

China Wind Operators

Sluggish 3Q19 operating performance

China wind operators have different development trends after announcing 1H19 results. We think overall sentiment is still sluggish due to long standing renewable subsidy delay and newly added tariff uncertainties from policy revise, and most wind operators read soft 3Q19 operating performance. HNR's privatization had boosted market focus in short term, however, but we don't expect privatization would be a trend for the sector. Our sector top pick is Suntien (956 HK) for its outstanding operating performance, increasing gas business focus, and pending A-share listing.

- **Sluggish 3Q19 operating performance, except Suntien.** Wind operators encountered bad season in 3Q19, as leading operators read YoY wind power generation decline range by 5.0% to 13.3% due to unsatisfactory wind resources in North China. Suntien (956 HK) was an exception in our coverage list, posting YoY 14.0% wind power generation growth during the period. YTD, CLY (916 HK), HNR(958 HK) and HDFX(816 HK)'s wind outputs were slower than our estimates, while Suntien was slightly leading ahead.
- **Subsidy and policy overhang remain.** We observed valuation pressures on China wind operators after disappointed resolution disclosed during interim results briefing for the rapid expanding renewable subsidy delay and funding shortfall. State Council's executive meeting(国常会) decided to cancel the benchmark tariff for coal-fired power and replace with a market-based benchmark had raised more market concerns on wind operators, since market anticipated potential future tariff cut will lead to 1) harder to reach grid-parity, and 2) further enlarge the subsidy gap. We see those valuation pressures marked by CLY (leading wind operator,)s valuation tumble.
- **Privatization would be a short-lived boost but not a market trend.** HNR's surprising privatization offer at ~1x P/B had altered market sentiment since early Sep. According to our communication with wind operators, we believe privatization decision is highly based on corporate strategy and mgmt. style, but with no direct guidance from SASAC(国资委). HNR's privatization will be a single case for renewables assets restructuring, but not a common trend for deep discounted renewable SOE listcos, in our view.
- **Suntien is our sector top pick.** Suntien's share price has rebounded 20.2% since interim results announcement, ranked 2nd after HNR's surprising privatization. Given relatively strong operating results, increasing gas business exposure, and more importantly, A-Share listing is coming close, we believe re-rating catalysts remain. Our TP for Suntien is HK\$2.74, representing 17.6% upside.

Valuation Table

						EPS(RMB)				EPS-CAGR				PER			PBR		
Company	Ticker	Market cap HK\$, mn	Stock price (HK\$)	TP (HK\$)	Rating	18	19E	20E	18-20E	18	19E	20E	18	19E	20E	18	19E	20E	
CHINA LONGYUAN-H	916 HK	39,137	4.87	4.68	HOLD	0.49	0.60	0.66	16.3%	8.8	7.3	6.5	0.7	0.7	0.6				
XINJIANG GOLD-H	2208 HK	52,019	8.45	12.06	BUY	0.84	0.78	0.96	6.6%	8.8	9.7	7.8	1.1	1.0	0.9				
HUANENG RENEWA-H	958 HK	22,295	2.11	3.17	HOLD	0.29	0.35	0.39	15.1%	6.4	5.3	4.8	0.7	0.6	0.6				
HUADIAN FUXIN -H	816 HK	12,276	1.46	2.00	BUY	0.24	0.31	0.36	23.0%	5.0	4.2	3.6	0.5	0.4	0.4				
CHINA DATANG C-H	1798 HK	5,383	0.74	N/A	NR	0.15	0.19	0.22	21.3%	4.1	3.4	3.0	0.4	0.4	0.3				
CHINA SUNTIEN-H	956 HK	7,207	1.94	2.74	BUY	0.33	0.39	0.44	14.7%	5.2	4.4	3.9	0.7	0.6	0.5				
CGN NEW ENERGY H	1811 HK	4,291	1.00	N/A	NR	0.02	0.03	0.03	18.6%	6.2	4.6	4.4	0.5	0.5	0.5				
CONCORD NE	182 HK	3,208	0.38	N/A	NR	0.06	0.08	0.09	26.4%	4.5	4.5	3.6	0.5	0.5	0.4				
Average						17.8%				6.1	5.4	4.7	0.6	0.6	0.5				

Source: Bloomberg, CMBIS estimates

MARKET PERFORM (Maintain)

China Wind Sector

Robin Xiao

(852) 3900 0849

robinxiao@cmbi.com.hk

Related Reports

1. "China Wind Sector – Revisit subsidy delay issue and 1H19 preview" – 5 Aug 2019
2. "China Wind Sector – Poor Nov wind resources may drag 2018E earnings" – 14 Dec 2018
3. "China Wind Sector – Market overlooked fundamental improvements" – 25 Oct 2018

Contents

Suntien Green Energy (956 HK)	2
China Longyuan (916 HK)	2
Huadian Fuxin (816 HK)	2
Huaneng Renewables (958 HK)	2

Figure 1: Major China wind operators' 3Q19/9M19 operating performance and run rate

Company and segment	3Q18 Power generation (GWh)	3Q19 Power generation (GWh)	YoY growth (%)	9M18 Power generation (GWh)	9M19 Power generation (GWh)	YoY growth (%)	FY18A Power generation (GWh)	FY19E Power generation (GWh)	9M18/ FY18 (%)	9M19/ FY19E (%)
CLY - 916 HK										
Power generation total	10,628	10,307	-3.0%	36,458	36,597	0.4%	49,970	52,082	73.0%	70.3%
Wind	8,120	7,717	-5.0%	28,909	29,162	0.9%	39,542	41,594	73.1%	70.1%
Coal-fired	2,377	2,471	3.9%	7,170	7,050	-1.7%	9,919	9,938	72.3%	70.9%
Others	131	119	-9.3%	379	384	1.4%	509	550	74.4%	69.9%
HNR - 958 HK										
Power generation total	4,399	4,151	-5.6%	18,008	19,347	7.4%	24,974	26,988	72.1%	71.7%
Wind	4,049	3,771	-6.9%	16,955	18,194	7.3%	23,563	25,472	72.0%	71.4%
Solar	350	380	8.5%	1,053	1,153	9.5%	1,410	1,516	74.7%	76.0%
DTR - 1798 HK										
Power generation total	3,364	2,923	-13.1%	12,916	12,911	0.0%	17,975	n/a	71.9%	n/a
Wind	3,294	2,857	-13.3%	12,695	12,703	0.1%	17,690	n/a	71.8%	n/a
Others	70	66	-5.6%	220	208	-5.7%	285	n/a	77.2%	n/a
HDFX - 816 HK										
Power generation total	11,381	12,629	11.0%	33,059	37,213	12.6%	44,574	48,184	74.2%	77.2%
Wind	3,488	3,249	-6.8%	12,389	12,210	-1.4%	16,869	17,298	73.4%	70.6%
Solar	430	473	10.2%	1,253	1,316	5.0%	1,613	1,625	77.7%	81.0%
Hydro	1,699	3,222	89.6%	4,075	9,224	126.4%	5,791	10,171	70.4%	90.7%
Coal-fired	4,940	4,671	-5.4%	13,372	11,741	-12.2%	17,514	15,456	76.4%	76.0%
NG	783	984	25.6%	1,851	2,619	41.5%	2,621	3,468	70.6%	75.5%
Others	41	30	-25.8%	120	103	-14.2%	166	166	72.2%	61.9%

Source: Company data, CMBIS estimates

Suntien Green Energy (956 HK)

3Q19 operating performance on track

Suntien's share price has rebounded 20.2% since interim results announcement. The Company was the only wind operator under our coverage posting wind power generation growth in 3Q19. We believe Suntien's operation efficiency as well as increasing exposures in natural gas business have gradually gaining market awareness. Trading at 5.9x/0.7x FY19E PER/PBR, we believe Suntien's valuation is still very attractive, and we expect Suntien pending A-share listing will boost share price to higher. **Reiterate BUY with TP unchanged at HK\$2.74.**

■ **3Q19 wind power generation on track.** During the period, wind power generation surged 14.0% YoY to 1,373GWh, and solar power generated 43GWh. Suntien generated 6,281GWh electricity in 9M19, up 14.6% YoY. Suntien's 9M19 power generation growth was slightly faster than our 12.1% estimates for FY19. We expect the outstanding growth was not only attributable to Suntien's excellent operating efficiencies, but also from newly added wind capacity. The Company intends to maintain prudent capacity addition scale of ~500MW in FY19E.

