



October 28, 2013

Sector Rating:  
**OVERWEIGHT**

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**Key Data**

Avg.13E P/E (x)	17.20
Avg.13E P/B (x)	1.37
Avg.13E Dividend Yield (%)	1.32

Source(s): Company, Bloomberg, ABCI Securities

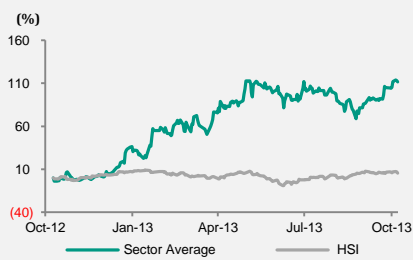
**Sector performance (%)**

	Absolute	Relative*
1-mth	9.47	10.35
3-mth	3.60	-0.41
6-mth	15.34	10.96

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities

**1-Year Sector performance**



Source(s):Bloomberg

## Renewable Energy Sector Bullish on 2014 Outlook

**Investment themes**

- ❖ As China is pursuing development of renewable energy sources, we expect to see strong capacity growth in the relevant sector. This is especially true for nuclear and wind powers which have relatively higher utilization hours
- ❖ Increase in renewable energy subsidy by the government will improve liquidity and lower the financing costs of renewable energy developers—especially the wind power operators

- ❖ We initiate coverage on Longyuan (916 HK) with BUY. We also favor Huaneng Renewables (958 HK, BUY) and Beijing Jingneng Clean Energy (579 HK, BUY). For Datang Renewable (1798 HK), we recommend HOLD

**Shifting to renewable energy.** Based on the 12<sup>th</sup> Five-Year Plan, the government is targeting to raise the installed capacity of non-fossil fuel power to 30% by 2015, and increase non-fossil fuel consumption to 11.4%/15.0% by 2015/2020 from 8.6% in 2010. We expect to see strong capacity growth in renewable energy sector, especially the nuclear and wind powers that have relatively higher utilization hours. The government targets to raise installed capacity of nuclear/wind powers to 40 GW/100GW by 2015, representing a 5-year CAGR of 29.9% and 26.4%, respectively, compared to 7.8% among coal-fired power and 5.7% in hydropower.

**Increasing support for renewable energy at the expense of coal-fired power.** NDRC announced to (1) raise the renewable energy subsidy from RMB 0.008/kWh to RMB 0.015/kWh;(2) raise de-Nox tariff premium from RMB 0.008/kWh to RMB 0.01/kWh;(3) add a new tariff premium of RMB 0.02/kWh for de-dust facilities. The renewable energy subsidy is expected to finance through lowering the on-grid tariffs of coal-fired IPPs. We believe the increase in renewable energy subsidy will facilitate collection of overdue subsidy receivables and hence improve the financial conditions of renewable energy developers, especially that of the wind power operators which have substantial amounts of outstanding subsidy receivables.

**Overweight sector outlook; BUY HN Renew, Longyuan and BJCE.** We are positive on the outlook for the wind power sector based on the increasing investment in grid construction and the expectation that more accommodative policies will be implemented. Our top picks include: Huaneng Renewables (958 HK, BUY). We believe its location advantage will generate higher unit returns via the higher utilization hours and on-grid tariff. We also like Longyuan (916HK, BUY) as it has the highest utilization hours amongst peers. Its diversified wind portfolio also makes it less susceptible to uncontrollable natural factors in wind power generation. We believe Beijing Jingneng Clean Energy (579 HK, BUY) will be a major beneficiary under the government's plan to reduce air pollution in Beijing. We assign a HOLD rating on Datang Renewable (1798 HK) because of its highest gearing level and lowest profitability among peers.

**Risk factors:** (1) High gearing of power players; (2) Natural resources risks; (3) Grid connection risks; (4) Policy risks; (5) Economic slowdown.

**Sector Valuation Summary (data as of Oct 25, 2013)**

Company	Ticker	Rating	Price (HK\$)	TP (HK\$)	FY13E P/E(x)	FY14E P/E (x)	FY13E P/B (x)	FY14E P/B (x)	FY13E Yield (%)	FY14E Yield (%)
Longyuan	916 HK	Buy	8.98	10.77	18.83	14.87	1.78	1.62	1.06	1.34
Huaneng Renewables (HN Renew)	958 HK	Buy	2.97	3.63	16.36	12.27	1.49	1.35	1.34	1.79
Datang Renewable (DT Renew)	1798 HK	Hold	1.63	1.70	22.05	13.02	0.80	0.75	1.13	1.92
Beijing Jingneng Clean Energy (BJCE)	579 HK	Buy	3.14	3.60	11.58	10.46	1.40	1.32	1.73	1.91

Source(s): Companies, ABCI Securities estimates



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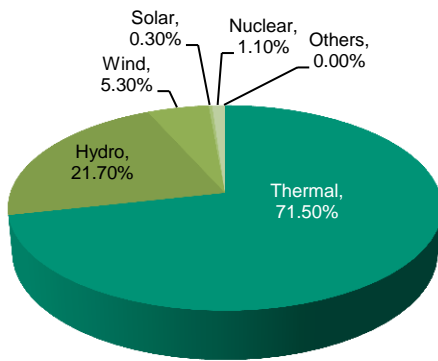
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## Shifting to alternative energy

### Alternative energy is replacing coal-fired power

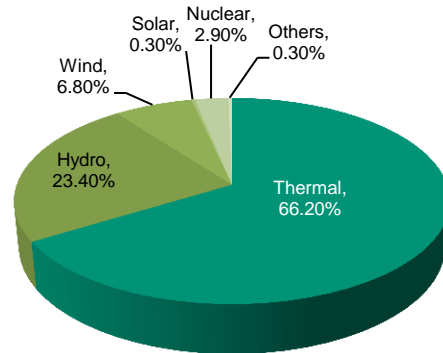
Based on the 12<sup>th</sup> Five-Year Plan, the government is targeting to raise installed capacity of non-fossil fuel power to 30% by 2015. It also aims to increase non-fossil fuel consumption to 11.4% by 2015 and 15.0% by 2020, compared to 6% in 2010.

Exhibit 1: Installed capacity breakdown as at end-2012



Source(s):NEA

Exhibit 2: Installed capacity breakdown as at end-2015



Source(s): NEA

Total power installed capacity (including coal-fired power, hydropower, nuclear power, gas-fired power, wind power and solar power) in China is expected to increase at a 9.0% CAGR to 970GW during 2010-15, exceeding the estimated growth in electricity consumption at 8.0% CAGR (reaching 6,150bn kwh by 2015).

For non-fossil fuel power, installed capacity growth is expected to be higher due to the lower utilization hours in general (except for nuclear power). We expect strong capacity growth of renewable energies in the coming years, especially for nuclear and wind power that usually have relatively higher utilization hours. The government targets to raise installed capacities of nuclear and wind powers to 40 GW and 100GW by 2015, representing the 5-year CAGRs of 29.9% and 26.4%, respectively, compared to the single-digit growth at 7.8% in coal-fired power and 5.7% in hydropower.

Following the Fukushima Daiichi nuclear disaster in Japan, China announced to suspend approval for all nuclear plant projects in Mar 2011. However, as the official capacity target of 40 GW by 2015 remains unchanged and approval for nuclear projects resumed in Oct 2012, nuclear capacity will experience a higher growth in the next two years at 47.1% CAGR in 2012-15. Solar capacity is expected to grow the most at 85.7% CAGR for the same period, but the high growth is mainly resulted from its low base. In 2012, solar only accounted for less than 0.1% of total installed capacity in China.



**Exhibit 3: Installed capacity growth of power plants in China**

	2010	2011	2012	2015	2020	12-15E CAGR
<b>Thermal</b>	707	739	758	960	1170	8.2%
<b>Hydro</b>	198	212	249	290	420	5.2%
<b>Wind</b>	31	45	61	100	200	18.0%
<b>Solar</b>	1	2	3	21	50	85.7%
<b>Nuclear</b>	11	13	13	40	86	47.1%
<b>Gas</b>			38	56	80	13.5%
<b>Others</b>	27	44	23	79	9	51.0%
<b>Total</b>	<b>974</b>	<b>1,055</b>	<b>1,145</b>	<b>1,490</b>	<b>1,935</b>	<b>9.2%</b>

Source(s): www.gov.cn, CEC

The changes in installed capacity among the powers are mainly driven by the state-owned energy and power generation enterprises. As the government favors development of renewable energies, these enterprises have been expanding their business scope to include clean energies. For instance, Guodian Group, Huaneng Group and Datang Corp. are the parent companies of the three largest wind power operators in China - Longyuan, Huaneng Renewables (HN Renew) and Datang Renewable (DT Renew), respectively. We believe these changes in power structure will continue to divert funds from traditional IPPs to renewable IPPs.

**Exhibit 4: Parent companies of some major Hong Kong-listed renewable companies**

Parent company	HK-Listed Renewable Companies
Guodian Group	Longyuan (916 HK), Guodian Tech (1296 HK)
Huaneng Group	HN Renew (958 HK)
Datang Corporation	DT Renew (1798 HK)
China Power Investment Corp	Shanghai Electric
China Huadian Corp	Huadian Fuxin (816 HK)

Source(s): Company reports, ABCI Securities

**Nuclear power to outperform on stability and sustainability**

Coal-fired power is widely used because of its high stability and the low technology level required. The 5-year annual average utilization hour during 2008-2012 of coal-fired power plants was 5,010, compared to 2,007 for wind power and 1,500-2,200 for solar power. Its high utilization hour also makes it one of the most cost-efficient energy sources. The Chinese government, however, increases the use of non-fossil fuel as it seeks to rely on more sustainable and environmental-friendly energy sources.

Among the non-fossil fuel powers, nuclear power has the highest utilization hour. In 2012, utilization hour of nuclear power in China reached 7,838, about 57% higher than coal-fired power. With improved technologies to prevent leakage of nuclear radiation, we believe nuclear power – a more predictable energy source than solar and wind powers (which rely heavily on uncontrollable factors and natural resources) – will be developed as a major energy source in China to provide a sustainable energy source to the country. In addition, dispatch priority also adds stability to the development of renewable energy. In particular, wind, hydro and solar powers will be granted the highest priority, followed by nuclear, gas-fired and coal-fired powers. Thus, power plants with higher dispatch priorities will be less adversely affected by the decelerating growth expected in electricity consumption.



Exhibit 5: Utilization hours of power plants in China

	2008	2009	2010	2011	2012	5-year Avg.
Thermal	4,885	4,865	5,030	5,305	4,965	5,010
Hydro	3,589	3,328	3,404	3,019	3,555	3,379
Wind	2,046	2,077	2,097	1,920	1,893	2,007
Nuclear	7,825	7,758	7,841	7,759	7,838	7,804
<b>Total</b>		<b>4,546</b>	<b>4,650</b>	<b>4,731</b>	<b>4,331</b>	<b>4,565</b>

Source(s): NEA

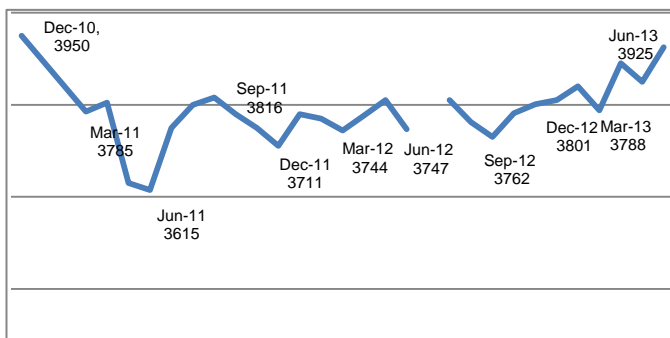
Declining production costs encourage increasing use of renewable energies

Coal-fired and nuclear powers are subject to fluctuations in raw material costs-coal and uranium, respectively. Coal price has dropped by 12% since the beginning of 2013 because of slower economic growth that reduced electricity consumption. Coal price, however, is a double-edged sword to the coal-fired IPPs due to the cost pass-through mechanism (Please refer to P7).

