	(268)	(281)
Others	491	87	212	109	113
Investing cash flow	(8,614)	(8,633)	(19,577)	(27,280)	(27,536)
Net Capital raise	0	0	0	0	0
Net debt financing	3,564	(2,606)	9,739	10,009	15,792
Dividend payout	(1,297)	(1,289)	(785)	(912)	(963)
Interest paid	(2,938)	(3,592)	(3,724)	(3,599)	(4,067)
Others	318	(315)	0	0	0
Financing cash flow	(352)	(7,802)	5,230	5,498	10,763
Net change in cash	3,165	(2,179)	116	(224)	917
Cash at the beginning	1,905	5,072	2,861	2,977	2,753
Adjustment (Time deposit & FX effect)	2	(31)	0	0	0
Cash at the end	5,072	2,861	2,977	2,753	3,670

Source(s): Company, ABCI Securities estimates

Key ratio

FY ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Sales mixed (%)					
Wind power	65.06	69.77	70.87	72.29	73.46
Coal-fire power	28.77	24.13	23.03	21.57	20.37
Other	6.17	6.11	6.10	6.14	6.17
Total	100	100	100	100	100
Profit & loss ratios (%)					
Gross margin	36.40	39.36	38.93	38.40	37.89
Operating profit margin	34.33	36.97	36.83	36.30	35.79
Pre-tax margin	22.22	22.35	24.87	23.93	23.00
Net profit margin	18.50	18.65	20.52	19.74	18.98
Selling & administrative expenses/revenue	2.20	2.23	2.10	2.10	2.10
Effective tax rate	16.75	16.55	17.50	17.50	17.50
Growth (%)					
Revenue	10.26	7.30	5.34	9.64	8.83
Gross profit	14.04	16.04	4.18	8.16	7.39
Operating profit	13.40	15.57	4.92	8.08	7.31
Net profit	1.34	8.16	15.89	5.49	4.62
Balance sheet ratios					
Current ratio (x)	0.36	0.45	0.43	0.37	0.40
Quick ratio (x)	0.26	0.34	0.37	0.28	0.34
Cash ratio (x)	0.11	0.08	0.06	0.05	0.06
Trade and bill receivables days	96.89	122.39	170.00	170.00	170.00
Trade and bill payables turnover days	51.81	45.05	45.00	45.00	45.00
Inventory turnover days	23.26	20.59	18.00	18.00	18.00
Total debt / equity ratio (%)	188.15	169.47	164.32	170.97	185.95
Net debt / equity ratio (%)	135.63	127.05	125.89	132.00	143.17
Returns (%)					
ROAA	2.59	2.69	2.93	2.79	2.63
ROAE	9.33	9.19	9.52	9.00	8.77
Payout ratio	20.00	20.01	20.00	20.00	20.00

Source(s): Company, ABCI Securities estimates

Huaneng Renewables (958 HK)

Privatization is positive; upgrade to BUY

- Potential privatization is likely to go through as HNR offers HK\$3.17/shr, which implies a 19% upside to the last closing price
- 10%/16%YoY growth in wind power capacity in 2019E/20E driven by subsidy cut by end-2020.
- Adjusted net profit growth would be 11%/9%YoY in 2019E/20E on capacity growth and higher utilization hours
- Upgrade to **BUY** with TP of HK\$ 3.17, which implies 7.9x/7.2x 2019/20E P/E and 1.00x/0.89x 2019/20E P/B

Potential privatization- a share price catalyst. HNR announced on Sep 2 that its parent company would initiate process to privatize its H-Shares. HNR was trading at 0.63x/0.57x 2019/20E P/B (\$2.17 on Aug 31, 2019). HNR would be privatized at HK\$3.17, implies 1.0x 2019E P/B, suggesting a 19% upside from the last closing price on Oct 3. We estimate the privatization is likely to be approved given 4606mn of H-shares (out of 5031mn of outstanding H-shares issued on IPO and three new share placements) were issued at HK\$ 2.54 on average. The offering price of HK\$3.17 suggests a 25% upside, which should appeal to shareholders in our view.

10%/16%YoY growth in installed capacity. We believe HNR is likely to report strong growth in installed capacity for 2019E/20E to avoid subsidy cut. We expect 1.1GW/1.9GW of new installed capacity in 2019E/20E, representing 10%/16%YoY growth in total installed capacity. The expansion should drive earnings.

Adjusted net profit to increase by 11%/9%YoY for 2019E/20E. While subsidy cut would have negative impacts on HNR's earnings, the Group is likely to report the strongest wind power capacity growth in 2019E/20E among peers (10%/16% vs. peer average of 8%/11%) with higher utilization hours during the period. We expect adjusted 2019E/20E earnings would increase by 11%/9%YoY (excluded one-off impairment loss).

TP at HK\$3.17; upgrade to BUY. We roll over our valuation to 2020 and our DCF-based TP is HK\$ 3.17 (previously at HK\$ 2.70), which implies 7.9x/7.2x 2019/20E P/E and 1.00x/0.89x 2019E/20E P/B. We believe the privatization is likely to go through as offering price reach HK\$ 3.17 (1x 2019E P/B). Privatization offering price would offer a 21% upside to shareholders at based on the last closing price. Upgrade to **BUY**.

Results and Valuation

FY ended Dec 31	2017A	2018A	2019E	2020E	2021E
Revenue (RMB mn)	10,554	11,650	12,719	14,624	16,555
Chg (% YoY)	14.2	10.4	9.2	15.0	13.2
Net profit (RMB mn)	3,012	3,086	3,879	4,222	4,440
Chg (% YoY)	13.3	2.5	25.7	8.8	5.2
EPS (RMB)	0.315	0.332	0.367	0.400	0.420
Chg (% YoY)	15.2	5.4	10.7	8.8	5.2
BVPS (RMB)	2.400	2.594	2.882	3.228	3.586
Chg (% YoY)	15.9	8.1	11.1	12.0	11.1
P/E (x)	7.72	7.32	6.62	6.08	5.78
P/B (x)	1.01	0.94	0.84	0.75	0.68
ROE (%)	13.46	11.87	13.41	13.08	12.34
ROA (%)	3.51	3.53	4.12	3.84	3.48
DPS (RMB)	0.044	0.044	0.055	0.060	0.063
Yield (%)	1.82	1.81	2.27	2.47	2.60
Net gearing (%)	185.7	165.7	172.0	191.6	198.3