■ **Gas sales volume growth was 18.8% YoY in 3Q19.** Gas sales volume was 494mcbm during the period, up 18.8%. Wholesale gas volume growth exhibited slowdown to 9.8% in 3Q19, while retail gas volume growth maintained high at 29.6% in the same period. Mgmt. explained some wholesale industrial gas consumption was affected due to tighten environmental control in Sep. In 9M19, Suntien accumulated gas sales volume was 2,145mcbm, up 25.3% YoY, slightly lower than our FY19E growth estimate of 29.4%. Based on sufficient winter gas supply in 4Q19, we expect Suntien's gas sales volume growth to catch up and maintain gas sales estimates unchanged.

■ **A-share listing ranking ~30 in the list.** We expect Suntien to gain more market awareness from its A-share listing. According to mgmt., the Company is currently ranking ~30th place pending for listing committee's approval. Mgmt. expect target timeline for the approval would likely at year end of 2019. We believe Suntien's A-share listing will boost valuation to higher level.

Earnings Summary

(YE 31 Dec)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue (RMB mn)	7,058	9,975	12,731	15,436	18,210
YoY growth (%)	61.0	41.3	27.6	21.3	18.0
Net income (RMB mn)	940	1,240	1,329	1,484	1,646
EPS (RMB)	0.25	0.33	0.36	0.40	0.44
YoY growth (%)	73.5	32.0	7.2	11.6	10.9
P/E (x)	8.1	6.1	5.7	5.1	4.6
P/B (x)	0.9	0.8	0.6	0.6	0.6
Yield (%)	5.0	6.1	7.0	7.8	8.6
ROE (%)	10.9	12.4	11.3	11.6	11.9
Net gearing (%)	195	190	214	249	256

Source: Company data, CMBIS estimates

BUY (Maintain)

Target Price HK\$2.74
(Previous TP) HK\$2.74
Up/Downside +20.2%
Current Price HK\$2.28

China Wind Sector

Robin Xiao
(852) 3900 0849
robinxiao@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	8,471
Avg 3 mths t/o (HK\$ mn)	10.0
52w High/Low (HK\$)	2.56/1.76
Total Issued Shares (mn)	1,876

Source: Bloomberg

Shareholding Structure

HECIC	50.5%
Freefloat	49.5%

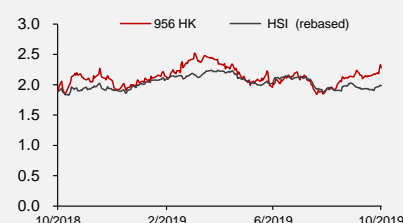
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	9.4%	9.2%
3-mth	9.9%	17.0%
6-mth	-0.4%	11.7%
12-mth	21.4%	15.1%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: Ernst & Young

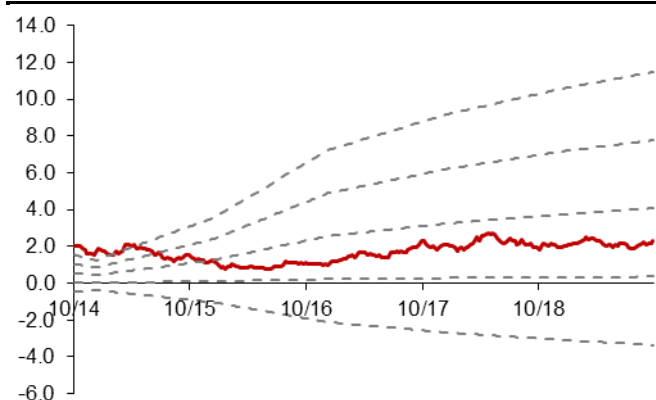
Related Reports

1. "Suntien Green Energy (956 HK) – A share listing will be a potential catalyst" – 29 Aug 2019
2. "Suntien Green Energy (956 HK) – 1H19 maintain decent growth" – 5 Aug 2019
3. "Suntien Green Energy (956 HK) – Wind progress on track, while gas sales facing uncertainties" – 29 Apr 2019

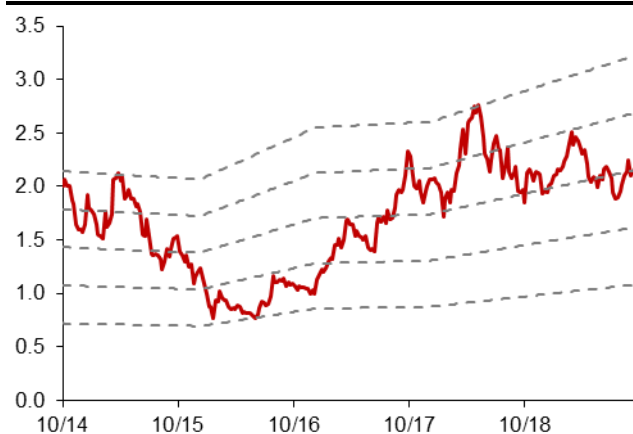
Figure 2: Suntien's 3Q19/9M19 operating performance summary

Company and segment	3Q18 Power generation	3Q19 Power generation	YoY growth	9M18 Power generation	9M19 Power generation	YoY growth	FY18A Power generation	FY19E Power generation	9M18/ FY18	9M19/ FY19E
	(GWh)	(GWh)	(%)	(GWh)	(GWh)	(%)	(GWh)	(GWh)	(%)	(%)
Suntien - 956 HK										
Power generation total	1,244	1,416	13.9%	5,483	6,281	14.6%	7,815	8,765	70.2%	71.7%
Wind	1,205	1,373	14.0%	5,381	6,153	14.3%	7,676	8,608	15.7%	16.0%
Solar	39	43	9.1%	102	129	25.5%	139	157	28.1%	n/a
Natural Gas Sales (mcbm)	416	494	18.77%	1,713	2,145	25.25%	2,631	3,406	65.1%	63.0%
Wholesale	204	225	9.8%	1,029	1,308	27.1%	1,620	2,187	63.5%	59.8%
Retail	192	249	29.6%	623	766	22.8%	920	1,122	67.8%	68.2%
CNG	19	20	5.5%	60	71	19.0%	92	97	65.2%	73.2%

Source: Company data, CMBIS estimates

Figure 3: 12M forward P/E band

Source: Bloomberg, CMBIS

Figure 4: 12M forward P/B band

Source: Bloomberg, CMBIS

Financial Summary

Income statement

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	7,058	9,975	12,323	14,947	17,607
Wind & Solar	3,100	3,422	3,878	4,366	4,838
Natural Gas	3,957	6,551	8,445	10,582	12,769
Costs of sales	(4,750)	(7,116)	(9,190)	(11,319)	(13,480)
Other income and gains, net	81	100	77	76	76
Selling & distribution exps	(0)	(0)	(1)	(1)	(1)
Administrative expenses	(453)	(502)	(573)	(635)	(704)
Other expenses	(171)	(219)	(62)	(75)	(79)
Operating profit	1,764	2,239	2,575	2,993	3,419
Finance costs	(774)	(785)	(916)	(1,152)	(1,339)
Joint ventures & associates	214	290	341	375	425
Pre-tax profit	1,204	1,743	2,065	2,336	2,624
Income tax	(99)	(168)	(207)	(234)	(289)
Minority interests	(165)	(307)	(286)	(324)	(366)
Renewable green bond	-	(29)	(60)	(60)	(60)
Net profit	940	1,240	1,513	1,720	1,911

Cash flow summary

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Profit before tax	1,204	1,743	2,065	2,336	2,624
Depreciation and amortization	1,125	1,308	1,540	1,887	2,320
Change in working capital	(75)	(147)	(1,685)	402	(136)
Taxation	(126)	(217)	(227)	(234)	(289)
Others	496	91	(60)	(60)	(60)
Operating cash flow	2,642	2,778	1,634	4,332	4,460
Capex & investments	(4,324)	(5,568)	(8,392)	(10,265)	(7,426)
Others	754	(12)	12	-	-
Investment cash flow	(3,570)	(5,580)	(8,381)	(10,265)	(7,426)
Equity raised	-	-	-	-	-
Perpetual MTN raised	-	590	410	-	-
Change of Debts	2,963	2,673	6,502	6,883	3,872
Others	(901)	274	-	-	-
Financing cash flow	1,563	3,022	6,202	6,049	2,925
Net change in cash	634	220	(544)	116	(40)
Cash at the beginning	1,491	2,110	2,240	1,696	1,812
Exchange difference	(15)	(89)	-	-	-
Cash at the end of the year	2,110	2,240	1,696	1,812	1,772
Add: Acquired cash	-	-	-	-	-
Cash at balance sheet	2,110	2,240	1,696	1,812	1,772