Price of uranium, the major raw material of nuclear power, started to soften since 1Q11 when the Fukushima Daiichi nuclear disaster took place in Japan. Subsequent to the nuclear crisis, Japan and some European countries (such as Germany) suspended nuclear generation or planned to cease generating nuclear power. Demand for nuclear power plummeted and hence uranium price declined. The NYMEX uranium (type U308) price fell 54.6% from US\$ 77.5/lb on Feb 2, 2011 to US\$ 35.15/lb on Oct 16, 2013. The weakening uranium price may benefit nuclear power generation companies temporarily. As China has resumed approval of nuclear project in Oct 2012, we expect new nuclear power plants will gradually commence operation in 2014 and if other countries also resume their projects of nuclear power plants, uranium price will also recover.

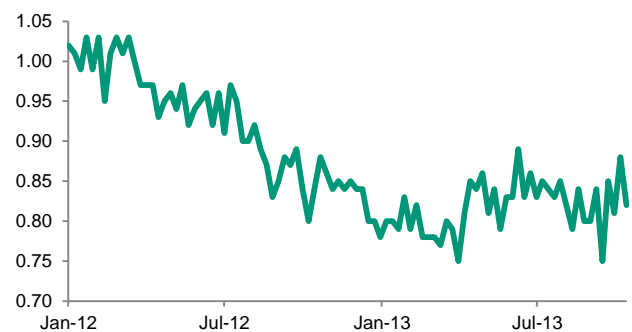
Wind and solar powers, on the other hand, are not subject to changes in raw material costs but procurement costs of parts/components that affect project returns. It is expected wind turbine prices to remain stable while prices of solar modules are likely to continue to trend downwards. We believe declining production costs encourage increasing use of renewable energies.

Exhibit 6: ASP of 1.5 MW wind turbines (RMB/kW)



Source(s):Goldwind, ABCI Securities

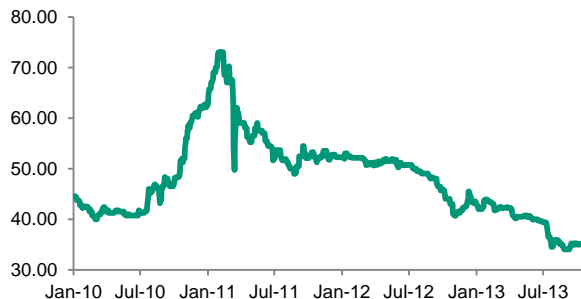
Exhibit 7: ASP of solar modules (US\$/Watt)



Source(s): Bloomberg

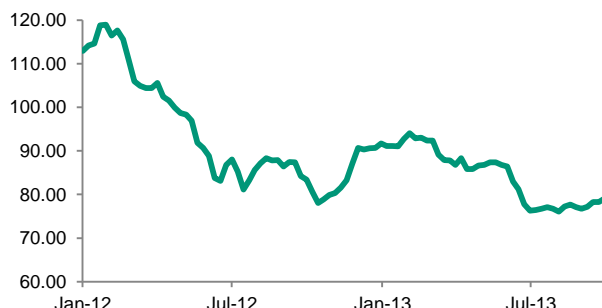


Exhibit 8: ASP of U308 uranium (US\$/lb)



Source(s): New York Mercantile Exchange, Bloomberg

Exhibit 9: McCloskey Newcastle coal price (US\$/ton)



Source(s): Bloomberg

**Government’s increasing support for renewable energies at the expense of coal-fired IPPs**

NDRC announced to raise the renewable energy subsidy from RMB 0.008/kWh to RMB 0.015/kWh and de-Nox tariff premium from RMB 0.008/kWh to RMB 0.01/kWh. In addition, a new tariff premium of RMB 0.02/kWh would be added for de-dust facility. The renewable energy subsidy is financed by lowering the on-grid tariff of coal-fired IPPs while keeping end-user tariff unchanged. In 2013, NDRC announced on Sep 30 that on-grid tariff cut, which had taken place since Sep 25, would range from RMB 0.0097-0.025/kwh.

Such move is intended to make up for the shortfall in China’s Renewable Energy Development Fund (REDF) established in 2008 to provide subsidies to developers of renewable energy projects. In fact, the subsidy to REDF were raised from RMB 0.004/kwh to RMB 0.008/kwh in Nov 2011 but the amount was still not enough to cover for REDF’s subsidies to the renewable energy developers. The fund shortage led to major delay in payment. According to NDRC, repayment for the owed subsidies between Oct 2010 and Apr 2011 had only started in Dec 2012.

As at June 2013, Longyuan’s outstanding receivables from energy subsidy were RMB 3.6bn, while the figures for HR Renew and DT Renew were RMB 2.3bn and RMB 3.0bn, respectively. We believe the increases in renewable energy subsidy to REDF will speed up the collection of overdue subsidies by renewable energy developers, thus improving their liquidity, working capital and lowering financing costs.



## Overhangs of the power industry

### Potential tariff-cut

The NDRC reiterated that the increase in renewable energy subsidy in Sep 2013 financed through lowering coal-fired on-grid tariffs is independent of the coal-cost pass-through mechanism announced in late Dec 2012 by the State Council. The pass-through mechanism would only be implemented every 12 months and tariff adjustment decisions would be based upon the prescribed formula (i.e. there will be an on-grid tariff adjustment if coal price changes by more than 5% within 12 months). As coal price has dropped by more than 10% since the beginning of 2013, the market expects the current mechanism will trigger another tariff cut in Dec 2013 (12 months after the new coal-cost pass through was announced) in addition to the tariff cut earlier in Sep 2013.

In addition, the market also expects the government to cut the on-grid tariff for wind and solar power projects, especially as coal-fired tariff and procurement costs are declining, to reduce the differences in on-grid tariffs of coal-fired power and alternative energy. The NDRC announced that on-grid tariff for solar projects would be lowered from the standardized RMB1.00/kwh to RMB0.9-1.0/kwh, depending on project location and construction cost. Such tariff cut has been effective since Sep 1, 2013 and is applicable to projects approved after Sep 1, 2013, or power plants that were approved before Sep 1, 2013 but only started commercial operation after Jan 1, 2014.

To gauge the impacts of the tariff cut, we conduct a scenario analysis of changes in on-grid tariffs among the major power stocks. If government is to cut on-grid tariffs, all power stocks will be negatively impacted but companies with higher profit margins and more diversified power portfolios will be less affected. Overall, the wind power stocks are less sensitive to tariff cuts than coal-fired IPPs due to their higher profit margins. Within the renewable energy sector, BJCE (579 HK) and Longyuan (916 HK) which have diversified revenue streams will be the least affected as wind power accounted for only 32% and 50% of their revenues, respectively. In our view, nuclear power companies are unlikely to subject to tariff cut as its on-grid tariff of RMB0.43/kwh, which was revised in July 2013 and is applicable to all projects that will commence commercial operation after Jan 1, 2013 is very close to the one for coal-fired power.

Exhibit 10: Scenario analysis of on-grid tariffs among the major power stocks

Ticker	Company	Shr price (HK\$)	Est EPS				Sensitivity			Est PE			
			2013	ASP -5%	ASP -3%	ASP -1%	ASP -5%	ASP -3%	ASP -1%	2013	ASP -5%	ASP -3%	ASP -1%
902	Huaneng Power	7.93	0.7744	0.3201	0.5018	0.6836	58.70%	35.20%	11.70%	8.08	19.54	12.47	9.15
991	Datang Power	3.47	0.325	0.0455	0.1573	0.2691	86.00%	51.60%	17.20%	8.42	60.14	17.40	10.17
836	China Resources Power	3.45	0.4785	1.5901	1.8394	2.0887	89.10%	53.40%	17.80%	5.69	52.07	12.22	6.92
1071	Huadian Int	19.78	2.2133	0.0523	0.2228	0.3933	28.20%	16.90%	5.60%	7.05	9.81	8.48	7.47
2380	China Power	3.02	0.4139	0.3111	0.3522	0.3933	24.80%	14.90%	5.00%	5.76	7.66	6.76	6.06
916	Longyuan	8.98	0.4073	0.3422	0.3682	0.3943	16.00%	9.60%	3.20%	17.39	20.71	19.24	17.97
958	HN Renew	2.97	0.1821	0.1482	0.1617	0.1753	18.60%	11.20%	3.70%	12.87	15.81	14.49	13.37
1798	DT Renew	1.63	0.0635	0.0256	0.0407	0.0559	59.80%	35.90%	12.00%	20.25	50.33	31.57	22.99
579	BJCE	3.14	0.2068	0.1928	0.1984	0.204	6.80%	4.10%	1.40%	11.98	12.85	12.49	12.14

Source(s): Companies, ABCI Securities estimates



## Updates on wind power industry

Wind power counters have outperformed the market and have risen by 15.3% for the past 6 months as recovery in utilization hour has turned the industry around. As we expect utilization hour to rise further and more supportive policies will be rolled out, the upside potential is still increasing.

### Continuous improvement in utilization hours

Grid curtailment rate of Longyuan (16%), HN Renew (24%) and DT Renew (26%) in 1H2012 dropped to 13%, 19% and 13%, respectively, in 1H2013. This was partly due to the agreement established between the Northern Grid and NE Grid, in which the NE Grid would dispatch 20% more electricity output to Northern grid, alleviating the grid curtailment issues in NE China. As a result, utilization hours of the three major wind power operators improved by 10%-28%.

Going forward, we expect curtailment rate to continue to decline due to improvement in grid infrastructure. The government has been increasing its investment in grid construction from RMB 24bn in 2012 to RMB 52bn in 2013E. In June 2013, the Xinjiang to NW Grid commenced operation. The Hami-Xinjiang to Zhengzhou-Henan transmission line of 8GW is expected to commence operation by end-2013. Therefore, we are expecting further improvement in utilization hours in 2014-15.

**Exhibit 11: Utilization hours of the three largest wind power operators**

Code	Company	2008	2009	2010	2011	2012	1H12	1H13
916	Longyuan	2,354	2,268	2,217	2,026	1,985	1,003	1,104
958	HN Renew	2,380	2,365	2,265	1,962	1,774	861	1,096
1798	DT Renew	2,255	2,159	2,134	1,951	1,752	880	1,054
	China	-	<b>2,077</b>	<b>2,097</b>	<b>1,903</b>	<b>1,890</b>	NA	NA

Source(s): Company reports

### Improvement in liquidity

Due to fund shortage, subsidy payments to renewable energy operators were delayed. After issuing RMB14.8bn of renewable energy subsidy to the wind, solar and bioenergy power sectors in Apr 2013 (of which 62.8% was allocated to the wind power sector), NDRC announced to raise the renewable energy subsidy from RMB0.008/kWh to RMB0.015/kWh, effective from Sep 25 in order to make up for the fund shortage.

As at June 2013, Longyuan had renewable energy overdue receivables of RMB3.6bn, while the amount was RMB2.3bn for HN Renew and RMB3.0bn for DT Renew. We believe the increase in renewable energy subsidy will facilitate collection of these outstanding receivables and improve liquidity and working capital, as well as lower gearing and financing costs of renewable energy developers.