Source(s): Bloomberg, ABCI Securities estimates

Company Report

Oct 4, 2019

Rating: BUY
TP: HK\$ 3.17

Analyst : Kelvin Ng
 Tel: (852) 2147 8869
 kelvinng@abci.com.hk

Share price (HK\$)	2.67
Est. share price return	18.7%
Est. dividend yield	2.3%
Est. total return	21.0%
Previous Rating	HOLD
Previous Report Date	Feb 26, 2019

Source(s): Bloomberg, ABCI Securities

Key Data

52Wk H/L(HK\$)	3.0/1.9
Issued shares (mn)	10,567
Issued H-shares (mn)	5,031
Market cap (HK\$ mn)	31,488
H-share Market cap (HK\$ mn)	14,993
3-mth avg daily turnover(HK\$ mn)	46
Major shareholder(s):	
Huaneng Group.	54.0%

Source(s): Company, ABCI Securities

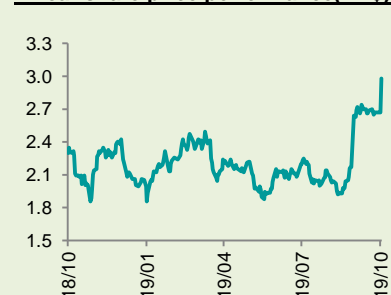
Share Performance (%)

	Absolute	Relative*
1-mth	13.31	14.37
3-mth	32.44	39.02
6-mth	33.69	46.64

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

1-Year share price performance(HK\$)



Source(s): Bloomberg, ABCI Securities

1H19 results highlight

32%YoY earnings growth in 1H19 exceed expectations

1H19 net profit was RMB 3,094mn (+32% YoY), 9.3% higher than Bloomberg consensus (3 observations), achieving 83%/77% of Bloomberg and our full-year estimates. Historically, 1H earnings contributed to ~ 64% of HNR's full-year earnings. This set of results is better than consensus and our estimates.

12%YoY wind power output growth was driven by higher utilization hour

Wind power output increased 12%YoY, driven by 8%YoY increase in utilization hour and 4% YoY increase in installed capacity. Operating margin improved from 61.2% in 1H18 to 65.2% in 1H19 mainly due to lower unit operating cost.

Net gearing ratio continues to fall on deleveraging in China

HNR's net gearing ratio fell 12ppt HoH to 154% in 1H19. The ratio has been trending down since 2015 from 241%, 230% in 2016, 186% in 2017, and 166% in 2018. We believe this should strengthen HNR's balance sheet in the long run.

2019/20outlook

Share price catalyst: potential privatization of H-share

The Group announced on Sep 2 that its parent company would initiate process to privatize HNR-H, whose share was trading at 0.63x/0.57x 2019/20E P/B (\$2.17 on Aug 31, 2019). HNR would offer HK\$3.17/shr as offering price which implies 1.0x 2019E P/B based on our estimate, suggested a 19% upside from the last closing price of on Oct 3. HNR has 10,567mn of outstanding shares and its parent company has a 52.39% stake, thus the total consideration of this privatization would be ~HK\$ 15.9bn, which is higher than its H-share IPO proceeds of HK\$ 6.2bn in June 2011. Total capital raised from previous fundraising activities (including H-Share IPO) was ~HK\$11.7bn.

- **Depressed valuation triggers privatization.** We believe HNR's low valuation at 0.63x/0.57x 2019E P/B (based on Aug 31, 2019 closing price and ABCI estimates) has triggered the privatization. We are positive on HNR's prospects because: (1) cash flow and leverage haven been improving in recent years; (1) China's established schedule of the tariff cut adds clarity to the issue and remove overhangs; (3) HNR, as an SOE, would enjoy more benefits than the private operators.
- **Parent company may consolidate wind power assets.** While HNR is the sole listed wind power unit of China Huaneng Group (unlisted, China's largest independent power producer), its sister company, Huaneng Power (902HK, NR), also holds wind power assets, albeit of a much smaller scale. We believe the privatization could be partially driven by China Huaneng's plan to reconsolidate its wind power assets.
- **Privatization is likely to succeed.** We believe privatization is likely to go through if the offering is priced at 1x 2019E P/B, or HK\$3.17, given the funding cost for 4606mn of H-shares (out of total 5031mn of outstanding H-shares issued via the HK IPO and three new share placements) was HK\$ 2.54/shr on average. The offering price of HK\$3.17 suggests a 25% upside and should appeal to shareholders in our view

10%/16%YoY growth in installed capacity

We believe HNR is likely to report strong growth in installed capacity for 2019E/20E to take advantage of the older subsidy level. We expect 1.1GW/1.9GW of new installed capacity in 2019E/20E, representing 10%/16%YoY growth in total installed capacity. The expansion should drive earnings.

Utilization hour would be 2,255/2,307hrs in 2019E/20E

We believe the subsidy cut would eliminate the less competitive operators and raise the hurdle for new entrants. The reduced competition would help alleviate power curtailment of wind power in China. HNR's utilization in 2019E and 2020E would be high at 2,255hrs and 2,307hrs.



1%/2%YoY decline in overall wind power tariff in 2019E/20E

China's new subsidy policy would reduce nationwide wind power benchmark tariff (type 4) by 8.9%/9.6%YoY in 2019 and 2020 (2018 at RMB 0.57/kWh, 2019 and 2020 at RMB 0.52/kWh and RMB 0.47/kWh, incl. VAT). Hence, we expect HNR's overall wind power tariff would decline by 1%/2%YoY in 2019E/20E because the old subsidy level will still apply to a high proportion of its existing capacity (> 85%).

Net gearing ratio may spike up in 2019E/20E due to capacity expansion but long-term decline is expected

Given HNR would ramp up capacity growth before end-2020 to avoid subsidy cut, we believe CAPEX would rise in 2019E/20E. Consequentially, net gearing ratio would rise to 170%/190% in 2019E/20E (2018: 166%). Nonetheless, net gearing ratio would trend down in the long run as the Group's expansion pace resumes to normal.