Balance sheet

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Non-current assets	28,755	32,743	39,327	47,428	52,533
Fixed asset	22,466	26,584	33,026	41,091	45,836
Intangible assets	1,870	1,757	1,673	1,574	1,475
Interest in associates and JVs	1,687	1,918	2,378	2,757	3,185
Prepayments	1,819	1,648	1,391	1,114	1,114
Others	913	837	859	892	923
Current assets	5,533	6,418	7,355	7,820	8,227
Cash	2,110	2,240	1,696	1,812	1,772
Trade and bills receivables	2,564	3,296	3,729	4,442	4,885
Prepayments	789	812	1,844	1,476	1,476
Others	70	70	86	90	94
Current liabilities	9,473	8,602	9,572	11,143	12,560
Trade and bill payables	576	148	986	1,196	1,409
Other payables	3,084	3,655	2,440	2,693	2,788
Borrowings	5,708	4,644	6,022	7,118	8,215
Others	49	70	50	50	50
Non-current liabilities	14,314	18,162	23,214	29,000	31,767
Borrowings	13,217	16,683	21,350	26,779	29,125
Other payables	69	184	102	112	116
Others	-	25	25	25	25
Minority Interest	1,896	2,360	2,401	2,496	2,603
Renewable green bond	-	590	1,000	1,000	1,000
Shareholders' equity	8,605	9,446	10,495	11,609	12,832
Total Equity	10,501	12,397	13,896	15,105	16,434

Key ratios

YE Dec 31	FY17A	FY18A	FY19E	FY20E	FY21E
Sales mix (%)					
Wind & Solar	45.2	43.9	34.3	31.5	29.2
Natural Gas	54.6	56.1	65.7	68.5	70.8
Total	100	100	100	100	100
P&L ratios (%)					
Gross profit margin	32.9	32.7	28.7	0.25	24.3
Operating margin	28.0	25.0	22.4	20.9	20.0
Pre-tax margin	17.0	17.1	17.5	16.8	15.6
Net margin	12.4	13.3	12.4	12.3	11.5
Effective tax rate	13.0	8.2	9.6	10.0	10.0
Balance sheet ratios					
Current ratio (x)	0.49	0.58	0.75	0.77	0.70
Quick ratio (x)	0.49	0.58	0.74	0.76	0.70
Cash ratio (x)	0.19	0.22	0.26	0.18	0.16
Debtors turnover days	107.6	107.2	104.0	99.8	96.7
Total debt / equity ratio (%)	178.8	180.2	172.0	197.0	224.4
Net debt / equity ratio (%)	195.2	190.0	223.3	254.4	257.0
Returns (%)					
ROE	6.86	10.92	12.35	13.16	13.64
ROA	1.84	2.74	3.17	3.24	3.11
Per share					
EPS (RMB)	0.25	0.33	0.41	0.46	0.51
DPS (RMB)	0.10	0.13	0.16	0.19	0.21
BVPS (RMB)	2.32	2.70	3.09	3.39	3.72

Source: Company data, CMBIS estimates

China Longyuan (916 HK)

Valuation is still suppressed by weak sentiment

CLY was the worst performer under our wind operator coverages. Share price has declined 6.9% since 1H19 results announcement. As leading wind operator with largest wind farm scale in the world, CLY also has the highest exposure to renewable subsidy issues as well as potential tariff adjustment. CLY's weak valuation reflects market concerns for cash flow and potential policy risks for future growth. Trading at consensus forward 6.6x/0.58x PE/PB, CLY's valuation is now at 5-yr low. As market still has no clue for solving subsidy issues, however, we expect valuation pressures to remain on CLY. **We cut DCF TP from HK\$5.00 to HK\$4.68, maintain HOLD.**

- **3Q19 wind power generation declined 5.0% YoY.** In 3Q19, CLY recorded wind power generation of 7,717GWh, down 5.0% YoY. According to mgmt., weak wind power generation was mainly due to unsatisfactory wind resources in North China during the period. In 9M19, CLY generated 29,162GWh wind power, up only 0.9% YoY, significantly slower than our FY19E projection with a wind power generation growth of 5.2%. Based on CLY's 3Q19 operating figures, we trim FY19/20/21E wind utilization hour from 2,354/2,348/2,402 to 2,300/2,323/2,346 to reflect a more conservative utilization hour outlook.
- **Revise earnings downward.** Based on wind utilization hours assumption change, we cut FY19-21E EPS by 7.2/7.2/6.9% to RMB0.55/0.60/0.71. Our DCF TP is reduced from HK\$5.00 to HK\$4.68 accordingly. As we see no re-rating catalyst in short-term, **we maintain HOLD recommendation for CLY.**

Earnings Summary

(YE 31 Dec)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue (RMB mn)	24,592	26,388	27,121	28,679	31,314
YoY growth (%)	10.3	7.3	2.8	5.7	9.2
Net income (RMB mn)	3,688	3,924	4,392	4,809	5,686
EPS (RMB)	0.46	0.49	0.55	0.60	0.71
YoY growth (%)	8.0	6.4	11.9	9.5	18.2
P/E (x)	8.1	7.6	6.8	6.2	5.3
P/B (x)	0.7	0.7	0.6	0.6	0.5
Yield (%)	2.5	2.6	2.9	3.2	3.8
ROE (%)	9.0	8.9	9.2	9.3	10.1
Net gearing (%)	173.4	163.0	156.4	157.3	140.8

Source: Company data, CMBIS estimates

HOLD (Maintain)

Target Price	HK\$4.68
(Previous TP)	HK\$5.00
Up/Downside	+12.8%
Current Price	HK\$4.15

China Wind Sector

Robin Xiao

(852) 3900 0849

robinxiao@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	33,351
Avg 3 mths t/o (HK\$ mn)	55
52w High/Low (HK\$)	7.49/4.59
Total Issued Shares (mn)	3,430

Source: Bloomberg

Shareholding Structure

CHN Energy	58.4%
Free float	41.6%

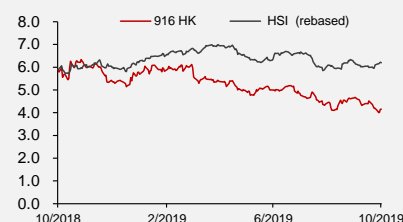
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	-10.6%	-10.8%
3-mth	-14.6%	-9.1%
6-mth	-23.3%	-13.9%
12-mth	-29.9%	-33.5%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: Ernst & Young

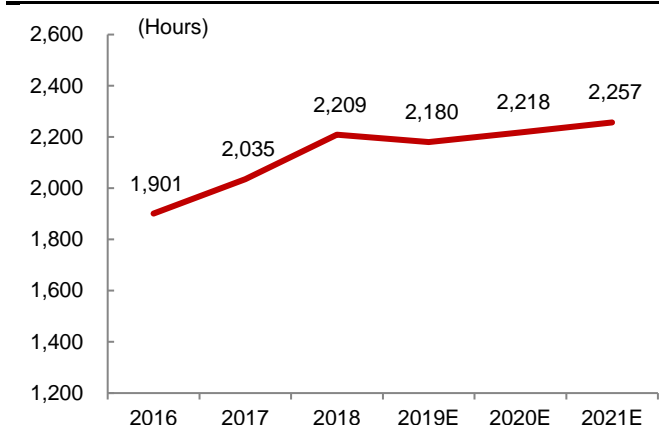
Related Reports

1. "China Longyuan (916 HK) – Results in line, but lack of short-term catalyst" – 22 Aug 2019
2. "China Longyuan (916 HK) – Maintaining status quo despite policy uncertainties" – 29 Apr 2019
3. "China Longyuan (916 HK) – Found ways to manage receivables; boosting CAPEX" – 21 Mar 2019

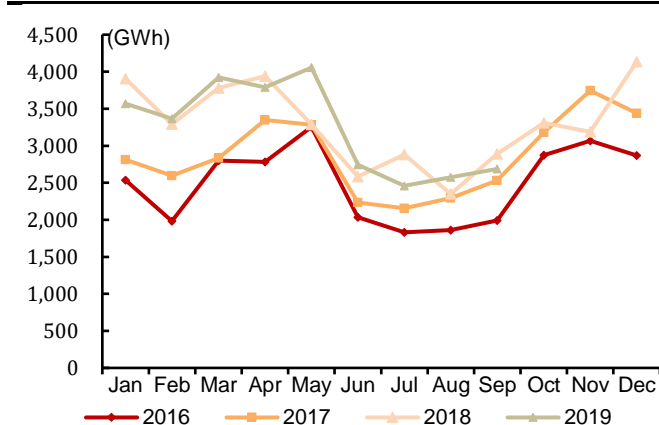
Figure 5: CLY's 3Q19/9M19 Operating performance