**Exhibit 12: Net debt-to-equity ratios of major power operators in China (%)**

Code	Company	2008	2009	2010	2011	2012	1H13	5-yr Av
902	Huaneng Power	243.1	244.2	212.0	265.8	237.5	212.5	240.5
991	Datang Power	354.4	412.4	392.6	301.4	308.6	330.9	353.9
836	China Resources Power	108.3	117.5	137.7	130.3	114.6	94.7	121.7
1071	Huadian Int	362.4	320.8	406.4	431.7	405.9	363.4	385.4
2380	China Power	122.4	189.8	251.2	249.1	230.5	198.7	208.6
<b>Average</b>		<b>238.1</b>	<b>256.9</b>	<b>280.0</b>	<b>275.7</b>	<b>259.4</b>	<b>240.0</b>	<b>262.0</b>
916	Longyuan	296.6	65.4	120.6	155.6	146.9	143.0	157.0
958	HN Renew	227.6	305.4	273.1	152.1	195.5	185.0	230.7
1798	DT Renew	190.2	270.8	195.1	264.3	313.6	310.3	246.8
579	BJCE	160.0	214.0	162.3	106.1	174.3	161.2	163.3
<b>Average</b>		<b>218.6</b>	<b>213.9</b>	<b>187.8</b>	<b>169.5</b>	<b>207.6</b>	<b>199.9</b>	<b>199.5</b>

Source(s): Company reports





Although the net debt-to-equity ratio of wind power operators were over 140% as of 1H13, their gearing levels have been declining thanks to better wind resources and the lower grid curtailment rate. Gearing of the sector (199.9% as of 1H13) is also generally lower than the traditional IPPs (240.0% as of 1H13). Furthermore, we notice that bond yields (ask yield to maturity) of the recently issued bonds by wind power operators range from 3.21%-9.83%, as compared to the official bank lending rate of 6.0%. This indicates the credit market considers the current gearing level of the wind power sector as reasonable.

**Exhibit 13: Bond yields of some power operators**

Code	Company	Amount issued (mn)	Coupon (%)	Issue date	Maturity	Curr	Ask yield to maturity	Rating
902	Huaneng	5,000	4.820	02/27/2013	11/24/2013	CNY	4.700	N/A
1071	Huadian Int	2,000	4.800	09/16/2013	09/16/2014	CNY	5.150	N/A
916	Longyuan	300	3.25%	08/12/2013	08/12/2016	USD	3.208	BBB-
958	HN Renew	1,140	4.800	10/29/2012	10/29/2015	CNY	9.832	N/A
1798	DT Renew	2,000	4.350	10/30/2012	10/30/2013	CNY	4.200	N/A
579	BJCE	900	4.020	01/24/2013	01/24/2014	CNY	4.980	N/A

Source(s): Bloomberg

**Accelerated installation growth**

CAPEX and installation growth of the major renewable energy providers have been slowing since 2011 due to the stricter standards applied for wind farm approvals to prevent over-capacity and reduce grid curtailment problem. On May 15, 2013, the State Council announced to decentralize the wind project approval by delegating the approval right from NDRC to local governments. Therefore, we expect wind power capacity growth to speed up in coming years.

**Exhibit 14: CAPEX of major clean energy generation companies**

Code	Clean energy providers	2009	2010	2011	2012	1H 12	1H 13
916	Longyuan (RMB mn)	16,184	17,846	13,782	13,745	3,676	4,084
	Chg (YoY)		10.26%	-22.77%	-0.27%		11.10%
958	HN Renew (RMB mn)	7,164	10,418	7,699	6,580	2,202	1,726
	Chg (YoY)		45.43%	-26.10%	-14.54%		-21.62%
1798	Datang Renew (RMB mn)	8,141	9,855	10,469	6,864	2,651	1,143
	Chg (YoY)		21.05%	6.23%	-34.43%		-56.87%
816	Huadian Fuxin (RMB mn)	6,816	6,912	5,717	6,908	2,008	3,565
	Chg (YoY)		1.42%	-17.29%	20.83%		77.57%
579	BJCE(RMB mn)	3,612	1,675	3,669	4,068	1,649	1,429
	Chg (YoY)		-53.62%	119.04%	10.87%		-13.39%
	<b>Total (RMB mn)</b>	<b>41,916</b>	<b>46,706</b>	<b>41,338</b>	<b>38,165</b>	<b>12,186</b>	<b>11,947</b>
	<b>Chg (YoY)</b>		<b>11.43%</b>	<b>-11.49%</b>	<b>-7.67%</b>		<b>-1.96%</b>

Source(s): Companies' reports, Bloomberg



Exhibit 15: Installation growth of the three largest wind power operators in China

Code	Company	2008	2009	2010	2011	2012	1H2013
916	Longyuan (MW)	2,503	4,504	6,556	8,598	10,544	10,661
	<i>Chg (YoY)</i>		79.9%	45.6%	31.1%	22.6%	18.5%
958	HN Renew (MW)	402	1,549	3,523	4,904	5,457	5,579
	<i>Chg (YoY)</i>		285.3%	127.4%	39.2%	11.3%	10.4%
1798	Datang Renew (MW)	1,768	2,620	4,028	5,259	5,669	5,635
	<i>Chg (YoY)</i>		48.2%	53.7%	30.6%	7.8%	4.7%
	China (MW)	12,000	25,805	44,733	62,365	75,325	
	<i>Chg (YoY)</i>		115.0%	73.4%	39.4%	20.8%	

Source(s): Company reports

**More policies to roll out**

The National Energy Administration (NEA) is currently drafting the final version of renewable portfolio standards and setting requirements for renewable power consumption by province starting in 2015. We expect the policy would encourage grid companies to consume renewable energies and further reduce grid curtailment rate.

**Top picks for wind power sector: Longyuan, HN Renew, and BJCE**

As the government is highly supportive of renewable energy development, and declines in coal costs (started since 4Q12) are narrowing, we expect funds will continue to flow from traditional IPPs to renewable powers. With increasing investment in grid construction and the expectation that more accommodative policies will be rolled out, we are positive on the outlook of wind power sector in 2014-2015.

Our top picks of the wind power sector includes **HN Renew (BUY)**. We believe its location advantage (in non-curtailment regions) will enable higher utilization hours and on-grid tariff and consequently, higher unit returns. Moreover, its share placement in Oct 2013, (of which 582mn of H-shares were issued at HK\$2.71 apiece; total net proceeds were HK\$1,553mn) helps strengthen the Group's capital base and provide support for capacity growth in 2014. We also like **Longyuan (BUY)** as it has the highest utilization hour among the major peers. This can be attributed to its diversified wind portfolio that makes it less susceptible to uncontrollable factors in wind power generation. Nonetheless, we believe the capacity growth will slow in the future due to its high base. We believe **BJCE (BUY)** will be the major beneficiary of the government's determination to reduce air pollution in Beijing. Similar to HN Renew, its share placement of 327mn H-shares at HK\$2.82 apiece raised a total of HK\$905.2mn in net proceeds. This will support the Group's capacity expansion in 2014. We assign DT Renew with a HOLD rating as it has the highest gearing level and lowest profitability among peers.



October 28, 2013  
Company Report  
Rating: BUY  
TP: HK\$ 10.77

H-Share price (HK\$)	8.98
Est. share price return	19.93%
Est. dividend yield	1.06%
Est. total return	20.99%

Analyst: Lisa Lee  
Tel: (852) 2147 8809  
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**Key Data**

52Wk H/L(HK\$)	9.50/4.77
Issued shares (mn)	8,036
H-Shares (mn)	3,340
Domestic (mn)	4,696
H-share Market cap	29,993
3-mth avg daily turnover (HK\$ mn)	136.31
Major shareholder(s) (%):	
Guodian Group	58.44
% of H-share:	
FIL Limited	8.04
Social Security Fund	8.00
JP Morgan	7.84
China Life Insurance	7.64
China Investment Corp	7.29

Source(s): Company, Bloomberg, ABCI Securities

**FY13 Revenue breakdown (%)**

<b>Wind power</b>	<b>58.19</b>
Sales of electricity	53.02
Service concession construction	5.17
<b>Coal power</b>	<b>38.99</b>
Sales of electricity and steam	23.24
Coal sales	15.74
Others	2.82

Source(s): Company, ABCI Securities

**Share performance (%)**

	Absolute	Relative*
1-mth	9.48	11.51
3-mth	10.01	6.06
6-mth	25.31	23.99

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities

**1-Year stock performance**



Source(s): Bloomberg, ABCI Securities

## Longyuan Power (916 HK)

### Market leader with proven track record

- With its diversified wind portfolio, Longyuan achieved the highest utilization hour among peers
- Longyuan has a huge project pipeline but its capacity growth will slow on its large base
- We expect maintenance costs to increase, but it will be partly offset by lowering cost of debt as increase in renewable subsidy surcharge is likely to improve working capital of wind power operators
- We initiate coverage on Longyuan with a BUY rating. Based on our DCF model with a WACC of 8.3%, we set our TP at HK\$10.77, which represent 17.8x FY14E P/E and 1.94x FY14E P/B

**Achieved highest utilization hours among major peers.** Longyuan's utilization hour in 1H13 was 1,104, which was 4.7% and 0.7% higher than DT Renew and HN Renew, respectively. As the Group has a diversified wind power portfolio, its utilization hour has been higher than its two major peers as the issue of wind curtailment became severe in 2H11. However, its location advantage is diminishing as DT Renew and HN Renew have constructed most of their new capacities in non-curtailment regions since 2011.

**Huge expansion pipeline.** Longyuan is the largest wind power operator that accounted for 14.0% of China total wind power capacity in 2012. The Group also has the highest capacity growth among peers. As at end-2012, Longyuan's consolidated installed capacity reached 10.5GW, up 22.6% YoY compared to the industry average (20.8%), DT Renew (8.5%) and HN Renew (11.3%). As of 1H13, the Group's approved wind power projects have a total capacity of 3,596MW pending operation. Based on management guidance, the Group will add another 1,600-2,000MW of capacity in 2013, representing a YoY growth of 15.1%-19.0%. Going forward, we expect the Group to post slower growth than the industry average due to its already large base. In terms of capacity, Longyuan accounted for 7.7% (~ 2,200MW) of the total capacity of the third batch of approved wind power projects announced by NEA in Mar 2013, compared to 14.0% installed capacity share in the market in 2012.

**Increasing maintenance costs offset partly by lower cost of debts.** As warranty periods of wind turbine start to expire, R&M expenses of Longyuan surged 156%YoY in 1H2013 to RMB 221mn. We expect the uptrend to continue but the amount will be partly offset by a slower growth in financing costs resulted from lower gearing. In addition, we believe the increase in renewable energy subsidy will improve cash flow of wind power operators and help lower their debt levels. As at 1H13, Longyuan had RMB3.6bn of overdue subsidy receivables.

**Recommend BUY with TP at HK\$ 10.77.** Based on our DCF model with a WACC of 8.3%, we set our TP at HK\$10.77, reflecting 17.8x FY14E PE and 1.94x FY14E PB. Based on diversified wind portfolio, fast capacity expansion and lower finance costs, we initiate BUY.