Capacity growth of solar power would be limited

In the next few years, we believe revenue contribution from the Group's solar power segment would be limited because 1) subsidy cut in solar power is greater than that in wind power (RMB 0.15/kWh cut vs. RMB 0.05/kWh), which means newly added solar power capacity would enjoy a much lower tariff. We believe HNR's future focus would remain on wind power operation.

Adjusted net profit to increase by 11%/9%YoY for 2019E/20E

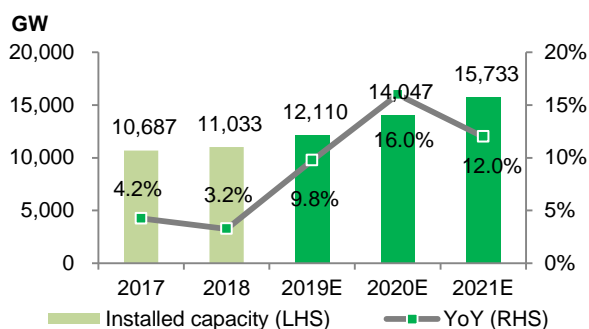
HNR's 1H19 power output was better than expected. However, NDRC's subsidy cut would reduce future earnings as the impact of tariff change on earnings is higher than that of output change (a 1% change in tariff would result in a 3% change in earnings; vs. 1% change in output would result in 1% change in earnings). We lower HNR's wind power tariff assumptions by 0.4%/1.5%/1.5% for 2019E/20E/21E and revise other operating assumptions. Adjusted earnings (excl. one-off impairment loss) would increase by 11%/9%YoY in 2019E/20E.

TP at HK\$3.17; upgrade to BUY

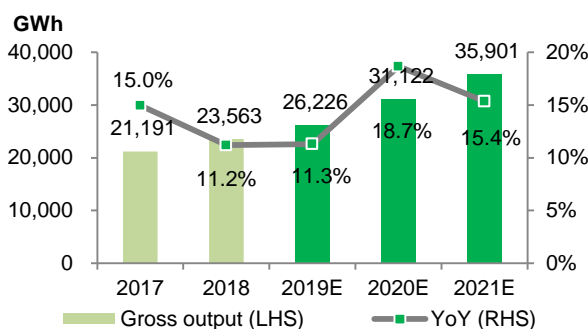
We roll over our valuation to 2020 and our DCF-based TP is HK\$ 3.17 (previously at HK\$ 2.70), which implies 7.9x/7.2x 2019/20E P/E and 1.00x/0.89x 2019E/20E P/B. We believe the privatization is likely to go through. The offering price of HK\$ 3.17 implies a 19% upside to closing price on Oct 3. Upgrade to **BUY**.

Risk – what if the privatization falls through?

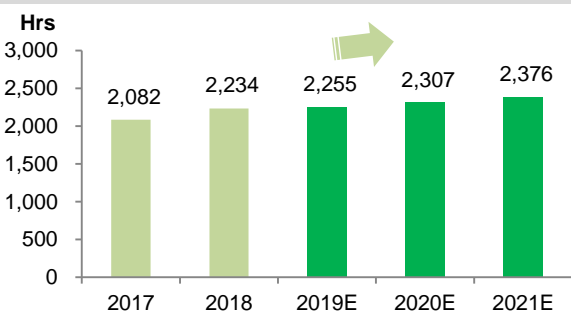
We believe the privatization will be aborted if H-share holders asked for higher offering price. HNR's current share price implies 0.84x/0.75x 2019E/20E P/B, which is higher than Longyuan's 0.66x/0.61x 2019E/20E P/B. We believe HNR's share price would go down to HK\$ 2.20 (0.69x/0.62x 2019E/20E P/B) if the privatization falls through, which implies an 18% downside from current share price.

Exhibit 25: HNR's wind power capacity outlook


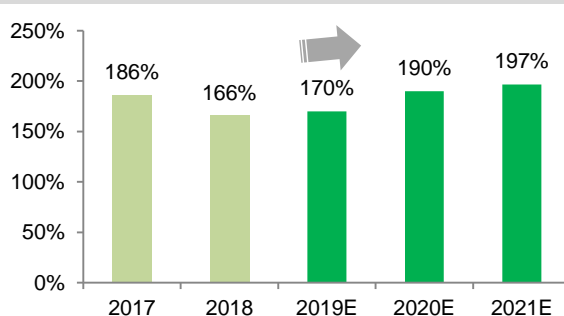
Source(s): Company, ABCI Securities estimates

Exhibit 26: HNR's gross wind power output


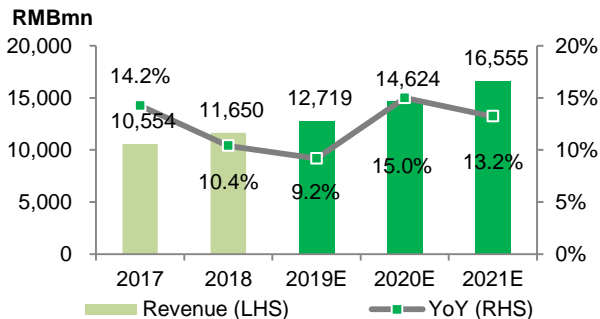
Source(s): Company, ABCI Securities estimates

Exhibit 29: HNR's utilization hour


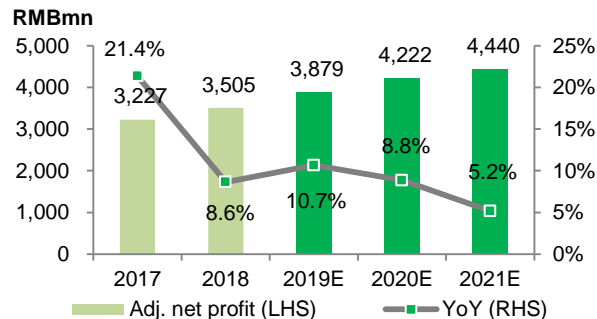
Source(s): Bloomberg, ABCI Securities estimates

Exhibit 27: HNR's net gearing ratio


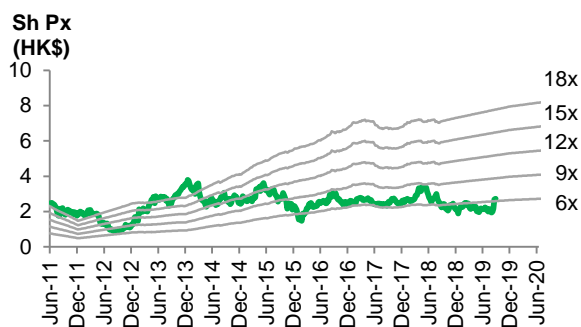
Source(s): Bloomberg, ABCI Securities estimates