Company and segment	3Q18	3Q19	YoY growth	9M18	9M19	YoY growth	FY18A	FY19E	9M18/ FY18	9M19/ FY19E
	Power generation (GWh)	Power generation (GWh)		Power generation (GWh)	Power generation (GWh)		Power generation (GWh)	Power generation (GWh)		
CLY - 916 HK										
Power generation total	10,628	10,307	-3.0%	36,458	36,597	0.4%	49,970	52,082	73.0%	70.3%
Wind	8,120	7,717	-5.0%	28,909	29,162	0.9%	39,542	41,594	73.1%	70.1%
Coal-fired	2,377	2,471	3.9%	7,170	7,050	-1.7%	9,919	9,938	72.3%	70.9%
Others	131	119	-9.3%	379	384	1.4%	509	550	74.4%	69.9%

Source: Company data, CMBIS estimates

Figure 6: CLY's wind utilization hours

Source: Company data, CMBIS estimates

Figure 7: CLY's monthly wind power generation

Source: Company data, CMBIS

Figure 8: Earnings revision

	Old			New			Change(%)		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Revenue (Rmb mn)	27,565	29,161	31,860	27,121	28,679	31,314	-1.6%	-1.6%	-1.7%
Net Income (Rmb mn)	4,735	5,181	6,110	4,392	4,809	5,686	-7.2%	-7.2%	-6.9%
EPS (Rmb)	0.59	0.64	0.76	0.55	0.60	0.71	-7.2%	-7.2%	-6.9%

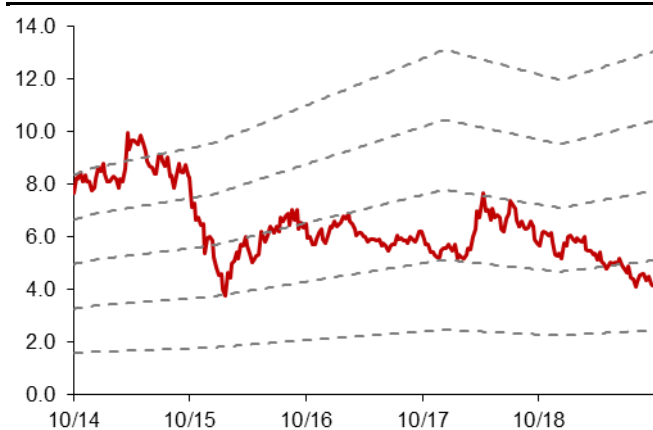
Source: CMBIS, CMBIS estimates

Figure 9: Our DCF valuation for CLY

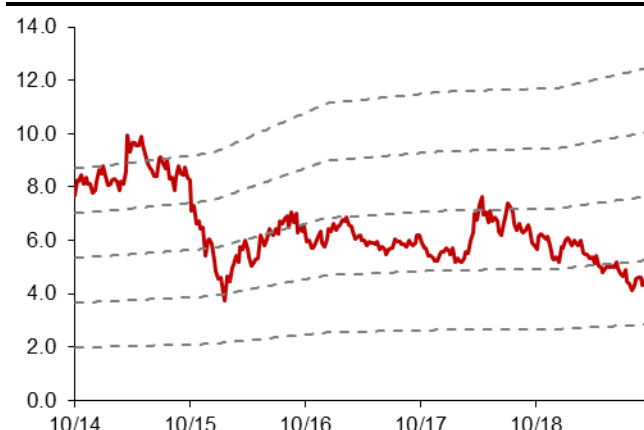
DCF Valuation (Rmb, mn)	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Turnover	28,679	31,314	33,304	35,269	33,281	32,770	32,250	31,722	31,189	30,653	30,115
Turnover growth (%)	6%	9%	6%	6%	-6%	-2%	-2%	-2%	-2%	-2%	-2%
EBIT	10,490	12,650	13,751	14,891	13,344	12,570	11,813	11,076	10,358	9,662	8,988
EBIT margin	37%	40%	41%	42%	40%	38%	37%	35%	33%	32%	30%
Tax rate (%)	18%	19%	19%	20%	20%	21%	21%	22%	22%	23%	23%
Depreciation	8,154	9,109	9,755	10,409	10,619	10,824	11,024	11,218	11,408	11,593	11,773
CAPEX	(18,495)	(11,146)	(11,146)	(11,014)	(10,646)	(10,291)	(9,949)	(9,619)	(9,300)	(8,993)	(8,696)
Change in working capital	(884)	(1,094)	(931)	(876)	(595)	(219)	(223)	(226)	(228)	(229)	(230)
Free cash flow	(898)	9,331	10,626	12,226	11,214	10,717	10,604	10,496	10,393	10,297	10,208
Years	1	2	3	4	5	6	7	8	9	10	11
Discount factor	0.92	0.84	0.77	0.71	0.65	0.60	0.55	0.51	0.46	0.43	0.39
Discount free cash flow	(825)	7,868	8,227	8,693	7,321	6,425	5,838	5,306	4,825	4,389	3,996
Terminal value	150,888										
Terminal perpetual growth	2%										
Terminal EV/EBITDA	7.27										

Valuations (Rmb mn)	WACC Calculations
Terminal value	150,888
Terminal perpetual growth	2.0%
Terminal EV/EBITDA	7.27
Total discount FCF	62,064
Discount terminal value	59,063
Firm value	121,126
Discount FCF(% of total)	51.2%
Terminal value (% of total)	48.8%
Add: Cash & cash equivalent	2,972
Less: Debt	77,798
Non-controlling interest	7,479
Perpetual MTN note	4,991
Equity Value - Rmb	33,830
Share fair value (Rmb)	4.21
Exchange rate (HKD/Rmb)	0.90
Share fair value (HKD)	4.68

Source: CMBIS, CMBIS estimates

Figure 10: 12M forward P/E band

Source: Bloomberg, CMBIS

Figure 11: 12M forward P/B band

Source: Bloomberg, CMBIS

Financial Summary

Income statement

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	24,592	26,388	27,121	28,679	31,314
Wind	15,998	18,410	18,852	20,403	23,140
Coal-fired	7,990	7,314	7,595	7,603	7,500
Others	530	650	674	674	674
Concession revenue	74	14	-	-	-
Cost of sales	(13,965)	(13,927)	(14,485)	(15,097)	(16,092)
Gross profit	10,627	12,461	12,635	13,582	15,222
Other income, net	712	917	881	918	986
Admin expense	(542)	(588)	(605)	(640)	(698)
Personnel costs	(1,677)	(2,075)	(2,205)	(2,395)	(2,539)
Other expenses	(784)	(1,473)	(922)	(975)	(1,065)
EBIT	8,337	9,242	9,785	10,490	11,907
Finance costs, net	(3,215)	(3,513)	(3,457)	(3,615)	(3,891)
Joint ventures & associates	344	167	273	338	361
Exceptional	-	-	-	-	-
Pre-tax profit	5,465	5,897	6,600	7,213	8,377
Income tax	(916)	(976)	(1,174)	(1,328)	(1,574)
Less:					
Minority interests	704	755	793	833	874
Distribution to perpetual	158	242	242	242	242
Net profit	3,688	3,924	4,392	4,809	5,686

Cash flow summary

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Net income	3,688	3,924	4,392	4,809	5,686
Depreciation and amortization	6,952	7,316	7,745	8,293	9,253
Change in working capital	(1,162)	(2,405)	(2,306)	(884)	(1,094)
Others	376	(335)	90	168	(3)
Operating CF	9,855	8,500	9,921	12,386	13,843
Capex	(10,755)	(7,248)	(11,471)	(17,678)	(10,733)
Associated companies	11	(78)	(273)	(338)	(361)
Other	(627)	(163)	122	(86)	(83)
Investment CF	(11,371)	(7,488)	(11,621)	(18,102)	(11,178)
Equity raised	1,954	(76)	-	-	-
Change of Debts	2,198	(2,565)	2,446	8,553	20
Dividend paid	(683)	(738)	(785)	(878)	(962)
Others	277	156	150	150	150
Financing CF	3,746	(3,222)	1,811	7,824	(792)
Net change in cash	2,230	(2,210)	111	2,108	1,873
Cash at the beginning	1,901	5,072	2,861	2,972	5,080
Exchange difference	941	-	-	-	-
Cash at the end	5,072	2,861	2,972	5,080	6,953
Pledged cash	33	253	280	312	312
Time deposit	-	-	-	-	-
Cash at balance sheet	5,105	3,114	3,252	5,392	7,264