**Risks:** (1) Sooner-than-expected interest rate hikes; (2) Surge in maintenance costs; (3) Policy risks.

**Results and Valuation**

FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	16,585	17,288	19,204	21,471	23,310
Chg (% YoY)	16.65	4.24	11.08	11.81	8.56
Net Income (RMB mn)	2,578	2,593	3,024	3,828	4,564
EBITDA (RMB mn)	6,865	8,586	11,641	13,624	15,322
Chg (% YoY)	23.67	25.07	35.59	17.03	12.46
EPS (RMB)	0.3454	0.3466	0.3763	0.4764	0.5679
Chg (% YoY)	28.05	0.34	8.56	26.60	19.22
BVPS (RMB)	3.47	3.66	3.97	4.38	4.85
Chg (% YoY)	11.28	5.50	8.54	10.09	10.80
P/E (x)	-	20.44	18.83	14.87	12.48
P/B (x)	-	1.93	1.78	1.62	1.46
ROE (%)	10.48	9.37	9.85	11.41	12.31
ROA (%)	3.05	2.56	2.67	3.10	3.44
DPS(RMB)	0.0690	0.0637	0.0753	0.0953	0.1136
Yield (%)	-	0.90	1.06	1.34	1.60
Net gearing* (%)	155.64	146.93	145.99	138.02	127.46

\*Net gearing=Net debt/Total equity

Source(s): Bloomberg, ABCI Securities estimates



**Consolidated income statement (2011A-2015E)**

<b>FY Ended Dec 31 (RMB mn)</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
Revenue	16,584.5	17,288.2	19,203.6	21,471.0	23,309.9
Other net income	1,295.9	1,295.8	300.0	250.0	250.0
<b>Total revenue</b>	<b>17,880.4</b>	<b>18,584.0</b>	<b>19,503.6</b>	<b>21,721.0</b>	<b>23,559.9</b>
D&A	(2,997.6)	(3,696.8)	(4,326.9)	(4,806.9)	(5,246.9)
Coal consumption	(2,877.3)	(2,627.2)	(2,043.2)	(2,044.4)	(2,095.5)
Coal sales cost	(3,896.6)	(3,197.2)	(3,118.5)	(3,118.5)	(3,118.5)
Service concession construction costs	(793.1)	(518.5)			
Personnel costs	(804.9)	(924.8)	(883.4)	(987.7)	(1,072.3)
Material costs	(477.9)	(478.5)	(384.1)	(429.4)	(349.6)
Maintenance	(257.5)	(304.8)	(441.7)	(493.8)	(512.8)
Admin	(308.2)	(401.6)	(249.6)	(279.1)	(303.0)
Other expenses	(364.3)	(389.7)	(441.7)	(493.8)	(536.1)
Share of profits less losses of associates and jointly controlled entities	60.2	140.1	0.0	0.0	0.0
<b>EBIT</b>	<b>5,163.3</b>	<b>6,185.1</b>	<b>7,614.6</b>	<b>9,067.4</b>	<b>10,325.1</b>
Finance income	400.7	142.8	0.0	0.0	0.0
Finance expenses	(2,038.4)	(2,660.4)	(2,999.3)	(3,224.3)	(3,359.3)
<b>EBT</b>	<b>3,525.6</b>	<b>3,667.4</b>	<b>4,615.2</b>	<b>5,843.0</b>	<b>6,965.8</b>
Tax	(305.0)	(342.1)	(738.4)	(934.9)	(1,114.5)
MI	(642.3)	(732.1)	(852.9)	(1,079.8)	(1,287.3)
<b>Net profit</b>	<b>2,578.3</b>	<b>2,593.2</b>	<b>3,023.9</b>	<b>3,828.3</b>	<b>4,564.0</b>
D&A	(2,997.6)	(3,696.8)	(4,326.9)	(4,806.9)	(5,246.9)
Adjusted EBITDA	6,865.0	8,586.0	11,641.5	13,624.3	15,322.0
Dividends	515.2	511.9	604.8	765.7	912.8
No. of issued shares at end of period (mn)	<b>7,464.3</b>	<b>8,036.4</b>	<b>8,036.4</b>	<b>8,036.4</b>	<b>8,036.4</b>
H-shares	2,710.7	3,340.0	3,340.0	3,340.0	3,340.0
Domestic shares	4,753.6	4,696.4	4,696.4	4,696.4	4,696.4
<b>Per share value (RMB)</b>					
<b>FD EPS</b>	<b>0.3454</b>	<b>0.3466</b>	<b>0.3763</b>	<b>0.4764</b>	<b>0.5679</b>
<b>NBV</b>	<b>3.47</b>	<b>3.66</b>	<b>3.97</b>	<b>4.38</b>	<b>4.85</b>
<b>DPS</b>	<b>0.0690</b>	<b>0.0637</b>	<b>0.0753</b>	<b>0.0953</b>	<b>0.1136</b>

Source(s): Company, ABCI Securities estimates

**Key Ratio (2011A-2015E)**

<b>FY ended Dec 31</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
<b>Profitability ratio (%)</b>					
Adjusted EBITDA margin	41.39	49.66	60.62	63.45	65.73
Adjusted EBIT margin	23.32	28.28	38.09	41.07	43.22
EBT margin	21.26	21.21	24.03	27.21	29.88
Net profit margin	15.55	15.00	15.75	17.83	19.58
ROAA	3.05	2.56	2.67	3.10	3.44
ROAE	10.48	9.37	9.85	11.41	12.31
<b>Cost ratio (%)</b>					
Personnel costs/Sales	-4.9	-5.3	-4.6	-4.6	-4.6
Material costs/Sales	-2.9	-2.8	-2.0	-2.0	-1.5
Maintenance/Sales	-1.6	-1.8	-2.3	-2.3	-2.2
Admin/Sales	-1.9	-2.3	-1.3	-1.3	-1.3
Effective tax rate	-8.7	-9.3	-16.0	-16.0	-16.0
<b>Leverage (x)</b>					
Current ratio	0.45	0.49	0.54	0.56	0.60
Quick ratio	0.42	0.47	0.52	0.54	0.58
Net debt/total equity (%)	155.6	146.9	146.0	138.0	127.5
<b>Working capital cycle (days)</b>					
Inventory turnover days	78.9	93.2	100.0	100.0	100.0
Receivables turnover days	98.2	141.7	150.0	135.0	135.0
Payables turnover days	157.2	152.9	130.0	130.0	150.0

Source(s): Company, ABCI Securities estimates



**Consolidated balance sheet (2011A-2015E)**

As of Dec 31 (RMB mn)	2011A	2012A	2013A	2014E	2015E
PPE	64,967.1	73,352.4	81,410.3	88,988.1	95,126.0
Investment properties	98.1	76.2	73.0	69.8	66.6
Lease prepayments	1,214.6	1,417.4	1,430.8	1,387.7	1,344.7
Intangible assets	8,162.8	8,321.8	7,983.3	7,644.8	7,306.3
Goodwill	11.5	11.5	11.5	11.5	11.5
Investments in associates and jointly controlled entities	1,554.5	2,127.2	2,127.2	2,127.2	2,127.2
Other financial assets	4,961.9	4,553.0	4,553.0	4,553.0	4,553.0
Deferred tax assets	180.8	194.2	194.2	194.2	194.2
<b>Total non-current assets</b>	<b>81,151.3</b>	<b>90,053.7</b>	<b>97,783.2</b>	<b>104,976.3</b>	<b>110,729.4</b>
Trading securities	406.0	301.7	301.7	301.7	301.7
Inventories	925.8	816.4	755.6	870.5	750.3
Trade debtors and bill receivable	5,429.9	7,997.5	7,786.2	8,096.4	9,146.5
Prepayments and other current assets	2,898.7	3,155.4	3,155.4	3,155.4	3,155.4
Tax recoverable	72.3	145.9	145.9	145.9	145.9
Assets held for sale	0.0	0.0	0.0	0.0	0.0
Restricted deposits	31.7	231.5	231.5	231.5	231.5
Cash at bank and on hand	3,708.2	5,137.6	8,566.7	10,800.5	11,971.7
<b>Total current assets</b>	<b>13,472.7</b>	<b>17,786.1</b>	<b>20,943.1</b>	<b>23,602.1</b>	<b>25,703.1</b>
<b>Total assets</b>	<b>94,624.0</b>	<b>107,839.9</b>	<b>118,726.3</b>	<b>128,578.4</b>	<b>136,432.5</b>
Borrowings	19,078.2	26,170.0	29,660.2	31,885.2	33,220.2
Obligations under finance leases	0.0	0.0	0.0	0.0	0.0
Trade creditors and bills payable	1,597.0	1,261.0	782.6	1,331.3	1,099.9
Other payables	9,003.6	8,525.1	8,525.1	8,525.1	8,525.1
Tax payable	157.6	118.9	118.9	118.9	118.9
<b>Total current liabilities</b>	<b>29,836.3</b>	<b>36,074.9</b>	<b>39,086.8</b>	<b>41,860.5</b>	<b>42,964.0</b>
<b>Net current liabilities</b>	<b>(16,363.6)</b>	<b>(18,288.8)</b>	<b>(18,143.7)</b>	<b>(18,258.4)</b>	<b>(17,260.9)</b>
<b>Total assets less current liabilities</b>	<b>64,787.7</b>	<b>71,764.9</b>	<b>79,639.5</b>	<b>86,717.9</b>	<b>93,468.5</b>
Borrowings	31,828.1	32,482.1	36,991.9	39,766.9	41,431.9
Deferred income	1,992.7	1,903.2	1,903.2	1,903.2	1,903.2
Deferred tax liabilities	100.6	97.7	97.7	97.7	97.7
Other non-current liabilities	541.1	860.0	860.0	860.0	860.0
<b>Total non-current liabilities</b>	<b>34,462.5</b>	<b>35,343.0</b>	<b>39,852.8</b>	<b>42,627.8</b>	<b>44,292.8</b>
<b>Net assets</b>	<b>30,325.2</b>	<b>36,421.9</b>	<b>39,786.8</b>	<b>44,090.1</b>	<b>49,175.7</b>
<b>Capital and reserves</b>					
Paid-in capital	7,464.3	8,036.4	8,036.4	8,036.4	8,036.4
Reserves	18,444.3	21,393.0	23,905.0	27,128.6	30,926.9
<b>Total equity attributable to the equity owner of the company</b>	<b>25,908.6</b>	<b>29,429.4</b>	<b>31,941.4</b>	<b>35,165.0</b>	<b>38,963.3</b>
<b>Non-controlling interests</b>	<b>4,416.6</b>	<b>6,992.5</b>	<b>7,845.4</b>	<b>8,925.2</b>	<b>10,212.4</b>
<b>Total equity</b>	<b>30,325.2</b>	<b>36,421.9</b>	<b>39,786.8</b>	<b>44,090.1</b>	<b>49,175.7</b>

Source(s): Company, ABCI Securities estimates

**Consolidated cash flow statement (2011A-2015E)**

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
<b>EBITDA</b>	8,160.9	9,881.8	11,941.5	13,874.3	15,572.0
Change in working capital	(1,831.5)	(2,161.1)	(206.3)	123.6	(1,161.3)
Others	(316.6)	(252.2)	(0.0)	(0.0)	0.0
<b>Cash (used in)/generated from operations</b>	<b>6,012.8</b>	<b>7,468.6</b>	<b>11,735.2</b>	<b>13,997.8</b>	<b>14,410.8</b>
Income tax paid	(370.6)	(471.0)	(738.4)	(934.9)	(1,114.5)
<b>CF from operating activities</b>	<b>5,642.2</b>	<b>6,997.6</b>	<b>10,996.8</b>	<b>13,063.0</b>	<b>13,296.2</b>
CAPEX	(13,782.5)	(13,744.7)	(12,000.0)	(12,000.0)	(11,000.0)
Others	(983.7)	(372.8)	0.0	0.0	0.0
<b>Cash flows from investing activities</b>	<b>(14,766.2)</b>	<b>(14,117.5)</b>	<b>(12,000.0)</b>	<b>(12,000.0)</b>	<b>(11,000.0)</b>
Net borrowing	11,058.0	8,067.0	8,000.0	5,000.0	3,000.0
Proceeds from issue of shares	0.0	0.0	0.0	0.0	0.0
Dividends paid	(403.1)	(515.2)	(511.9)	(604.8)	(765.7)
Interest paid	(2,222.6)	(3,025.1)	(2,999.3)	(3,224.3)	(3,359.3)
Others	(110.3)	4,328.9	0.5	0.0	0.0
<b>Cash flows from financing activities</b>	<b>8,322.0</b>	<b>8,855.6</b>	<b>4,489.2</b>	<b>1,170.9</b>	<b>(1,125.0)</b>
Net (decrease)/increase in cash and cash equivalents	(802.6)	1,735.8	3,486.0	2,233.8	1,171.2
Cash and cash equivalents at beginning of year/period	4,173.5	3,358.2	5,080.7	8,566.7	10,800.5
Effect of foreign exchange rate changes	(12.7)	(13.2)	0.0	0.0	0.0
<b>Cash and cash equivalents at end of year/period</b>	<b>3,358.2</b>	<b>5,080.7</b>	<b>8,566.7</b>	<b>10,800.5</b>	<b>11,971.7</b>