Exhibit 28: HNR's revenue outlook


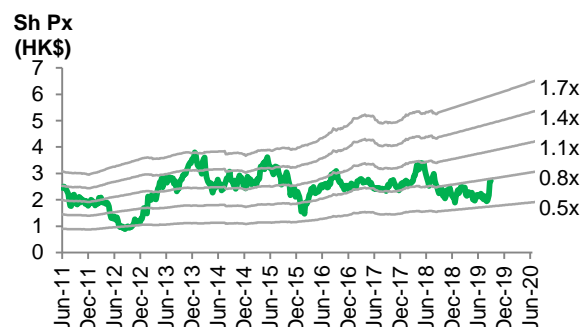
Source(s): Bloomberg, ABCI Securities estimates

Exhibit 29: HNR's adjusted net profit outlook


Source(s): Bloomberg, ABCI Securities estimates

Exhibit 30: HNR's fwd P/E chart


Source(s): Bloomberg, ABCI Securities estimates

Exhibit 31: HNR's fwd P/B chart


Source(s): Bloomberg, ABCI Securities estimates



Huaneng Renewables (958 HK, BUY)

Consolidated income statement

FY Ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Revenue	10,554	11,650	12,719	14,624	16,555
Wind power	9,700	10,620	11,753	13,668	15,609
Solar power	848	1,025	961	951	941
Other	6	5	5	5	5
Cost of sales	(4,504)	(4,890)	(5,508)	(6,605)	(7,575)
Gross Profit	6,051	6,760	7,211	8,019	8,980
SG&A expenses	(248)	(273)	(254)	(292)	(331)
Net financial income (cost)	(2,238)	(2,189)	(2,173)	(2,512)	(3,153)
Other income/ (expenses)	(157)	(603)	(127)	(146)	(166)
Profit before tax	3,408	3,695	4,657	5,069	5,331
Tax	(346)	(567)	(699)	(760)	(800)
Profit after tax	3,061	3,128	3,958	4,308	4,531
Profit attributable to:					
Minority interest	50	42	79	86	91
Equity shareholders of the Company	3,012	3,086	3,879	4,222	4,440
Basic EPS (RMB)	0.315	0.332	0.367	0.400	0.420
DPS (RMB)	0.044	0.044	0.055	0.060	0.063

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet

As of Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Current assets	11,242	14,582	17,758	21,227	23,487
Cash	2,503	3,415	4,341	6,471	6,348
Pledged and restricted bank deposits	52	68	0	0	0
Trade and bill receivables	7,214	9,968	12,334	13,308	15,720
Other receivables and prepayments	1,396	1,069	1,022	1,382	1,339
Inventories	55	44	62	65	80
Other current assets	22	18	0	0	0
Non-current assets	75,107	74,089	82,052	98,861	111,616
Property, plant & equipment	71,406	70,812	78,150	94,222	106,722
Investment properties	0	0	0	0	0
Intangible assets	621	589	559	529	499
Investment in JV and associates	254	201	66	66	66
Deferred tax assets	2	2	2	2	2
Other non-current assets	2,824	2,486	3,275	4,041	4,327
Total Assets	86,349	88,671	99,811	120,088	135,103
Current Liabilities	27,086	29,031	30,920	37,302	42,536
Trade and bill payables	0	0	0	0	0
Other payables	6,381	6,945	7,627	7,840	9,115
Short term borrowings	20,353	21,614	23,294	29,463	33,421
Other current assets	352	472	0	0	0
Non-current liabilities	33,821	31,427	37,558	47,718	53,624
Deferred tax liabilities	18	18	18	18	18
Long-term borrowings	29,451	28,611	34,941	44,194	50,131
Other non-current assets	4,351	2,798	2,599	3,506	3,474
Total Liabilities	60,907	60,458	68,478	85,020	96,160
Minority interests	840	805	884	970	1,061
Shareholders' equities	24,602	27,408	30,448	34,097	37,882

Source(s): Company, ABCI Securities estimates



Consolidated cash flow statement

FY ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Profit before tax	3,061	3,128	3,958	4,308	4,531
Change in depreciation and amortization	3,783	3,957	4,542	5,466	6,272
Change in Working Capital	(1,643)	(1,737)	(2,421)	(801)	(1,245)
Net financial cost (income)	2,144	2,156	2,173	2,512	3,153
Income tax paid	(312)	(563)	(699)	(760)	(800)
Net interest received	346	567	0	0	0
Others	302	422	0	0	0
Operating cash flow	7,681	7,931	7,553	10,726	11,911
CAPEX	(5,117)	(4,225)	(11,840)	(21,499)	(18,732)
Increase in intangible assets	0	(135)	(9)	(9)	(10)
Others	927	143	87	109	162
Investing cash flow	(4,191)	(4,217)	(11,762)	(21,400)	(18,580)
Net Capital raise	1,909	0	(3)	0	0
Net debt financing	(1,157)	423	8,009	15,422	9,896
Dividend payout	(483)	(501)	(582)	(633)	(666)
Interest paid	(2,241)	(2,257)	(2,256)	(2,260)	(2,621)
Others	(555)	(487)	(67)	275	(64)
Financing cash flow	(2,527)	(2,822)	5,102	12,804	6,546
Net change in cash	963	892	893	2,130	(123)
Cash at the beginning	1,665	2,503	3,415	4,341	6,471
Adjustment (Time deposit & FX effect)	(126)	20	34	0	0
Cash at the end	2,503	3,415	4,341	6,471	6,348