Balance sheet

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Non-current assets	128,513	128,718	132,839	142,476	144,234
Fixed asset	109,473	110,001	113,981	123,633	125,392
Prepaid lease payments	2,165	2,152	2,179	2,201	2,219
Interest in joint ventures	4,472	4,549	4,822	5,160	5,521
Other non-current assets	12,403	12,016	11,857	11,482	11,102
Current assets	17,122	17,786	19,868	22,758	25,793
Cash	5,105	3,114	3,252	5,392	7,264
Account receivable	7,155	10,542	11,417	12,070	13,175
Prepayments	3,629	2,819	3,792	3,829	3,876
Other current assets	1,233	1,312	1,408	1,466	1,477
Current liabilities	47,159	39,780	42,246	45,601	45,668
Trade and other payable	1,891	2,059	2,049	2,049	2,049
Other payables	9,220	9,122	8,805	8,671	8,739
Borrowings	35,774	28,336	31,119	34,615	34,615
Others	275	264	273	267	265
Non-current liabilities	45,176	50,158	50,138	55,229	55,081
Borrowings	41,620	46,645	46,679	51,922	51,922
Obligation under financial lease	415	361	307	255	207
Others non-current assets	3,141	3,152	3,152	3,052	2,952
Minority Interest	7,173	7,329	7,479	7,629	7,779
Perpetual MTN	4,991	4,991	4,991	4,991	4,991
Shareholders' equity	41,135	44,245	47,852	51,783	56,508
Total Equity	53,299	56,566	60,323	64,404	69,278

Key ratios

YE Dec 31	FY17A	FY18A	FY19E	FY20E	FY21E
Sales mix (%)					
Wind	65.1	69.8	69.5	71.1	73.9
Coal-fired	32.5	27.7	28.0	26.5	24.0
Others	2.2	2.5	2.5	2.3	2.2
Concession revenue	0.3	0.1	-	-	-
Total	100.0	100.0	100.0	100.0	100.0
Profit & loss ratios (%)					
Operating margin	33.9	35.0	36.1	36.6	38.0
Pre-tax margin	22.2	22.3	24.3	25.1	26.8
Net margin	15.0	14.9	16.2	16.8	18.2
Effective tax rate	16.8	16.5	17.8	18.4	18.8
Balance sheet ratios					
Current ratio (x)	0.36	0.45	0.47	0.50	0.56
Quick ratio (x)	0.34	0.43	0.45	0.48	0.54
Cash ratio (x)	0.11	0.07	0.07	0.11	0.15
Inventory turnover days	14.8	12.5	12.3	12.9	12.2
Debtors turnover days	96.9	122.4	147.8	149.5	147.1
Creditor turnover days	58.0	51.8	51.8	49.5	46.5
Total debt / equity ratio (%)	185.7	169.5	162.6	167.1	153.1
Net debt / equity ratio (%)	173.4	163.0	156.4	157.3	140.8
Returns (%)					
ROE	9.0	8.9	9.2	9.3	10.1
ROA	2.5	2.7	2.9	2.9	3.3
Per share					
EPS (RMB)	0.46	0.49	0.55	0.60	0.71
DPS (RMB)	0.09	0.10	0.11	0.12	0.14
BVPS (RMB)	5.12	5.51	5.95	6.44	7.03

Source: Company data, CMBIS estimates

Huadian Fuxin (816 HK)

Hydro beat, but nuclear still missed

HDFX's share price has rebounded 7.9% since 1H19 results announcement, despite the fact that market had weak sentiment on wind operators. We believe there is some speculation on the Company for potential privatization given its low valuation among peers. HDFX's 3Q19 operating performance was largely on track with our estimates. We believe hydro power generation will likely to beat our FY19E estimates, while nuclear share profit may still be a drag as Sanmen 2# unit was still in outage status. Our DCF TP for HDFX remained unchanged at HK\$2.00. **Maintain BUY.**

- **3Q19 power generation increased 11.0% YoY.** Rapid power generation growth was mainly backed by hydro and distributed natural gas energy, but dragged by wind and coal-fired power. Hydro power's performance was still outstanding, contributing YoY power generation growth of 89.6%/113.0% in 3Q19/9M19 respectively. Wind power generation was sluggish, leading to a drag with power generation decline of 6.8%/1.8% in 3Q19/9M19 respectively. Overall, HDFX recorded aggregated power generation growth of 10.7% in 9M19, slightly higher than our FY19E estimates. We expect hydro utilization hours to reach above our assumption of 3,900 hours.
- **Nuclear investments posted mixed signals.** Fuqing Nuclear exhibited accelerating pace in power output, as the project posted results catching up from declining ~14.0% in 1H19 to down 5.0% in 9M19. Sanmen Nuclear still faced problems from Unit 2# outage, which will likely to drag profit contribution from the newly commenced project.
- **Maintain BUY with TP unchanged at HK\$2.00.** Based on HDFX's 3Q19 operating performance, we maintain our financial forecasts unchanged. Trading at FY19E 4.7x/0.5x PER/PBR with estimated FY19-21E EPS CAGR of 21.1%, we believe HDFX is undervalued.

Earnings Summary

(YE 31 Dec)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue (RMB mn)	16,813	18,330	19,850	23,101	26,627
YoY growth (%)	5.63	9.02	8.30	16.37	15.26
Net income (RMB mn)	1,986	1,995	2,400	2,988	3,523
EPS (RMB)	0.24	0.24	0.29	0.36	0.42
YoY growth (%)	1.7	0.4	20.3	24.5	17.9
P/E (x)	5.6	5.6	4.6	3.7	3.2
P/B (x)	0.6	0.5	0.5	0.4	0.4
Yield (%)	4.2	4.3	4.9	6.0	7.1
ROE (%)	10.2	9.5	10.4	11.7	12.4
Net gearing (%)	287.2	205.2	207.7	204.6	187.2

Source: Company data, CMBIS estimates

BUY (Maintain)

Target Price	HK\$2.00
(Previous TP)	HK\$2.00)
Up/Downside	+36.1%
Current Price	HK\$1.47

China Wind Sector

Robin Xiao
(852) 3900 0849
robinxiao@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	12,360
Avg 3 mths t/o (HK\$ mn)	5.2
52w High/Low (HK\$)	1.92/1.29
Total Issued Shares (mn)	2,570

Source: Bloomberg

Shareholding Structure

Huadian Group	62.8%
Free float	37.2%

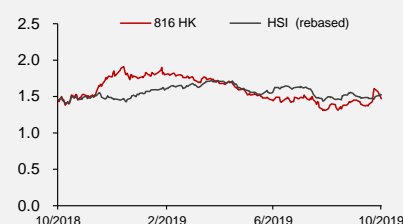
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	3.4%	3.2%
3-mth	2.0%	8.7%
6-mth	-12.3%	-1.6%
12-mth	0.7%	-4.5%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: KPMG

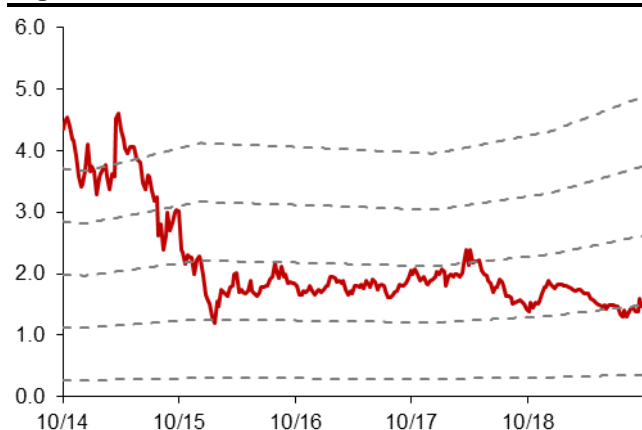
Related Reports

1. "Huadian Fuxin Energy (816 HK) - Sluggish nuclear dragged 1H19 earnings" - 27 Aug 2019
2. "Huadian Fuxin Energy (816 HK) - Recovering hydro and falling coal price 6 May 2019
3. "Huadian Fuxin Energy (816 HK) - Recovery of hydro and coal power will be key theme" - 26 Mar 2019