Source(s): Company, ABCI Securities estimates



October 28, 2013  
Company Report  
Rating: BUY  
TP: HK\$ 3.63

H-Share price (HK\$)	2.97
Est. share price return	22.22%
Est. dividend yield	1.34%
Est. total return	23.56%

Analyst: Lisa Lee  
Tel: (852) 2147 8809  
Email: lisalee@abci.com.hk

**Key Data**

52Wk H/L(HK\$)	3.11/0.96
Issued shares (mn)	9,029
H-Shares (mn)	3,494
Domestic (mn)	5,535
H-share Market cap	10,377
3-mth avg daily turnover (HK\$ mn)	59.88
Major shareholder(s) (%):	
Huaneng Group	61.30
% of H-share:	
JP Morgan	9.78
FIL Limited	9.76
Social Security Fund	7.58

Source(s): Company, Bloomberg, ABCI Securities

**FY12 Revenue breakdown (%)**

Sales of electricity	99.96
Others	0.04

Source(s): Company, ABCI Securities

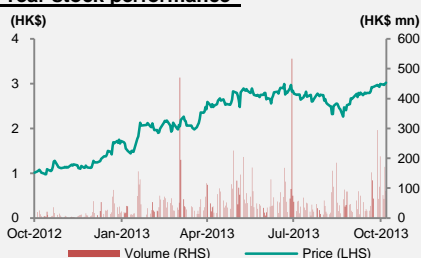
**Share performance (%)**

	Absolute	Relative*
1-mth	8.60	10.61
3-mth	14.77	10.65
6-mth	20.72	19.45

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities

**1-Year stock performance**



Source(s): Bloomberg, ABCI Securities

## Huaneng Renewables (958 HK)

### Strategic locations bear fruits

- Added capacities in strategic locations allow HN Renew to achieve the highest on-grid tariffs among peers and strongest recovery in utilization hour
- Earnings growth will be driven by installation growth and acquisition of assets from parent group. These assets, however, are mainly located in curtailment regions that may have lower returns
- The Group announced to issue 582mn shares at HK\$ 2.71 apiece on Oct 15, 2013, removing the lingering concerns of possible earnings dilution
- Based on our DCF model, we recommend BUY with TP at HK\$3.63, which represents 15.0x FY14E P/E and 1.65x FY14E P/B.

**Utilization hour improves on added capacities in strategic locations.** HN Renew utilization hours recovered strongly in 1H13 because of better wind resources and lower curtailment rate, which dropped to 13% in 1H13 from 24% in 1H12 as the Group's newly installed capacities were built in non-curtailment regions only since 2012. The Group has been focusing on project development in four regions, namely, Yunnan, Guangdong, Guizhou and Shandong. These projects are located in Class IV regions where the highest on-grid tariff of RMB0.61/kwh can be charged. As of end-2012, the Group's regional market shares (in terms of capacity) in the four provinces were the highest at 21.6%, 16.1%, 55.6% and 13.9%, respectively. Because of its strategic locations, the Group has achieved the highest on-grid tariffs among major peers since its listing. Its on-grid tariff in 2012 was RMB 0.6049/kwh, 3.9% higher than Longyuan and 2.0% higher than DT Renew.

**Wind capacity expansion.** Management confirms that its 2013 wind capacity expansion target will be 1GW and the increase will exceed 1GW for 2014. Given that the Group has missed its installation target by more than 30% in 2012, we therefore assume the Group will only add 800MW of capacity in 2013E and 1,000MW in 2014E. Management also reiterates its plan to acquire wind assets from its parent group before end-2016. We estimate that power generation of the parent's wind power projects in 1H13 amounted to ~14% of HN Renew's total gross power generation for the same period. However, these assets are mainly located in curtailment regions with tariffs lower than the HN Renew's average.

**Share placement in Oct.** HN Renew reiterated in Aug that it would consider external debt and equity funding in the short term. On Oct 15, the Group announced that it would issue 582mn shares at HK\$2.71 apiece, representing 6.4% of the total enlarged share capital and 16.7% of its H-share capital. We believe the overhang factor of possible earnings dilution expected is now cleared.

**BUY with TP at HK\$ 3.63.** Based on our DCF model with a WACC of 8.4%, we set our TP at HK\$3.63, which represents 15.0x FY14E P/E and 1.65x FY14E P/B. Recommend Buy on higher unit return and strengthening capital base to support capacity growth.

**Risk factors:** (1) Acquisition of parent assets; (2) Earnings dilution; (3) Policy risks.

**Results and Valuation**

FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	3,195.9	4,026.9	5,073.5	6,027.8	6,858.4
Chg (% YoY)	80.7	26.0	26.0	18.8	13.8
Net Income (RMB mn)	1,023.0	557.9	1,293.5	1,725.1	2,118.6
EBITDA (RMB mn)	2,838.2	3,594.9	4,474.8	5,292.4	6,001.1
Chg (% YoY)	86.9	26.7	24.5	18.3	13.4
EPS (RMB)	0.1211	0.0661	0.1433	0.1911	0.2346
Chg (% YoY)	32.9	-45.4	116.7	33.4	22.8
BVPS (RMB)	1.3415	1.3993	1.5740	1.7336	1.9262
Chg (% YoY)	47.25	4.31	12.48	10.14	11.11
P/E (x)	-	35.45	16.36	12.27	10.00
P/B (x)	-	1.67	1.49	1.35	1.22
ROE (%)	12.31	4.82	9.94	11.55	12.82
ROA (%)	2.41	1.06	2.34	2.90	3.29
DPS (RMB)	-	0.015	0.032	0.042	0.052
Yield (%)	-	0.64	1.34	1.79	2.20
Net gearing* (%)	152.1	195.5	170.7	161.0	156.2

\*Net gearing=Net debt/Total equity

Source(s): Bloomberg, ABCI Securities estimates



**Consolidated income statement (2011A-2015E)**

<b>FY Ended Dec 31 (RMB mn)</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
Revenue	3,195.9	4,026.9	5,073.5	6,027.8	6,858.4
Other net income	682.5	189.5	100.0	100.0	100.0
<b>Total income</b>	<b>3,878.5</b>	<b>4,216.4</b>	<b>5,173.5</b>	<b>6,127.8</b>	<b>6,958.4</b>
Service concession construction costs	0.0	0.0	0.0	0.0	0.0
D&A	(1,169.3)	(1,612.0)	(1,739.9)	(1,933.9)	(2,110.9)
Personnel costs	(118.0)	(151.0)	(152.2)	(180.8)	(205.8)
Repairs and maintenance	(29.9)	(50.4)	(40.6)	(72.3)	(102.9)
Admin	(117.8)	(126.8)	(152.2)	(180.8)	(205.8)
Other operating expenses	(92.1)	(103.9)	(253.7)	(301.4)	(342.9)
<b>EBIT</b>	<b>2,351.5</b>	<b>2,172.4</b>	<b>2,834.9</b>	<b>3,458.5</b>	<b>3,990.2</b>
Finance income	47.8	98.7	80.0	80.0	81.0
Finance expenses	(1,260.1)	(1,640.5)	(1,481.3)	(1,627.6)	(1,725.1)
Share of profit of a jointly controlled entity	0.0	0.0	0.0	0.0	0.0
<b>EBT</b>	<b>1,139.1</b>	<b>630.6</b>	<b>1,433.6</b>	<b>1,910.9</b>	<b>2,346.1</b>
Income tax	(32.3)	(29.5)	(93.2)	(124.2)	(152.5)
MI	83.8	43.1	46.9	62.5	76.8
<b>Net profit</b>	<b>1,023.0</b>	<b>557.9</b>	<b>1,293.5</b>	<b>1,724.2</b>	<b>2,116.8</b>
<b>Adjusted EBIT</b>	<b>1,668.9</b>	<b>1,982.8</b>	<b>2,734.9</b>	<b>3,358.5</b>	<b>3,890.2</b>
<b>Adjusted EBITDA</b>	<b>2,838.2</b>	<b>3,594.9</b>	<b>4,474.8</b>	<b>5,292.4</b>	<b>6,001.1</b>
Dividends	-	126.7	284.6	379.3	465.7
No. of issued shares at end of period (mn)	<b>8,446.9</b>	<b>8,446.9</b>	<b>9,029.2</b>	<b>9,029.2</b>	<b>9,029.2</b>
H-shares	2,911.6	2,911.6	3,493.9	3,493.9	3,493.9
Domestic shares	5,535.3	5,535.3	5,535.3	5,535.3	5,535.3
<b>Per share value (RMB)</b>					
<b>FD EPS</b>	0.1211	0.0661	0.1433	0.1911	0.2346
<b>NBV</b>	1.3415	1.3993	1.5740	1.7336	1.9262
<b>DPS</b>	-	0.0150	0.0315	0.0420	0.0516

Source(s): Company, ABCI Securities estimates

**Key Ratio (2011A-2015E)**

<b>FY ended Dec 31</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
<b>Profitability ratio (%)</b>					
Adjusted EBITDA margin	89.81	89.30	88.20	87.80	87.50
Adjusted EBIT margin	52.81	49.26	53.91	55.72	56.72
EBT margin	29.37	14.96	27.71	31.20	33.74
Net profit margin	32.01	13.86	25.49	28.62	30.89
ROAA	2.41	1.06	2.34	2.90	3.29
ROAE	12.31	4.82	9.94	11.55	12.82
<b>Cost ratio (%)</b>					
Personnel/Sales	-3.0%	-3.6%	-3.0%	-3.0%	-3.0%
Repair & maintenance/Sales	-0.8%	-1.2%	-0.8%	-1.2%	-1.5%
Admin/Sales	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Effective tax rate	-2.4%	-2.5%	-5.0%	-5.0%	-5.0%
<b>Leverage (x)</b>					
Current ratio	0.64	0.64	0.58	0.65	0.68
Quick ratio	0.64	0.64	0.58	0.65	0.68
Net debt/total equity (%)	152.1	195.5	170.7	161.0	156.2
<b>Working capital cycle (days)</b>					
Inventory turnover days	0.2	0.3	0.2	0.2	0.2
Receivables turnover days	169.6	240.8	250.0	200.0	180.0
Payables turnover days	861.9	682.2	577.8	441.0	417.8