Source(s): Company, ABCI Securities estimates

Key ratio

FY ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Sales mixed (%)					
Wind power	91.90	91.16	92.40	93.46	94.29
Solar power	8.04	8.80	7.56	6.50	5.68
Other	0.06	0.04	0.04	0.03	0.03
Total	100	100	100	100	100
Profit & loss ratios (%)					
Gross margin	57.33	58.03	56.70	54.84	54.24
Operating profit margin	55.58	54.20	53.70	51.84	51.24
Pre-tax margin	32.29	31.72	36.61	34.66	32.20
Net profit margin	29.01	26.85	31.12	29.46	27.37
Selling & administrative expenses/revenue	2.35	2.34	2.00	2.00	2.00
Effective tax rate	10.16	15.34	15.00	15.00	15.00
Growth (%)					
Revenue	14.24	10.38	9.17	14.98	13.21
Gross profit	16.71	11.73	6.67	11.20	11.98
Operating profit	19.51	7.65	8.16	10.99	11.91
Net profit	13.05	2.19	26.52	8.84	5.17
Balance sheet ratios					
Current ratio (x)	0.42	0.50	0.57	0.57	0.55
Quick ratio (x)	0.36	0.46	0.54	0.53	0.52
Cash ratio (x)	0.09	0.12	0.14	0.17	0.15
Trade and bill receivables days	204.89	269.16	320.00	320.00	320.00
Trade and bill payables turnover days	0.00	0.00	0.00	0.00	0.00
Inventory turnover days	3.57	3.71	3.50	3.50	3.50
Total debt / equity ratio (%)	202.44	183.25	191.26	216.02	220.56
Net debt / equity ratio (%)	185.71	165.68	172.00	191.59	198.25
Returns (%)					
ROAA	3.51	3.53	4.12	3.84	3.48
ROAE	13.46	11.87	13.41	13.08	12.34
Payout ratio	15.09	15.06	15.00	15.00	15.00

Source(s): Company, ABCI Securities estimates

Datang Renewable (1798 HK)

Tariff decline will slash earnings

- 7%YoY earnings decline in 1H19 missed market estimates
- DTR's wind power tariff is likely to report 2%/2%YoY decline in 2019E/20E.
- Due to the impending subsidy cut, DTR's wind power capacity is likely to increase by 8%/11%YoY in 2019E/20E.
- Low valuation may trigger potential privatization.
- 2019E/20E earnings to grow by 9%/-2%YoY on tariff decline.
- Maintain **HOLD** with TP of HK\$ 0.80, which implies 3.8x/3.9x 2019/20E P/E and 0.32x/0.29x 2019/20E P/B

7%YoY earnings decline in 1H19 missed market estimates. Datang Renewable (DTR) 1H19 net profit was RMB 883mn (-7%YoY), 6.8% lower than Bloomberg consensus (1 observation).

2%/2%YoY decline in wind power tariff in 2019E/20E. DTR has high exposure in "three north region" (Inner Mongolia, northeast and northwest China). We believe capacity growth in the region would drag its overall power tariff by 2%/2%YoY in 2019E/20E since tariff level is usually lower.

8%/11%YoY wind power capacity growth in 2019E/20E. DTR is likely to follow others to expand installed wind power capacity in 2019E/20E due to the subsidy cut by end-2020. We expect DTR to add 666MW/1,045MW of new capacity in 2019E/20E, which translates into capacity growth of 8%/11%YoY capacity growth.

Cheap valuation may trigger privatization. DTR has the lowest valuation among wind power operators in the market; its shares are trading at ~3.4x/3.4x 2019E/20E P/E and 0.26x/0.24x 2019E/20E P/B based on our estimates. HNR has proposed privatization based on its depressed valuation; we will not be surprised if DTR follows suit to be privatized by its parent company, Datang Group.

2019/20E earnings to grow by 9%/-2%YoY on tariff decline. Although we estimate 2019E/20E power capacity to expand by 8%/11% YoY, decline in wind power tariff would partially eradicate the gains. We expect net earnings to increase by 9%YoY in 2019E but decline by 2%YoY in 2020E.

TP at HK\$0.80; maintain HOLD. DTR's 1H19 results are worse than expected on tariff decline. We believe the subsidy cut would have the greatest impact on DTR among the wind power operators in our coverage universe (Longyuan, HNR and DTR). We revise down DTR's wind power tariff by 4%/5% in 2019E/20E and trim its 2019E/20E earnings by 3%/9%. Maintain **HOLD** with our new TP at **HK\$ 0.80** (previously at HK\$1.10), which implies 3.8x/3.9x 2019E/20E P/E and 0.32x/0.29x 2019E/20E P/B.

Results and Valuation

FY ended Dec 31	2017A	2018A	2019E	2020E	2021E
Revenue (RMB mn)	7,104	8,319	9,064	10,028	11,050
Chg (% YoY)	22.8	17.1	8.9	10.6	10.2
Net profit (RMB mn)	728	1,209	1,319	1,293	1,178
Chg (% YoY)	267.1	66.2	9.0	-1.9	-8.9
EPS (RMB)	0.08	0.15	0.16	0.16	0.15
Chg (% YoY)	209.2	78.7	9.0	-1.9	-8.9
BVPS (RMB)	1.32	1.53	1.79	1.93	2.06
Chg (% YoY)	-11.8	16.0	17.2	7.9	6.7
P/E (x)	8.12	4.54	4.16	4.25	4.66
P/B (x)	0.52	0.45	0.38	0.35	0.33
ROAE (%)	6.53	10.21	9.88	8.64	7.34
ROAA (%)	1.04	1.67	1.69	1.45	1.17
DPS (RMB)	0.015	0.018	0.020	0.019	0.018
Yield (%)	2.22	2.65	2.88	2.83	2.58
Net gearing (%)	323.9	305.8	295.7	296.7	319.4

Source(s): Bloomberg, ABCI Securities estimates

Company Report

Oct 4, 2019

Rating: **HOLD**

TP: **HK\$ 0.80**

Analyst : Kelvin Ng
 Tel: (852) 2147 8869
 kelvinng@abci.com.hk

Share price (HK\$)	0.75
Est. share price return	6.7%
Est. dividend yield	2.9%
Est. total return	9.6%
Previous Rating	HOLD
Previous Report Date	Feb 26, 2019

Source(s): Bloomberg, ABCI Securities

Key Data

52Wk H/L(HK\$)	1.1/0.7
Issued shares (mn)	7,274
Issued H-shares (mn)	2,501
Market cap (HK\$ mn)	5,819
H-share Market cap (HK\$ mn)	2,001
3-mth avg daily turnover(HK\$ mn)	1.8
Major shareholder(s) :	
Datang Group.	57.4%

Source(s): Company, ABCI Securities

Share Performance (%)

	Absolute	Relative*
1-mth	3.90	4.96
3-mth	0.00	6.57
6-mth	(13.51)	(0.57)

*Relative to HSCEI

Source(s): Bloomberg, ABCI Securities

1-Year share price performance(HK\$)



Source(s): Bloomberg, ABCI Securities

1H19 results highlight

7%YoY earnings decline in 1H19 missed market estimates

1H19 net profit was RMB 883mn (-7%YoY), 6.8% lower than Bloomberg consensus (1 observation).