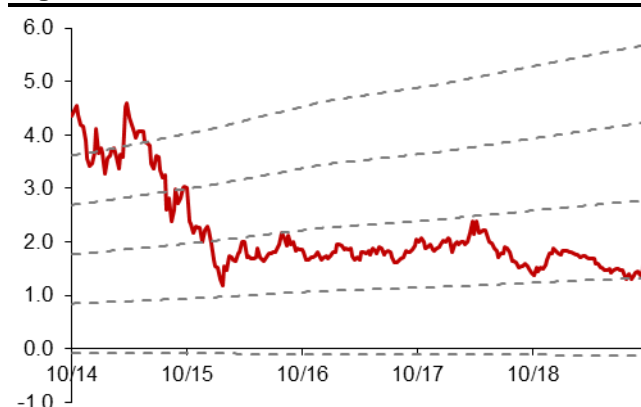
Figure 12: HDFX's 3Q19/9M19 operating performance

Company and segment	3Q18 Power generation	3Q19 Power generation	YoY growth	9M18 Power generation	9M19 Power generation	YoY growth	FY18A Power generation	FY19E Power generation	9M18/ FY18	9M19/ FY19E
	(GWh)	(GWh)	(%)	(GWh)	(GWh)	(%)	(GWh)	(GWh)	(%)	(%)
HDFX - 816 HK										
Power generation total	11,381	12,629	11.0%	33,131	36,668	10.7%	44,574	48,184	74.3%	76.1%
Wind	3,488	3,249	-6.8%	12,429	12,208	-1.8%	16,869	17,298	73.7%	70.6%
Solar	430	473	10.2%	1,253	1,324	5.7%	1,613	1,625	77.7%	81.5%
Hydro	1,699	3,222	89.6%	4,075	8,678	113.0%	5,791	10,171	70.4%	85.3%
Coal-fired	4,940	4,671	-5.4%	13,372	11,741	-12.2%	17,514	15,456	76.4%	76.0%
NG	783	984	25.6%	1,882	2,614	38.9%	2,621	3,468	71.8%	75.4%
Others	41	30	-25.8%	120	103	-14.2%	166	166	72.2%	61.9%

Source: Company data, CMBIS estimates

Figure 13: 12M forward P/E band

Source: Bloomberg, CMBIS

Figure 14: 12M forward P/B band

Source: Bloomberg, CMBIS

Financial Summary

Income statement

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	16,813	18,330	19,850	23,101	26,627
Hydro	2,518	1,693	2,859	2,602	2,677
Coal-fired	4,896	6,116	5,539	6,445	7,295
Wind	6,401	7,083	7,446	8,107	8,565
Others	2,997	3,437	4,007	5,946	8,089
Cost of sales	(9,435)	(10,975)	(10,761)	(13,271)	(16,105)
Gross profit	7,377	7,355	9,090	9,830	10,522
Other income, net	210	343	225	225	225
Admin expense	(512)	(422)	(522)	(606)	(698)
Personnel costs	(1,383)	(1,599)	(1,769)	(2,132)	(2,302)
Other expenses	(832)	(867)	(1,044)	(1,090)	(1,248)
EBIT	4,861	4,809	5,980	6,226	6,498
Finance costs, net	(2,800)	(2,991)	(2,909)	(3,066)	(3,181)
JVs & associates	742	940	680	1,136	1,432
Exceptional	-	-	-	-	-
Pre-tax profit	2,802	2,758	3,751	4,296	4,750
Income tax	(337)	(285)	(469)	(580)	(689)
Minority interests	(348)	(204)	(426)	(368)	(346)
Perpetual int distribution	(131)	(274)	(456)	(361)	(192)
Net profit	1,986	1,995	2,400	2,988	3,523

Cash flow summary

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Net income	1,986	1,995	2,400	2,988	3,523
D&A	4,335	4,759	4,970	5,483	6,053
Change in working capital	(4,071)	(821)	855	(527)	834
Others	5,788	374	(1,306)	(201)	(84)
Operating cash flow	8,038	6,306	6,919	7,744	10,327
Capex	(7,083)	(4,558)	(9,971)	(9,814)	(7,339)
Associated companies	(684)	(795)	(1,351)	(1,596)	(1,805)
Other	(1,583)	-	-	-	-
Investment cash flow	(9,350)	(5,352)	(11,323)	(11,410)	(9,143)
Equity raised	1,833	5,104	-	-	-
Change of Debts	2,614	(4,132)	5,445	5,357	2,178
Dividend paid	(429)	(467)	(478)	(540)	(672)
Others	(3,499)	4	152	160	168
Financing cash flow	520	508	5,120	4,977	1,674
Net change in cash	(792)	1,462	716	1,311	2,857
Cash at the beginning of the year	2,895	2,122	3,598	4,314	5,624
Exchange difference	18	14	-	-	-
Cash at the end of the year	2,122	3,598	4,314	5,624	8,482
Pledged cash	5	6	9	9	9
Cash at balance sheet	2,127	3,604	4,323	5,633	8,491

Balance sheet

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Non-current assets	95,915	96,146	103,987	110,186	113,434
Fixed asset	81,191	80,930	85,936	90,273	91,567
Prepaid lease payments	1,428	1,428	1,545	1,660	1,770
Interest in joint ventures	8,190	8,985	10,336	11,932	13,736
Other non-current assets	5,107	4,805	6,170	6,321	6,360
Current assets	11,325	12,157	12,790	14,374	16,379
Cash	2,127	3,604	4,323	5,633	8,491
Account receivable	6,992	5,970	6,268	6,435	5,544
Prepayments	1,919	2,154	1,845	1,906	1,925
Other current assets	287	430	355	399	419
Current liabilities	25,366	19,345	24,065	24,936	25,377
Trade and other payable	1,081	1,104	1,290	1,502	1,731
Other payables	8,715	7,220	7,796	7,330	7,082
Borrowings	15,382	10,868	14,780	15,900	16,355
Others	188	153	198	204	209
Non-current liabilities	55,406	55,857	57,535	61,840	63,632
Borrowings	53,779	54,096	55,603	59,814	61,526
Obligation under financial lease	226	291	309	332	341
Others non-current assets	1,401	1,470	1,624	1,694	1,764
Minority Interest	3,043	3,047	3,199	3,359	3,527
Perpetual Instrument	3,988	8,970	8,970	8,970	8,970
Shareholders' equity	19,436	21,086	23,008	25,456	28,307
Total equity	26,467	33,102	35,177	37,785	40,804

Key ratios

YE Dec 31	FY17A	FY18A	FY19E	FY20E	FY21E
Sales mix (%)					
Hydro	15.0	9.2	14.4	11.3	10.1
Coal-fired	29.1	33.4	27.9	27.9	27.4
Wind	38.1	38.6	37.5	35.1	32.2
Others	17.8	18.8	20.2	25.7	30.4
Total	100.0	100.0	100.0	100.0	100.0
Profit & loss ratios (%)					
Gross margin	45.1	42.0	46.9	43.5	40.4
Pre-tax margin	16.7	15.0	18.9	18.6	17.8
Net margin	11.8	10.9	12.1	12.9	13.2
Effective tax rate	12.0	10.3	12.5	13.5	14.5
Balance sheet ratios					
Current ratio (x)	0.4	0.6	0.5	0.6	0.6
Quick ratio (x)	0.4	0.6	0.5	0.6	0.6
Cash ratio (x)	0.1	0.2	0.2	0.2	0.3
Inventory turnover days	6.0	8.2	6.1	5.9	5.4
Debtors turnover days	151.8	118.9	115.3	101.7	76.0
Creditor turnover days	42.8	37.9	44.7	42.0	39.8
Total debt / equity ratio (%)	2.6	2.0	2.0	2.0	1.9
Net debt / equity ratio (%)	287.2	205.2	207.7	204.6	187.2
Returns (%)					
ROE	10.2	9.5	10.4	11.7	12.4
ROA	1.9	1.8	2.1	2.4	2.7
Per share					
EPS (RMB)	0.24	0.24	0.29	0.36	0.42
DPS (RMB)	0.06	0.06	0.06	0.08	0.09
BVPS (RMB)	2.31	2.51	2.74	3.03	3.37

Source: Company data, CMBIS estimates

Huaneng Renewables (958 HK)

Surprising privatization at ~1x P/B

HNR announced surprising privatization plan after 1H19 results, which has boosted share price by 37.9% since then. Huaneng Group's offer was HK\$3.17 per share to acquire all issued H shares in HNR. We estimate Huaneng Group's offer represents FY19E PBR of 0.97x. The privatization offer is subject to at least 90% acceptance and at least 75% voting approval. Based on HNR's closing price at HK\$2.98, we believe market had priced in a successful privatization. Given HNR's long term trading below 1x PBR, we believe privatization will offer a way out for investors. We raise TP from HK\$2.47 to HK\$3.17 on a successful deal outlook. **Maintain HOLD.**