Source(s): Company, ABCI Securities estimates



**Consolidated balance sheet (2011A-2015E)**

As of Dec 31 (RMB mn)	2011A	2012A	2013A	2014E	2015E
PPE	36,956.4	39,859.1	43,703.7	47,332.9	50,799.4
Lease prepayments	102.2	121.6	111.1	108.6	108.6
Intangible assets	381.4	363.5	345.2	327.1	327.1
Investment in a jointly controlled entity	85.1	85.1	85.1	85.1	85.1
Other non-current assets	3,824.2	3,717.3	3,717.3	3,717.3	3,717.3
Deferred tax assets	7.1	6.4	6.4	6.4	6.4
<b>Total non-current assets</b>	<b>41,356.4</b>	<b>44,153.0</b>	<b>47,968.7</b>	<b>51,577.4</b>	<b>55,043.9</b>
Inventories	2.1	4.1	1.5	3.5	2.2
Trade debtors and bills receivable	2,010.5	3,302.6	3,647.3	2,958.5	3,806.0
Prepayment and other current assets	584.3	561.5	689.5	796.8	894.3
Tax recoverable	0.0	0.0	0.0	0.0	1.0
Restricted deposits	59.5	209.0	209.0	209.0	209.0
Cash at bank and on hand	7,518.0	5,468.7	4,523.0	6,576.7	6,534.4
<b>Total current assets</b>	<b>10,174.3</b>	<b>9,545.9</b>	<b>9,070.3</b>	<b>10,544.5</b>	<b>11,446.8</b>
Borrowings	6,758.8	8,276.4	8,276.4	8,276.4	8,276.4
Obligations under finance leases	283.1	361.4	361.4	361.4	361.4
Other payables	8,838.9	6,213.6	6,992.6	7,573.3	8,127.9
Tax payable	18.0	30.6	30.6	30.6	30.6
<b>Total current liabilities</b>	<b>15,898.8</b>	<b>14,881.9</b>	<b>15,661.0</b>	<b>16,241.6</b>	<b>16,796.3</b>
Borrowings	19,257.1	22,004.8	22,110.0	25,110.0	27,110.0
Obligations under finance leases	2,384.1	2,257.0	2,257.0	2,257.0	2,257.0
Retention payables	1,546.6	1,572.4	1,572.4	1,572.4	1,572.4
Deferred income	257.8	273.3	273.3	273.3	273.3
Deferred tax liabilities	26.8	18.3	18.3	18.3	18.3
<b>Total non-current liabilities</b>	<b>23,472.5</b>	<b>26,125.7</b>	<b>26,230.9</b>	<b>29,230.9</b>	<b>31,230.9</b>
<b>Total assets</b>	<b>51,530.7</b>	<b>53,698.9</b>	<b>57,039.0</b>	<b>62,121.8</b>	<b>66,490.7</b>
<b>Net assets</b>	<b>12,159.4</b>	<b>12,691.3</b>	<b>15,147.1</b>	<b>16,649.3</b>	<b>18,463.5</b>
<b>Capital and Reserves</b>					
Share capital	8,446.9	8,446.9	9,672.2	9,672.2	9,672.2
Reserves	2,884.6	3,373.1	4,539.9	5,979.5	7,717.0
MI	827.9	871.3	935.0	997.5	1,074.3
<b>Total Equity</b>	<b>12,159.4</b>	<b>12,691.3</b>	<b>15,147.1</b>	<b>16,649.2</b>	<b>18,463.5</b>
<b>Equity to owners</b>	<b>11,331.5</b>	<b>11,820.0</b>	<b>14,212.1</b>	<b>15,651.8</b>	<b>17,389.2</b>

Source(s): Company, ABCI Securities estimates

**Consolidated cash flow statement (2011A-2015E)**

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
EBITDA	3,520.7	3,784.4	4,574.8	5,392.4	6,101.1
Change in working capital	(921.0)	(618.9)	309.0	1,160.2	(389.0)
Others	(16.0)	(27.9)	80.0	80.0	81.0
<b>Cash (used in)/generated from operations</b>	<b>2,583.7</b>	<b>3,137.7</b>	<b>4,963.8</b>	<b>6,632.6</b>	<b>5,793.1</b>
Income tax paid	(21.9)	(24.7)	(93.2)	(124.6)	(152.6)
<b>CF from operating activities</b>	<b>2,561.8</b>	<b>3,112.9</b>	<b>4,870.6</b>	<b>6,509.3</b>	<b>5,642.5</b>
CAPEX	(7,699.4)	(6,579.9)	(5,493.8)	(5,542.5)	(5,575.0)
Others	(88.0)	(1,775.2)	0.0	0.0	0.0
<b>Cash flows from investing activities</b>	<b>(7,787.3)</b>	<b>(8,355.1)</b>	<b>(5,493.8)</b>	<b>(5,542.5)</b>	<b>(5,575.0)</b>
Net borrowing	7,998.2	4,263.0	105.2	3,000.0	2,000.0
Proceeds from issue of shares	5,402.7	0.0	1,225.3	0.0	0.0
Dividends paid	0.0	(316.2)	(126.7)	(284.6)	(379.3)
Interest paid	(1,315.9)	(1,857.9)	(1,481.3)	(1,627.6)	(1,725.1)
Others	(504.7)	(585.4)	(45.1)	0.0	(3.5)
<b>Cash flows from financing activities</b>	<b>11,580.3</b>	<b>1,503.5</b>	<b>(322.6)</b>	<b>1,087.8</b>	<b>(108.1)</b>
Net (decrease)/increase in cash and cash equivalents	6,354.9	(3,738.7)	(945.7)	2,053.7	(42.3)
Cash and cash equivalents at beginning of year/period	1,297.8	7,506.2	5,468.7	4,523.0	6,576.7
Effect of foreign exchange rates, net	(146.4)	0.8	0.0	0.0	0.0
<b>Cash and cash equivalents at end of year/period</b>	<b>7,506.2</b>	<b>3,768.4</b>	<b>4,523.0</b>	<b>6,576.7</b>	<b>6,534.4</b>

Source(s): Company, ABCI Securities estimates



# October 28, 2013 Company Report Rating: HOLD TP: HK\$ 1.70

H-Share price (HK\$)	1.63
Est. share price return	4.29%
Est. dividend yield	1.13%
Est. total return	5.42%

**Analyst: Lisa Lee**  
**Tel: (852) 2147 8809**  
**Email: lisalee@abci.com.hk**

### Key Data

52Wk H/L(HK\$)	2.07/0.78
Issued shares (mn)	7,273
H-Shares (mn)	2,501
Domestic (mn)	4,772
H-share Market cap	4,076
3-mth avg daily turnover (HK\$ mn)	13.99
Major shareholder(s) (%):	
Datang Corporation	65.61
% of H-share:	
Social Security Fund	9.09
JP Morgan	6.98

Source(s): Company, Bloomberg, ABCI Securities

### FY12 Revenue breakdown (%)

Sales of electricity	98.62
Others	1.38

Source(s): Company, ABCI Securities

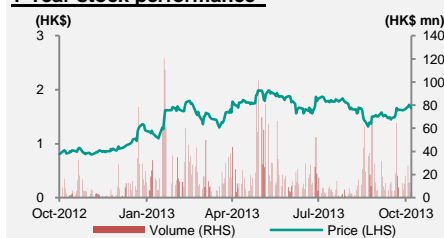
### Share performance (%)

	Absolute	Relative*
1-mth	9.93	11.97
3-mth	(6.74)	(10.09)
6-mth	(5.68)	(6.67)

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities

### 1-Year stock performance



Source(s): Bloomberg, ABCI Securities

## Datang Renewable (1798 HK) Awaiting for higher operating efficiency

- Management guided that installation growth will accelerate in the coming years. Still, the Group's growth rate is still lower than the industry average growth of 18.0% CAGR in 2012-15E
- We are also worried that its high gearing level exceeding 300% (vs industry average of 200%) might hinder the Group's capacity expansion
- On the back of better wind resources and lower curtailment, DT Renew utilization hour increased 20.9% YoY to 1,054 in 1H13. On-grid tariff dropped 4.2%YoY due to larger electricity contribution from Inner Mongolia
- Based on our DCF model with a WACC of 6.6%, we set our TP at HK\$1.7, representing 13.6x FY14E P/E and 0.78x FY14E P/B. Recommend HOLD

**Speed up capacity growth in 2013-15.** Management guided installed capacity would increase by 500MW (up 8.8%YoY) in 2013, 700MW (11.3%YoY) in 2014 and 1,000MW (14.6%YoY) in 2015. The planned capacity growth is based on the expectation of better grid connections, but the growth of 14.3% CAGR in 2012-15E is still below the estimated industry average of 18.0%. We are concerned that the exceptionally high gearing (1H13 net debt-to-equity ratio was 310%, much higher than Longyuan's 143% and HN Renew's 185%) might restrict capital expansion.

**Lowest utilization hour among peers.** Utilization hour of the Group increased 20.9% YoY (vs. 12.4% in Longyuan and 20.0% in HN Renew) in 1H13 to 1,054. Management guided utilization hours to reach at least 2,000 in 2013. Significant improvement will be mainly contributed by lower curtailment rate in Inner Mongolia (IM) and northeast (NE) China. However, due to stronger improvement and increased proportion of electricity output in these regions (where on-grid tariffs are lower than the Group's average), on-grid tariff of the Group dropped 4.2% YoY to RMB 0.58/kwh when Longyuan and HN Renew both posted increases in on-grid tariff in 1H13. As at 1H13, installed capacity in IM and NE China still jointly accounted for 67% of the Group's total installed capacity, as compared to Longyuan's 44% and HN Renew's 51%. We expect the Group's on-grid tariff to slowly increase as the Group's new installation would be primarily situated in Shanxi, Yunnan, Shandong and Shaanxi.

**Possible CDM provision.** The Group booked RMB 20mn of Clean Development Mechanism (CDM) impairment loss in 1H13 due to difficulty in collection. The Group collected CDM revenue of RMB 197mn in 1H13 and CDM receivables position dropped to RMB391mn. We believe provision might occur.

**Recommend HOLD with TP at HK\$ 1.70.** Based on our DCF model with a WACC of 6.6%, we set our TP at HK\$ 1.70, representing 13.6x FY14E P/E and 0.78x FY14E P/B. Recommend HOLD due to lower-than-average capacity growth and lower operating efficiency.

**Risk factors:** 1) High gearing; 2) CDM provision; 3) Earnings dilution; 4) Policy risks.

### Results and Valuation

FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	3,828.8	4,368.0	5,604.9	6,283.0	6,928.6
Chg (% YoY)	60.9%	14.1%	28.3%	12.1%	10.3%
Net Income (RMB mn)	729.8	112.1	424.3	718.7	819.5
EBITDA (RMB mn)	3,279.0	3,688.4	4,758.6	5,290.3	5,799.2
Chg (% YoY)	62.5%	12.5%	29.0%	11.2%	9.6%
EPS (RMB)	0.1003	0.0154	0.0583	0.0988	0.1127
Chg (% YoY)	57.2%	-84.6%	278.4%	69.4%	14.0%
BVPS (RMB)	1.57	1.56	1.61	1.72	1.83
Chg (% YoY)	6.79	-1.07	3.21	6.78	6.77
P/E (x)	-	83.41	22.05	13.02	11.41
P/B (x)	-	0.83	0.80	0.75	0.70
ROE (%)	6.56	0.97	3.55	5.88	12.94
ROA (%)	1.53	0.20	0.69	1.18	2.57
DPS(RMB)	0.039	0.023	0.015	0.025	0.028
Yield (%)	-	1.79	1.13	1.92	2.19
Net gearing* (%)	264.3	313.6	314.8	317.6	308.6

\*Net gearing=Net debt/Total equity

Source(s): Bloomberg, ABCI Securities estimates

**Consolidated income statement (2011A-2015E)**

<b>FY Ended Dec 31 (RMB mn)</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
Revenue	3,828.8	4,368.0	5,604.9	6,283.0	6,928.6
Other net income and other gains	518.4	277.4	0.0	0.0	0.0
<b>Total income</b>	<b>4,347.2</b>	<b>4,645.4</b>	<b>5,604.9</b>	<b>6,283.0</b>	<b>6,928.6</b>
D&A	(1,360.8)	(1,856.7)	(1,982.1)	(2,063.8)	(2,185.7)
Service concession construction costs	(24.2)	(8.2)	0.0	0.0	0.0
Labor costs	(187.7)	(264.9)	(336.3)	(377.0)	(415.7)
Repairs and maintenance	(69.5)	(83.1)	(100.9)	(157.1)	(207.9)
Material costs	(30.1)	(23.8)	(44.8)	(50.3)	(55.4)
Other operating expenses	(245.8)	(294.4)	(364.3)	(408.4)	(450.4)
Share of P/L of an associate	(7.4)	(6.1)	0.0	0.0	0.0
Share of profit of a jointly controlled entity	15.0	0.8	0.0	0.0	0.0
<b>EBIT</b>	<b>2,436.6</b>	<b>2,109.1</b>	<b>2,776.5</b>	<b>3,226.5</b>	<b>3,613.5</b>
Finance income	10.9	41.0			
Finance expenses	(1,442.2)	(1,973.7)	(2,200.0)	(2,250.0)	(2,500.0)
<b>EBT</b>	<b>1,005.3</b>	<b>176.3</b>	<b>576.5</b>	<b>976.5</b>	<b>1,113.5</b>
Tax	(35.0)	10.2	(46.1)	(78.1)	(89.1)
MI	(240.5)	(74.4)	(106.1)	(179.7)	(204.9)
<b>Net profit</b>	<b>729.8</b>	<b>112.1</b>	<b>424.3</b>	<b>718.7</b>	<b>820.3</b>
<b>Adjusted EBIT</b>	<b>1,918.2</b>	<b>1,831.7</b>	<b>2,776.5</b>	<b>3,226.5</b>	<b>3,613.5</b>
<b>Adjusted EBITDA</b>	<b>3,279.0</b>	<b>3,688.4</b>	<b>4,758.6</b>	<b>5,290.3</b>	<b>5,799.2</b>
Dividends	283.7	167.3	106.1	179.7	204.9
No. of issued shares at end of period (mn)	<b>7,273.7</b>	<b>7,273.7</b>	<b>7,273.7</b>	<b>7,273.7</b>	<b>7,273.7</b>
H-shares	2,501.1	2,501.1	2,501.1	2,501.1	2,501.1
Domestic shares	4,772.6	4,772.6	4,772.6	4,772.6	4,772.6
<b>Per share value (RMB)</b>					
<b>FD EPS</b>	0.1003	0.0154	0.0583	0.0988	0.1127
<b>NBV</b>	1.5744	1.5576	1.6075	1.7164	1.8326
<b>DPS</b>	0.039	0.023	0.015	0.025	0.028