2%/0%YoY capacity growth in wind power and solar power capacity suggests DTR remain cautious on the government's alternative energy policy

DTR reported 2%/0%YoY growth in installed capacity in wind/solar power, which we believe is a result of the Group's vigilance towards potential tariff change by the government.

Net gearing ratio fell to 300%

DTR's net gearing ratio was 300% in 1H19, a 6ppt improvement from 306% by end-2018 and 18ppt improvement from 1H18. We believe the improvement was a result of nationwide deleveraging as well as DTR's slowdown in capacity growth in recent years.

2019/20 outlook

8%/11%YoY wind power capacity growth in 2019E/20E

DTR is likely to follow other wind power operators to expand installed wind power capacity in 2019E and 2020E due to the impending subsidy cut by end-2020/21. We expect DTR to add 666MW/1,045MW of new capacity in 2019E/20E, which translates into 8%/11%YoY growth in total wind power capacity.

Solar power capacity growth would decelerate

We expect DTR's future solar power installed capacity growth would decelerate or stay flat on the subsidy cut for renewables announced in 2019 and policies targeting the solar power industry announced in 2018. Subsidy cut for solar power will be deeper than that for wind power (RMB 0.15/kWh vs. RMB 0.05/kWh). We believe DTR would turn more cautious on its solar power business as the uncertainty looms; hence, therefore, contribution of the segment would not increase in the short term.

2%/2%YoY decline in wind power tariff in 2019E/20E

Wind power facilities in the "three north regions" (Inner Mongolia, northeast and northwest in China) not only receive less feed-in tariffs but also face stiffer competition in dispatching power on grid. DTR, with a large amount wind power facilities located in these regions, has a relative advantage over others through better synergy. In 2015-18, DTR's capacity growth in Inner Mongolia grew 4%/6%/7%/2% YoY, respectively. We believe the Group would continue to expand capacity in the region in 2019, which may drag down the overall tariff. With the forthcoming subsidy cut for renewables and the Group's increasing exposure in Inner Mongolia, we estimate overall wind power tariff to decline by 2%/2%YoY in 2019E/20E.

Net gearing ratio to go upward

Wind power capacity growth in near future, as driven by the subsidy-free policy announced in 2019, would boost CAPEX and elevate net gearing ratio. We expect the ratio would reach 296% in 2019E, 297% in 2020E, and 319% in 2021E. Net financing cost would be RMB 2.3bn/2.6bn/3.0bn in 2019E-21E due to the risen leverage; meanwhile, interest coverage ratio would fall to 1.83, 1.73 and 1.58 in 2019E-21E.

Potential privatization as short-term catalyst

DTR has the lowest valuation among wind power operators in the market - it is now trading at ~3.4x/3.4x 2019E/20E P/E and 0.26x/0.24x 2019E/20E P/B based on our estimates. The low valuation can be attributed to the location of its wind power assets in the p "three north regions" and high net gearing ratio (1H19 at 300%, the highest among peers). However, the privatization plan of HNR has prompted speculation on the possibility that DTR may follow suit, especially with its depressed valuation. We believe this will be a short-term catalyst to DTR share price.

2019/20E earnings to grow by 9%/-2%YoY on tariff decline

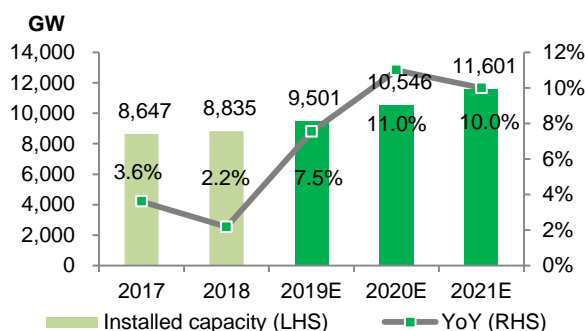
Despite the 8%/11% YoY wind power capacity growth expected for 2019E/20E, most of these new capacities will be located in the “three north regions”. With the lower tariff received in these regions as well as the policy-driven decline in subsidy for renewables in general, we expect earnings growth to fall to 9%YoY in 2019E (2016-18 CAGR at 147% due to low base), and declined by 2%YoY in 2020E.

TP at HK\$0.80; maintain HOLD

DTR's 1H19 results are worse than expected on due to tariff decline. For wind power business, we believe DTR's tariff in 2019E/20E would suffer from the deepest decline among the three wind power operators in our coverage universe (Longyuan, HNR and DTR) because most of its newly-added capacity would remain in the “three north regions” with lower tariff. We revise down DTR's wind power tariff by 4%/5% in 2019E/20E. For its solar power business, we believe operators will turn more cautious in business expansion due to the government's subsidy cut for renewables. DTR is unlikely to expand its solar power capacity in 2019E/20E, hence we slash our solar power capacity estimates by 41%/55% and solar power output estimates by 29%/45% in 2019E/20E.

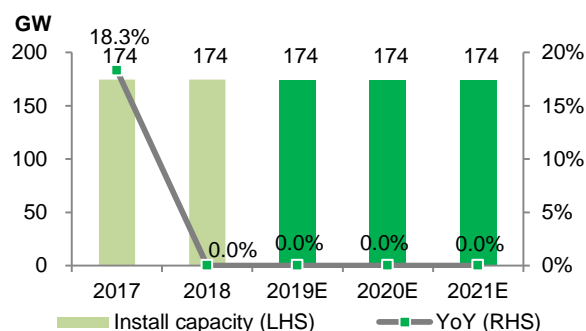
Overall, we revise down 2019E/20E earnings by 3%/9%. However, DTR's current valuation is attractive at 0.26x/0.24x 2019/20E P/B with 2019E/20E dividend yield of 3.8%/3.7%, which we believe provides the prerequisite condition for privatization. We maintain **HOLD** with our new TP at **HK\$0.80** (previously at HK\$1.10), which implies 3.8x/3.9x 2019E/20E P/E and 0.32x/0.29x 2019E/20E P/B.