- **Key timeline of the privatization.** Huaneng Group and HNR made joint announcement with the HK\$3.17 privatization offer on 3 Oct. The Company will then 1) distribute composite document within 21 days after the announcement by 24 Oct 2019, and 2) to fulfill offer conditions within the next 60 days after composite documents dispatch, indicating a decision will come by 23 Dec 2019.
- **High probability of successful privatization.** With reference to HNR's equity fund raising history, we believe the privatization will likely to be successful. HNR had four rounds of equity fund raising with share price of HK\$2.50/2.71/2.50/2.61 in 2011 IPO/Oct 2013/Dec 2014/May 2017, respectively. We believe majority of independent shareholders will be satisfied with Huaneng Group's offer. Given HNR's share value trading below book value for long term as well as increasing policy uncertainty in China, we see the privatization offer still provides a profitable way out.
- **3Q19 wind power generation declined 6.9% YoY.** After strong 1H19 wind power generation performance, HNR exhibited a slowdown in 3Q19, due to sluggish wind resources in North China. In 3Q19, Wind power generation was 3,771GWh, down 6.9% YoY; and solar power generation was 380GWh, up 8.5%. In 9M19, total power generation recorded 19,347GWh, up 7.4%, largely in line with our FY19E estimates. We believe market is now not sensitive to HNR's operating data, but with all eyes on the privatization progress.
- **Key risk:** fail in privatization. Market has priced in high possibility of successful privatization. If the deal fails, we expect valuation will fall back to ~5x/0.6x PER/PBR.

Earnings Summary

(YE 31 Dec)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue (RMB mn)	10,554	11,650	12,625	13,529	15,556
YoY growth (%)	14.2	10.4	8.4	7.2	15.0
Net income (RMB mn)	3,012	3,086	4,116	4,259	4,928
EPS (RMB)	0.29	0.29	0.39	0.40	0.47
YoY growth (%)	7.5	-0.6	33.4	3.5	15.7
P/E (x)	9.1	9.2	6.9	6.7	5.8
P/B (x)	1.2	1.0	0.91	0.82	0.73
Yield (%)	1.6	1.6	2.2	2.3	2.6
ROE (%)	12.2	11.3	13.3	12.3	12.6
Net gearing (%)	189.9	175.7	159.6	158.3	139.2

Source: Company data, CMBIS estimates

HOLD (Maintain)

Target Price HK\$3.17
(Previous TP) HK\$2.47
Up/Downside +6.4%
Current Price HK\$2.98

China Wind Sector

Robin Xiao
(852) 3900 0849
robinxiao@cmbi.com.hk

Stock Data

Mkt Cap (HK\$ mn)	31,488
Avg 3 mths t/o (HK\$ mn)	93
52w High/Low (HK\$)	3.01/1.87
Total Issued Shares (mn)	5,031

Source: Bloomberg

Shareholding Structure

Huaneng Group	52.4%
Freefloat	47.6%

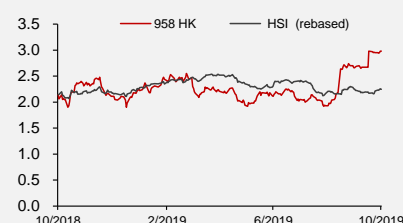
Source: HKEx

Share Performance

	Absolute	Relative
1-mth	12.0%	11.8%
3-mth	47.5%	57.1%
6-mth	33.0%	49.3%
12-mth	39.9%	32.7%

Source: Bloomberg

12-mth Price Performance



Source: Bloomberg

Auditor: KPMG

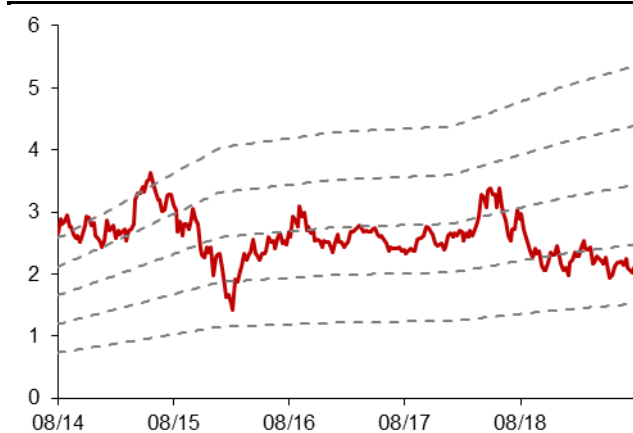
Related Reports

1. "Huaneng Renewables (958 HK) –" 1H earnings beat, but lacks re-rating catalyst - 30 Aug 2019
2. "Huaneng Renewables (958 HK) – 1Q19 earnings surged with increasing operating leverage" 30 Apr 2019
3. "Huaneng Renewables (958 HK) –"Mid-term outlook turns gray – 24 Aug 2018

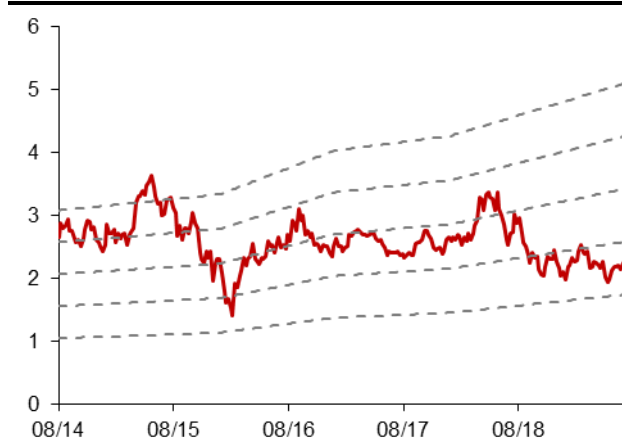
Figure 15: HNR's 3Q19/9M19 operating performance and our estimates

Company and segment	3Q18 Power generation (GWh)	3Q19 Power generation (GWh)	YoY growth (%)	9M18 Power generation (GWh)	9M19 Power generation (GWh)	YoY growth (%)	FY18A Power generation (GWh)	FY19E Power generation (GWh)	9M18/ FY18 (%)	9M19/ FY19E (%)
HNR - 958 HK										
Power generation total	4,399	4,151	-5.6%	18,008	19,347	7.4%	24,974	26,988	72.1%	71.7%
Wind	4,049	3,771	-6.9%	16,955	18,194	7.3%	23,563	25,472	72.0%	71.4%
Solar	350	380	8.5%	1,053	1,153	9.5%	1,410	1,516	74.7%	76.0%

Source: Company data, CMBIS estimates

Figure 16: 12M forward P/E band

Source: Bloomberg, CMBIS

Figure 17: 12M forward P/B band

Source: Bloomberg, CMBIS

Financial Summary

Income statement

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	10,554	11,650	12,625	13,529	15,556
Wind	9,617	10,611	11,530	12,408	14,401
Solar	937	1,039	1,094	1,121	1,155
Other net income	469	388	385	427	489
Operating expenses	(5,372)	(6,142)	(5,929)	(6,574)	(7,606)
DD&A	(3,798)	(3,973)	(4,076)	(4,519)	(5,191)
Personnel costs	(514)	(652)	(704)	(811)	(978)
Repair and maintenance	(191)	(265)	(253)	(284)	(333)
Administrative exps	(248)	(273)	(290)	(311)	(358)
Other operating exps	(621)	(980)	(606)	(649)	(747)
EBIT	5,651	5,896	7,080	7,382	8,440
Finance costs, net	(2,238)	(2,189)	(2,071)	(2,245)	(2,454)
JV & Associates	(5)	(11)	(8)	(8)	(8)
Exceptional	-	-	-	-	-
Pre-tax profit	3,408	3,695	5,001	5,128	5,977
Income tax	(346)	(567)	(826)	(809)	(979)
Less: Minority interests	50	42	58	60	70
Net profit	3,012	3,086	4,116	4,259	4,928