Source(s): Company, ABCI Securities estimates

**Key Ratio (2011A-2015E)**

<b>FY ended Dec 31</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
<b>Profitability ratio (%)</b>					
Adjusted EBITDA margin	85.64	84.44	84.90	84.20	83.70
Adjusted EBIT margin	50.10	41.93	49.54	51.35	52.15
EBT margin	26.26	4.04	10.29	15.54	16.07
Net profit margin	19.06	2.57	7.57	11.44	11.83
ROAA	1.53	0.20	0.69	1.18	2.57
ROAE	6.56	0.97	3.55	5.88	12.94
<b>Cost ratio (%)</b>					
Labor costs/Sales	-4.9	-6.1	-6.0	-6.0	-6.0
Repair & maintenance/Sales	-1.8	-1.9	-1.8	-2.5	-3.0
Material costs/Sales	-0.8	-0.5	-0.8	-0.8	-0.8
Effective tax rate	-3.5	-5.8	-8.0	-8.0	-8.0
<b>Leverage (x)</b>					
Current ratio	0.73	0.62	0.62	0.89	1.06
Quick ratio	0.72	0.62	0.62	0.89	1.06
Net debt/total equity (%)	264.31	313.64	314.76	317.61	308.55
<b>Working capital cycle (days)</b>					
Inventory turnover days	1.1	1.1	1.1	1.1	1.1
Receivables turnover days	199.7	239.3	120.0	120.0	120.0

Source(s): Company, ABCI Securities estimates

**Consolidated balance sheet (2011A-2015E)**

As of Dec 31 (RMB mn)	2011A	2012A	2013A	2014E	2015E
PPE	41,111.1	44,854.5	46,360.7	48,273.3	51,124.5
Land use rights	301.0	334.0	388.1	441.4	494.8
Intangible assets	422.2	416.9	400.3	384.3	368.9
Investment in an associate	28.4	227.2	227.2	227.2	227.2
Investment in a jointly controlled entity	55.0	50.8	50.8	50.8	50.8
Others	441.3	364.5	364.5	364.5	364.5
<b>Total non-current assets</b>	<b>44,975.1</b>	<b>49,010.5</b>	<b>50,554.1</b>	<b>52,504.0</b>	<b>55,393.3</b>
Inventories	12.5	14.2	19.6	18.3	23.5
Trade and bills receivable	2,693.7	3,034.5	650.9	3,480.4	1,075.4
Prepayments and other receivables	2,395.4	2,168.5	3,973.9	2,911.6	4,681.4
Financial assets at FV through P&L	0.0	16.5	16.5	16.5	16.5
Current income tax prepayments	15.0	24.5	24.5	24.5	24.5
Financial assets at fair value through P&L	0.0	0.0	0.0	0.0	0.0
Restricted deposits	28.8	10.1	10.1	10.1	10.1
Cash and cash equivalents	4,162.4	2,103.8	2,863.3	4,776.6	8,239.4
<b>Total current assets</b>	<b>9,307.8</b>	<b>7,372.1</b>	<b>7,558.8</b>	<b>11,237.9</b>	<b>14,070.7</b>
Borrowings	5,667.3	5,456.6	6,000.0	6,750.0	7,500.0
Trade and bills payable	503.7	637.3	320.9	1,042.4	688.8
Current income tax liabilities	22.3	23.7	23.7	23.7	23.7
Other payables	6,636.9	5,846.2	5,752.7	4,794.4	5,000.2
<b>Total current liabilities</b>	<b>12,830.1</b>	<b>11,963.9</b>	<b>12,097.3</b>	<b>12,610.6</b>	<b>13,212.7</b>
Borrowings	29,514.0	32,705.2	34,000.0	38,250.0	42,500.0
Deferred income tax liabilities	59.9	32.7	32.7	32.7	32.7
Other non-current liabilities*	143.2	184.3	184.3	184.3	184.3
<b>Total non-current liabilities</b>	<b>29,717.1</b>	<b>32,922.2</b>	<b>34,217.0</b>	<b>38,467.0</b>	<b>42,717.0</b>
<b>Total assets</b>	<b>54,282.9</b>	<b>56,382.7</b>	<b>58,112.9</b>	<b>63,741.9</b>	<b>69,464.0</b>
<b>Net assets</b>	<b>11,735.7</b>	<b>11,496.6</b>	<b>11,798.6</b>	<b>12,664.4</b>	<b>13,534.4</b>
<b>Capital and Reserves</b>					
Share capital	7,273.7	7,273.7	7,273.7	7,273.7	7,273.7
Share premium	2,081.0	2,081.0	2,081.0	2,081.0	2,081.0
Other reserves	(1,607.8)	(1,668.0)	(1,668.0)	(1,668.0)	(1,668.0)
Retained earnings	1,058.1	961.8	1,218.8	1,831.4	2,471.3
Proposed final dividend	283.7	167.3	106.1	179.7	204.9
MI	2,647.0	2,680.9	2,787.0	2,966.7	3,171.6
<b>Total equity</b>	<b>11,735.7</b>	<b>11,496.6</b>	<b>11,798.6</b>	<b>12,664.4</b>	<b>13,534.4</b>
<b>Equity to owners</b>	<b>9,088.6</b>	<b>8,815.7</b>	<b>9,011.6</b>	<b>9,697.8</b>	<b>10,362.8</b>

Source(s): Company, ABCI Securities estimates

**Consolidated cash flow statement (2011A-2015E)**

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
<b>EBITDA</b>	<b>1,411.7</b>	<b>2,386.9</b>	<b>3,797.4</b>	<b>4,759.7</b>	<b>4,758.6</b>
Change in working capital	(1,245.7)	182.9	162.9	(2,002.7)	482.2
Others	2,375.8	1,595.3	983.8	553.3	1,063.5
<b>Cash (used in)/generated from operations</b>	<b>2,541.8</b>	<b>4,165.2</b>	<b>4,944.1</b>	<b>3,310.4</b>	<b>6,304.3</b>
Interests	10.3	27.9	0.0	0.0	0.0
Income tax paid	(67.1)	(49.8)	(46.1)	(78.1)	(89.1)
<b>CF from operating activities</b>	<b>2,485.1</b>	<b>4,143.4</b>	<b>4,898.0</b>	<b>3,232.2</b>	<b>6,215.2</b>
CAPEX	(10,469.1)	(6,864.3)	(3,548.2)	(4,036.5)	(5,097.9)
Others	(1,198.4)	305.8	0.0	0.0	0.0
<b>Cash flows from investing activities</b>	<b>(11,667.5)</b>	<b>(6,558.4)</b>	<b>(3,548.2)</b>	<b>(4,036.5)</b>	<b>(5,097.9)</b>
Net borrowing	7,877.2	15,439.6	2,198.2	5,000.0	5,000.0
Proceeds from issue of shares	240.2	0.0	0.0	0.0	0.0
Dividends paid	(100.3)	(283.7)	(167.3)	(106.1)	(179.7)
Interest paid	(1,666.4)	(2,356.4)	(2,200.0)	(2,250.0)	(2,500.0)
Others	2,098.4	(12,444.2)	(421.2)	73.6	25.2
<b>Cash flows from financing activities</b>	<b>8,449.1</b>	<b>355.3</b>	<b>(590.4)</b>	<b>2,717.5</b>	<b>2,345.5</b>
Net (decrease)/increase in cash and cash equivalents	(733.3)	(2,059.8)	759.5	1,913.2	3,462.9
Cash and cash equivalents at beginning of year/period	5,031.3	4,162.4	2,103.8	2,863.3	4,776.6
Effect of foreign exchange rates, net	(135.6)	1.2	0.0	0.0	0.0
<b>Cash and cash equivalents at end of year/period</b>	<b>4,162.4</b>	<b>2,103.8</b>	<b>2,863.3</b>	<b>4,776.6</b>	<b>8,239.4</b>

Source(s): Company, ABCI Securities estimates

## October 28, 2013 Company Report Rating: BUY TP: HK\$ 3.60

H-Share price (HK\$)	3.14
Est. share price return	14.65%
Est. dividend yield	1.73%
Est. total return	16.38%

**Analyst: Lisa Lee**  
 Tel: (852) 2147 8809  
 Email: lisalee@abci.com.hk

### Key Data

52Wk H/L(HK\$)	3.48/1.32
Issued shares (mn)	6,150
H-Shares (mn)	1,638
Domestic (mn)	4,512
H-share Market cap	6,170
3-mth avg daily turnover (HK\$ mn)	26.82
Major shareholder(s) (%):	
BEIH	68.58
% of H-share:	
Beijing Enterprises Energy Tech	11.15
SAIF Partners	8.83
Keywise Capital	7.49
Goldwind New Energy	7.13
Chen Li	6.97
Norges Bank	5.98

Source(s): Company, Bloomberg, ABCI Securities

### FY12 Revenue breakdown (%)

Sales of electricity	98.62
Others	1.38

Source(s): Company, ABCI Securities

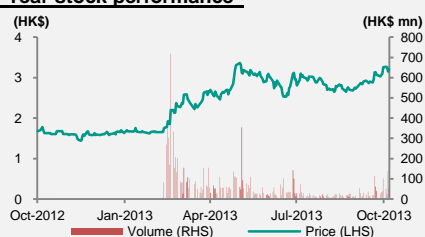
### Share performance (%)

	Absolute	Relative*
1-mth	12.63	14.72
3-mth	6.64	2.81
6-mth	25.88	24.56

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities

### 1-Year stock performance



Source(s): Bloomberg, ABCI Securities

## BJCE (579 HK)

### Major beneficiary in Beijing's cleanup campaign

- Determination of Beijing Municipal Government to reduce air pollution will continue to drive construction of gas-fired cogeneration plants in Beijing. As the largest state-owned gas-fired provider in the city, BJCE will become the largest beneficiary under the supportive policy
- Increasing gas price will erode BJCE's profit but we believe government will also increase subsidy accordingly
- Based on our DCF model with a WACC of 8.5%, we set our TP at HK\$3.60, which represents 12.0x FY14 PE and 1.52x FY14 PB. Recommend BUY

**Government's strong support accelerates capacity growth.** To reduce the severe air pollution problem, the Beijing municipal government provides strong support and subsidies to gas-fired power generation in order to meet the coal-free objective within the fifth ring road target by end-2015. The Group's earnings will be driven by capacity growth from three major gas-fired projects, namely, the Jingxi co-gen power plant (1,308MW), Gaoantun co-gen power plant (845MW) and Future Sci-Tech City distributed energy project (240MW). The consolidated capacity of 2,393MW is expected to commence operation in late Nov 2013 and 2014 respectively, doubling the Group's installed capacity to 4,421MW by end-2014 from 2,208MW in 1H13 (2,028 in end-2012).