Exhibit 32: DTR's wind power installed capacity growth will accelerate in the next few years



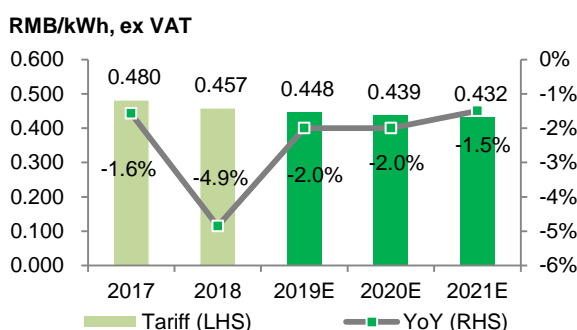
Source(s): Company, ABCI Securities estimates

Exhibit 33: DTR's solar power capacity growth would stay flat in coming years



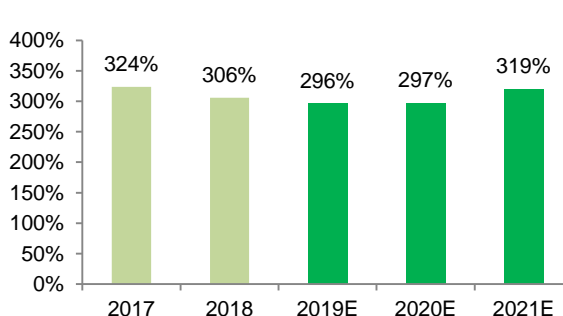
Source(s): Company, ABCI Securities estimates

Exhibit 34: DTR's wind power tariff outlook



Source(s): Company, ABCI Securities estimates

Exhibit 35: DTR's net gearing ratio outlook



Source(s): Company, ABCI Securities estimates



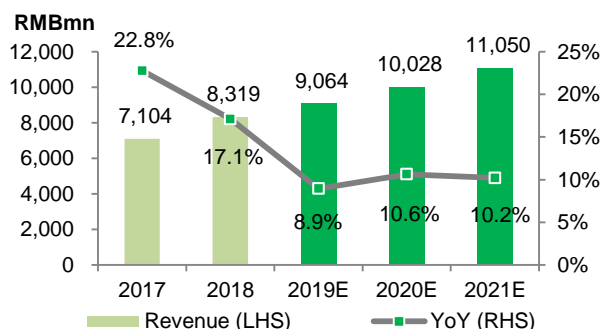
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ABC SECURITIES COMPANY LIMITED

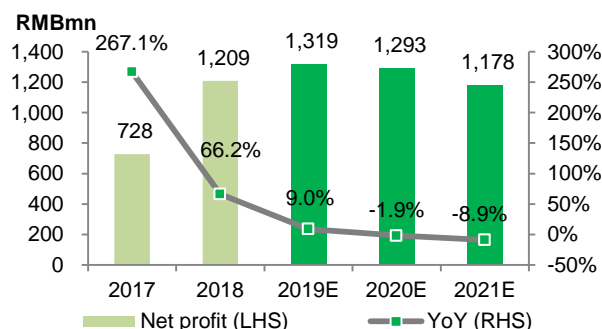
Datang Renewable (1798 HK, HOLD)
China Alternative Energy Sector- NEUTRAL
Oct 4, 2019

Exhibit 36: DTR's revenue outlook



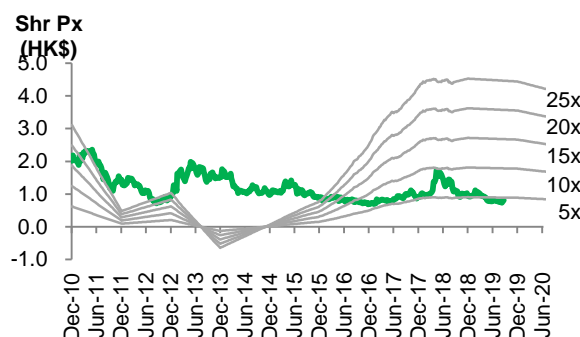
Source(s): Company, ABCI Securities estimates

Exhibit 37: DTR's net profit outlook



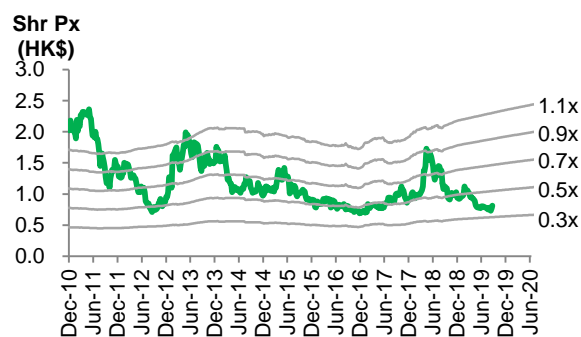
Source(s): Company, ABCI Securities estimates

Exhibit 38: DTR's fwd P/E chart



Source(s): Bloomberg, ABCI Securities estimates

Exhibit 39: DTR's fwd P/B chart



Source(s): Bloomberg, ABCI Securities estimates



Consolidated income statement

FY Ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Revenue	7,104	8,319	9,064	10,028	11,050
Wind power	6,888	8,092	8,899	9,867	10,892
Concession construction	7	5	0	0	0
Other	209	223	164	161	158
Cost of sales	(3,874)	(4,272)	(4,699)	(5,380)	(6,073)
Gross Profit	3,231	4,047	4,364	4,648	4,977
SG&A expenses	0	0	0	0	0
Net financial income (cost)	(1,870)	(2,112)	(2,296)	(2,561)	(3,000)
Other income/ (expenses)	(302)	(206)	(222)	(276)	(326)
Profit before tax	1,059	1,729	1,847	1,811	1,650
Tax	(156)	(303)	(277)	(272)	(248)
Profit after tax	903	1,426	1,570	1,540	1,403
Profit attributable to:					
Minority interest	(175)	(217)	(251)	(246)	(224)
Equity shareholders of the Company	728	1,209	1,319	1,293	1,178
Basic EPS (RMB)	0.084	0.150	0.164	0.161	0.146
DPS (RMB)	0.015	0.018	0.020	0.019	0.018