Cash flow summary

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Net income	3,012	3,086	4,116	4,259	4,928
DD&A	3,804	3,977	4,081	4,524	5,247
Change in working capital	(3,792)	(1,780)	600	1,265	252
Others	(804)	(1,184)	966	(302)	(121)
Operating cash flow	2,220	4,099	9,763	9,747	10,306
Capex & investments	(3,219)	(3,298)	(11,353)	(14,866)	(9,001)
Associated companies	1,061	250	468	339	(21)
Others	339	-	-	-	-
Investments cash flow	(2,158)	(3,048)	(10,885)	(14,526)	(9,022)
Equity raised	1,852	-	-	-	-
Change of Debts	(1,566)	40	1,694	7,057	2,578
Dividend paid	(399)	(454)	(465)	(617)	(639)
Others	(17)	275	30	30	30
Financing cash flow	(129)	(140)	1,259	6,469	1,969
Net change in cash	(67)	912	136	1,690	3,252
Cash at year begin	2,570	2,503	3,415	3,551	5,241
Exchange difference	-	-	-	-	-
Cash at the end of the year	2,503	3,415	3,551	5,241	8,493
Less: pledged cash	52	68	63	66	66

Balance sheet

YE Dec 31 (RMB mn)	FY17A	FY18A	FY19E	FY20E	FY21E
Non-current assets	75,107	74,089	80,904	90,917	94,703
Fixed asset	71,406	70,812	78,119	88,497	92,288
Prepaid lease payments	357	269	280	291	301
Interest in JVs	254	201	199	196	194
Other non-current assets	3,090	2,807	2,306	1,933	1,920
Current assets	11,242	14,582	15,531	17,940	21,451
Cash	2,503	3,415	3,551	5,241	8,493
Account receivable	7,214	9,968	10,574	11,284	11,539
Prepayments	1,396	1,069	1,276	1,276	1,276
Other current assets	130	130	130	139	142
Current liabilities	27,086	29,031	32,237	37,543	39,188
Borrowings	20,353	21,614	23,576	26,886	28,181
Finance leases	352	472	300	300	130
Other payables	6,253	6,817	8,241	10,236	10,756
Tax payables	128	128	120	120	120
Non-current liabilities	33,821	31,427	32,304	35,749	37,080
Borrowings	29,451	28,611	28,815	32,861	34,444
Finance leases	1,231	730	430	130	-
Deferred income	198	181	189	185	187
Others	2,940	1,905	2,870	2,572	2,449
Total equity	25,442	28,214	31,895	35,566	39,886
Minority Interest	840	805	835	865	895
Shareholders' equity	24,602	27,408	31,059	34,701	38,991

Key ratios

YE Dec 31	FY17A	FY18A	FY19E	FY20E	FY21E
Sales mix (%)					
Wind	91.1	91.1	91.3	91.7	92.6
Solar	8.9	8.9	8.7	8.3	7.4
Total	100.0	100.0	100.0	100.0	100.0
P&L ratios (%)					
Operating margin	53.5	50.6	56.1	54.6	54.3
Pre-tax margin	32.3	31.7	39.6	37.9	38.4
Net margin	28.5	26.5	32.6	31.5	31.7
Effective tax rate	-10.2	-15.3	-16.5	-15.8	-16.4
Balance sheet ratios					
Current ratio (x)	0.42	0.50	0.48	0.48	0.55
Quick ratio (x)	0.41	0.50	0.48	0.48	0.55
Cash ratio (x)	0.17	0.12	0.11	0.14	0.22
Debtors turnover days	205	269	297	295	268
Total debt / total equity (%)	180	178	164	168	157
Net debt / equity (%)	190	176	160	158	139
Returns (%)					
ROE	12.2	11.3	13.3	12.3	12.6
ROA	3.5	3.5	4.3	3.9	4.2
Per share					
EPS (RMB)	0.29	0.29	0.39	0.40	0.47
DPS (RMB)	0.04	0.04	0.06	0.06	0.07
BVPS (RMB)	2.33	2.59	2.94	3.28	3.69

Source: Company data, CMBIS estimates

Disclosures & Disclaimers

Analyst Certification

The research analyst who is primary responsible for the content of this research report, in whole or in part, certifies that with respect to the securities or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about the subject securities or issuer; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific views expressed by that analyst in this report.

Besides, the analyst confirms that neither the analyst nor his/her associates (as defined in the code of conduct issued by The Hong Kong Securities and Futures Commission) (1) have dealt in or traded in the stock(s) covered in this research report within 30 calendar days prior to the date of issue of this report; (2) will deal in or trade in the stock(s) covered in this research report 3 business days after the date of issue of this report; (3) serve as an officer of any of the Hong Kong listed companies covered in this report; and (4) have any financial interests in the Hong Kong listed companies covered in this report.

CMBIS Ratings

BUY	: Stock with potential return of over 15% over next 12 months
HOLD	: Stock with potential return of +15% to -10% over next 12 months
SELL	: Stock with potential loss of over 10% over next 12 months
NOT RATED	: Stock is not rated by CMBIS

OUTPERFORM	: Industry expected to outperform the relevant broad market benchmark over next 12 months
MARKET-PERFORM	: Industry expected to perform in-line with the relevant broad market benchmark over next 12 months
UNDERPERFORM	: Industry expected to underperform the relevant broad market benchmark over next 12 months

CMB International Securities Limited

Address: 45/F, Champion Tower, 3 Garden Road, Hong Kong, Tel: (852) 3900 0888 Fax: (852) 3900 0800

CMB International Securities Limited ("CMBIS") is a wholly owned subsidiary of CMB International Capital Corporation Limited (a wholly owned subsidiary of China Merchants Bank)

Important Disclosures

There are risks involved in transacting in any securities. The information contained in this report may not be suitable for the purposes of all investors. CMBIS does not provide individually tailored investment advice. This report has been prepared without regard to the individual investment objectives, financial position or special requirements. Past performance has no indication of future performance, and actual events may differ materially from that which is contained in the report. The value of, and returns from, any investments are uncertain and are not guaranteed and may fluctuate as a result of their dependence on the performance of underlying assets or other variable market factors. CMBIS recommends that investors should independently evaluate particular investments and strategies, and encourages investors to consult with a professional financial advisor in order to make their own investment decisions.

This report or any information contained herein, have been prepared by the CMBIS, solely for the purpose of supplying information to the clients of CMBIS or its affiliate(s) to whom it is distributed. This report is not and should not be construed as an offer or solicitation to buy or sell any security or any interest in securities or enter into any transaction. Neither CMBIS nor any of its affiliates, shareholders, agents, consultants, directors, officers or employees shall be liable for any loss, damage or expense whatsoever, whether direct or consequential, incurred in relying on the information contained in this report. Anyone making use of the information contained in this report does so entirely at their own risk.

The information and contents contained in this report are based on the analyses and interpretations of information believed to be publicly available and reliable. CMBIS has exerted every effort in its capacity to ensure, but not to guarantee, their accuracy, completeness, timeliness or correctness. CMBIS provides the information, advices and forecasts on an "AS IS" basis. The information and contents are subject to change without notice. CMBIS may issue other publications having information and/or conclusions different from this report. These publications reflect different assumption, point-of-view and analytical methods when compiling. CMBIS may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

CMBIS may have a position, make markets or act as principal or engage in transactions in securities of companies referred to in this report for itself and/or on behalf of its clients from time to time. Investors should assume that CMBIS does or seeks to have investment banking or other business relationships with the companies in this report. As a result, recipients should be aware that CMBIS may have a conflict of interest that could affect the objectivity of this report and CMBIS will not assume any responsibility in respect thereof. This report is for the use of intended recipients only and this publication, may not be reproduced, reprinted, sold, redistributed or published in whole or in part for any purpose without prior written consent of CMBIS.

Additional information on recommended securities is available upon request.

For recipients of this document in the United Kingdom

This report has been provided only to persons (I) falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended from time to time) ("The Order") or (II) are persons falling within Article 49(2) (a) to (d) ("High Net Worth Companies, Unincorporated Associations, etc.") of the Order, and may not be provided to any other person without the prior written consent of CMBIS.

For recipients of this document in the United States

This report is intended for distribution in the United States to "major US institutional investors", as defined in Rule 15a-6 under the US, Securities Exchange Act of 1934, and may not be furnished to any other person in the United States. Each major US institutional investor that receives a copy of this research report by its acceptance hereof represents and agrees that it shall not distribute or provide this research report to any other person.

For recipients of this document in Singapore

This report is distributed in Singapore by CMBI (Singapore) Pte. Limited (CMBISG) (Company Regn. No. 201731928D), an Exempt Financial Adviser as defined in the Financial Advisers Act (Cap. 110) of Singapore and regulated by the Monetary Authority of Singapore. CMBISG may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, as defined in the Securities and Futures Act (Cap. 289) of Singapore, CMBISG accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact CMBISG at +65 6350 4400 for matters arising from, or in connection with the report.