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet

As of Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Current assets	7,722	12,801	15,598	21,372	20,990
Cash	1,224	3,633	2,016	10,365	7,312
Pledged and restricted bank deposits	55	41	0	0	0
Trade and bill receivables	5,042	7,473	11,399	8,931	11,050
Other receivables and prepayments	1,262	1,486	1,990	1,856	2,382
Inventories	138	168	193	220	246
Other current assets	0	0	0	0	0
Non-current assets	62,826	61,616	66,003	75,170	83,189
Property, plant & equipment	58,088	56,430	60,731	69,047	76,933
Investment properties	21	17	0	0	0
Intangible assets	1,179	1,199	1,181	1,164	1,147
Investment in JV and associates	739	802	802	802	802
Deferred tax assets	24	16	16	16	16
Other non-current assets	2,775	3,153	3,274	4,142	4,291
Total Assets	70,548	74,417	81,601	96,543	104,179
Current Liabilities	21,262	20,969	23,634	28,348	31,010
Trade and bill payables	1,429	364	794	532	965
Other payables	6,518	5,978	6,581	7,768	8,406
Short term borrowings	13,315	14,627	16,258	20,048	21,639
Other current assets	0	0	0	0	0
Non-current liabilities	34,917	38,166	40,321	49,163	52,876
Deferred tax liabilities	22	20	20	20	20
Long-term borrowings	34,507	35,781	37,935	46,778	50,491
Other non-current assets	388	2,365	2,365	2,365	2,365
Total Liabilities	56,179	59,135	63,954	77,511	83,886
Minority interests	2,975	2,990	3,241	3,487	3,712
Shareholders' equities	11,394	12,292	14,406	15,544	16,581

Source(s): Company, ABCI Securities estimates



Consolidated cash flow statement

FY ended Dec 31 (RMB mn)	2017A	2018A	2019E	2020E	2021E
Profit before tax	1,059	1,729	1,847	1,811	1,650
Change in depreciation and amortization	3,325	3,469	3,722	4,262	4,806
Change in Working Capital	(2,898)	(1,792)	(3,234)	2,730	(1,447)
Net financial cost (income)	1,878	2,108	2,073	2,329	2,394
Income tax paid	(110)	(284)	(217)	(251)	(246)
Net interest received	13	24	0	0	0
Others	(61)	52	(68)	(75)	(83)
Operating cash flow	3,205	5,306	4,123	10,806	7,074
CAPEX	(4,503)	(5,146)	(7,987)	(12,541)	(12,655)
Increase in intangible assets	0	0	(19)	(19)	(20)
Others	(10)	67	0	0	0
Investing cash flow	(4,513)	(5,080)	(8,006)	(12,561)	(12,676)
Net Capital raise	0	0	772	0	0
Net debt financing	3,430	4,562	3,786	12,632	5,304
Dividend payout	(242)	(318)	(145)	(158)	(155)
Interest paid	(1,838)	(2,121)	(2,147)	(2,369)	(2,601)
Others	16	59	0	0	0
Financing cash flow	1,366	2,182	2,265	10,105	2,548
Net change in cash	58	2,408	(1,617)	8,349	(3,054)
Cash at the beginning	1,166	1,224	3,633	2,016	10,365
Adjustment (Time deposit & FX effect)	0	1	0	0	0
Cash at the end	1,224	3,633	2,016	10,365	7,312

Source(s): Company, ABCI Securities estimates

Key ratio

FY ended Dec 31	2017A	2018A	2019E	2020E	2021E
Sales mixed (%)					
Wind power	96.96	97.27	98.19	98.40	98.57
Concession construction	0.10	0.06	0.00	0.00	0.00
Other	2.94	2.68	1.81	1.60	1.43
Total	100	100	100	100	100
Profit & loss ratios (%)					
Gross margin	45.47	48.65	48.15	46.35	45.04
Operating profit margin	40.37	45.50	44.95	42.85	41.34
Pre-tax margin	14.91	20.78	20.38	18.06	14.94
Net profit margin	12.71	17.15	17.32	15.35	12.70
Selling & administrative expenses/revenue	0.00	0.00	0.00	0.00	0.00
Effective tax rate	14.76	17.50	15.00	15.00	15.00
Growth (%)					
Revenue	22.78	17.11	8.94	10.64	10.20
Gross profit	43.11	25.27	7.84	6.50	7.07
Operating profit	35.61	31.98	7.64	5.46	6.30
Net profit	208.32	58.02	10.05	(1.92)	(8.88)
Balance sheet ratios					
Current ratio (x)	0.36	0.61	0.66	0.75	0.68
Quick ratio (x)	0.30	0.53	0.57	0.68	0.59
Cash ratio (x)	0.06	0.18	0.09	0.37	0.24
Trade and bill receivables days	201.48	274.54	380.00	370.00	330.00
Trade and bill payables turnover days	178.62	76.61	45.00	45.00	45.00
Inventory turnover days	11.89	13.05	14.00	14.00	14.00
Total debt / equity ratio (%)	419.70	410.09	376.18	429.90	435.00
Net debt / equity ratio (%)	323.91	305.82	295.67	296.67	319.41
Returns (%)					
ROAA	1.04	1.67	1.69	1.45	1.17
ROAE	6.53	10.21	9.88	8.64	7.34
Payout ratio	17.99	12.03	12.00	12.00	12.00

Source(s): Company, ABCI Securities estimates



Disclosures

Analyst Certification

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Definition of equity rating

Rating	Definition
Buy	Stock return rate \geq Market return rate (10%)
Hold	- Market return rate (-10%) \leq Stock return rate < Market return rate (+10%)
Sell	Stock return < - Market return (-10%)

Notes: Stock return rate: expected percentage change of share price plus gross dividend yield over the next 12 months

Market return rate: average market return rate since 2005 (HSI total return index 2005-17 CAGR at 10%)

Time horizon of share price target: 12-month

Stock rating, however, may vary from the stated framework due to factors including but not limited to: corporate governance, market capitalization, historical price volatility relative to corresponding benchmark index, average daily turnover of the stock relative to market capitalization of the stock, competitive advantages in corresponding industry, etc.

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