**Diversified power operator.** The Group is the ninth largest wind power operator in China in terms of installed capacity. We expect wind power installed capacity to increase by 11% YoY to 1,887MW in 2014 and utilization hours to improve to 2,100 as curtailment rate decreases. Revenue from wind power accounted for 31.8% of total revenue. The diversified operating model reduces the Group's reliance on a single natural resource and generates a stable revenue stream.

**Concerns on increasing gas price.** NDRC announced to raise average price of non-residential use natural gas retail price by 18.2% to RMB1.95/m<sup>3</sup>, effective on July 10, 2013. Beijing will raise retail price of natural gas used for power generation by 17.1% to RMB 2.67/m<sup>3</sup>. The Group's natural gas purchased is subsidized by the government and is calculated based on the price of natural gas. In addition, Beijing plans to increase fiscal expenditure on energy saving and environment conservation by 58.5%YoY to RMB 10.3bn in 2013. We assume that the higher natural gas price will be offset by increased subsidy. Nevertheless, we calculate that for each 5% increase in natural gas price, the Group's net profit will drop by 22%. The reverse is true for each 5% decline in natural gas price.

**Recommend BUY with TP at HK\$ 3.60.** The Group issued 327mn H-shares at HK\$ 2.82 each and raised a total of HK\$905.2mn in Oct 2013. Thus, previous concerns on earnings dilution have been cleared. Based on our DCF model with a WACC of 8.5%, we set our TP at HK\$ 3.60, which represents 12.0x FY14E P/E and 1.52x FY14E P/B. Recommend BUY.

**Risk factors:** (1) High gearing; (2) Increase in natural gas price; (3) Policy risks.

### Results and Valuation

FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	4,051	4,152	7,243	10,930	13,042
Chg (% YoY)	11.75	2.49	74.47	50.90	19.33
Net Income (RMB mn)	845.8	910.1	1,315.5	1,534.6	1,829.5
EBITDA (RMB mn)	1,401	1,670	2,196	3,873	4,713
Chg (% YoY)	20.94	19.23	31.50	76.34	21.70
EPS (RMB)	0.1682	0.1481	0.2139	0.2369	0.2824
Chg (% YoY)	64.42	-11.95	44.43	10.76	19.22
BVPS (RMB)	1.8352	1.4711	1.7636	1.8707	2.1058
Chg (% YoY)	29.65	-19.84	19.89	6.07	12.57
P/E (x)	-	16.73	11.58	10.46	8.77
P/B (x)	-	1.68	1.40	1.32	1.18
ROE (%)	9.49	9.05	13.23	13.15	14.94
ROA (%)	3.48	3.07	3.79	3.50	4.00
DPS(RMB)	0.0087	0.0375	0.0428	0.0474	0.0565
Yield (%)	0.35	1.51	1.73	1.91	2.28
Net gearing* (%)	106.1	174.3	162.9	175.4	200.1

\*Net gearing=Net debt/Total equity

Source(s): Company, ABCI Securities estimates

**Consolidated income statement (2011A-2015)**

<b>FY Ended Dec 31 (RMB mn)</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
Revenue	4,050.7	4,151.6	7,243.1	10,929.6	13,041.9
Other income	963.1	733.2	1,030.7	2,663.3	3,530.2
<b>Total income</b>	<b>5,013.9</b>	<b>4,884.8</b>	<b>8,273.8</b>	<b>13,592.9</b>	<b>16,572.1</b>
Gas consumption	(2,110.1)	(1,841.3)	(4,198.9)	(8,346.4)	(10,189.9)
Service concession construction costs	0.0	0.0	0.0	0.0	0.0
D&A	(801.5)	(854.4)	(1,068.4)	(1,348.4)	(1,628.4)
Personnel costs	(211.7)	(249.1)	(362.2)	(546.5)	(652.1)
Repairs and maintenance	(105.6)	(151.2)	(30.9)	(79.9)	(105.9)
Other expenses	(213.5)	(291.3)	(455.1)	(747.6)	(911.5)
Other gains and losses	(9.2)	51.4	0.0	0.0	0.0
<b>EBIT</b>	<b>1,562.3</b>	<b>1,548.8</b>	<b>2,158.4</b>	<b>2,524.1</b>	<b>3,084.4</b>
Interest income	16.3	27.9	13.0	13.0	13.0
Finance costs	(591.5)	(708.5)	(835.8)	(942.9)	(1,142.9)
Share of results of associates	147.4	243.5	280.0	280.0	280.0
Share of results of jointly controlled entities	(0.3)	0.2	0.4	0.4	0.4
<b>EBT</b>	<b>1,134.2</b>	<b>1,111.9</b>	<b>1,616.1</b>	<b>1,874.6</b>	<b>2,234.8</b>
Tax	(196.8)	(123.5)	(193.9)	(215.6)	(257.0)
MI	(91.5)	(78.3)	(106.7)	(124.4)	(148.3)
<b>Net profit</b>	<b>845.8</b>	<b>910.1</b>	<b>1,315.5</b>	<b>1,534.6</b>	<b>1,829.5</b>
<b>Adjusted EBITDA</b>	<b>1,400.7</b>	<b>1,670.0</b>	<b>2,196.1</b>	<b>3,872.5</b>	<b>4,712.8</b>
<b>Adjusted EBIT</b>	<b>599.1</b>	<b>815.6</b>	<b>1,127.7</b>	<b>(139.3)</b>	<b>(445.8)</b>
Dividends	53.7	230.6	263.1	306.9	365.9
No. of issued shares at end of period (mn)	6,032.2	6,149.9	6,149.9	6,477.4	6,477.4
H-shares	1,508.1	1,637.5	1,965.1	1,965.1	1,965.1
Domestic shares	4,524.1	4,512.4	4,512.4	4,512.4	4,512.4
<b>Per share value (RMB)</b>					
<b>FD EPS</b>	0.1682	0.1481	0.2139	0.2369	0.2824
<b>NBV</b>	1.8352	1.4711	1.7636	1.8707	2.1058
<b>DPS</b>	0.0087	0.0375	0.0428	0.0474	0.0565

Source(s): Company, ABCI Securities estimates

**Key Ratio (2011A-2015E)**

<b>FY ended Dec 31</b>	<b>2011A</b>	<b>2012A</b>	<b>2013A</b>	<b>2014E</b>	<b>2015E</b>
<b>Profitability ratio (%)</b>					
Adjusted EBITDA margin	34.58	40.23	30.32	35.43	36.14
Adjusted EBIT margin	14.79	19.64	15.57	-1.27	-3.42
EBT margin	28.00	26.78	22.31	17.15	17.14
Net profit margin	20.88	21.92	18.16	14.04	14.03
ROAA	3.48	3.07	3.79	3.50	4.00
ROAE	9.49	9.05	13.23	13.15	14.94
<b>Cost ratio (%)</b>					
Personnel costs/Sales	-5.2	-6.0	-5.0	-5.0	-5.0
Repair & maintenance/Sales	-2.6	-3.6	-3.0	-3.0	-3.0
Other expenses/Sales	-5.3	-7.0	-5.5	-5.5	-5.5
Effective tax rate	-17.4	-11.1	-12.0	-11.5	-11.5
<b>Leverage (x)</b>					
Current ratio	0.61	0.63	1.00	0.96	0.96
Quick ratio	0.60	0.63	0.99	0.95	0.95
Net debt/total equity (%)	106.1	174.3	162.9	175.4	200.1
<b>Working capital cycle (days)</b>					
Inventory turnover days	4.3	5.7	4.0	4.0	4.0
Receivables turnover days	117.0	128.1	80.0	80.0	80.0

Source(s): Company, ABCI Securities estimates



**Consolidated balance sheet (2011A-2015E)**

As of Dec 31 (RMB mn)	2011A	2012A	2013A	2014E	2015E
PPE	14,866.4	17,405.5	21,536.0	28,386.5	34,957.1
Intangible assets	4,795.8	4,656.1	4,656.1	4,656.1	4,656.1
Goodwill	124.2	124.2	124.2	124.2	124.2
Others	3,319.6	4,061.2	4,061.2	4,061.2	4,061.2
<b>Non-current assets</b>	<b>23,106.0</b>	<b>26,247.0</b>	<b>30,377.4</b>	<b>37,228.0</b>	<b>43,798.6</b>
Inventories	59.8	69.9	88.9	150.7	135.2
Trade and bill receivables	1,440.0	1,475.2	1,699.9	3,091.2	2,625.8
Other receivables, deposits and prepayments	153.1	317.6	63.4	511.5	174.5
Current tax assets	1.0	11.5	11.5	11.5	11.5
Amounts due from related parties	285.8	138.5	138.5	138.5	138.5
Prepaid lease payments	2.9	2.1	2.1	2.1	2.1
Value-added tax recoverable	291.3	426.8	426.8	426.8	426.8
Restricted bank deposits	0.0	207.6	207.6	207.6	207.6
Cash and cash equivalents	2,747.3	2,178.0	5,275.0	6,698.7	5,655.5
<b>Current assets</b>	<b>4,981.2</b>	<b>4,827.1</b>	<b>7,913.6</b>	<b>11,238.6</b>	<b>9,377.5</b>
Assets classified as held for sale		35.0	35.0	35.0	35.0
Trade and other payables	1,578.8	1,915.1	2,226.3	6,005.8	4,044.5
Amounts due to related parties	242.6	1,339.3	1,339.3	1,339.3	1,339.3
Bank and other borrowings-due within one year	6,127.5	4,266.8	4,266.8	4,266.8	4,266.8
Income tax payable	96.9	49.5	49.5	49.5	49.5
Deferred income-current portion	160.1	32.9	32.9	32.9	32.9
<b>Current liabilities</b>	<b>8,205.9</b>	<b>7,603.6</b>	<b>7,914.8</b>	<b>11,694.3</b>	<b>9,733.0</b>
Liabilities associate with assets classified as held for sale	0.0	1.2	1.2	1.2	1.2
Bank and other borrowings-due after one year	8,364.6	9,305.9	14,305.9	19,305.9	24,305.9
Medium-term notes		1,000.0	1,000.0	1,000.0	1,000.0
Corporate bonds		3,582.9	3,582.9	3,582.9	3,582.9
Deferred tax liabilities	26.4	24.9	24.9	24.9	24.9
Deferred income	42.1	268.3	268.3	268.3	268.3
Other non-current liabilities	0.0		0.0	0.0	0.0
<b>Non-current liabilities</b>	<b>8,433.0</b>	<b>14,182.0</b>	<b>19,182.0</b>	<b>24,182.0</b>	<b>29,182.0</b>
<b>Total assets</b>	<b>28,087.2</b>	<b>31,109.1</b>	<b>38,326.0</b>	<b>48,501.5</b>	<b>53,211.0</b>
<b>Net assets</b>	<b>11,448.3</b>	<b>9,322.3</b>	<b>11,228.1</b>	<b>12,624.0</b>	<b>14,294.9</b>
<b>CAPITAL AND RESERVES</b>					
Share capital	6,032.2	6,149.9	6,864.1	6,864.1	6,864.1
Reserves	5,038.3	2,896.9	3,981.7	5,253.3	6,775.8
<b>Equity attributable to owners of the Company</b>	<b>11,070.5</b>	<b>9,046.8</b>	<b>10,845.8</b>	<b>12,117.4</b>	<b>13,639.9</b>
Non-controlling interests	377.8	275.5	382.2	506.6	655.0
<b>Total Equity</b>	<b>11,448.3</b>	<b>9,322.3</b>	<b>11,228.0</b>	<b>12,624.0</b>	<b>14,294.9</b>

Source(s): Company, ABCI Securities estimates

**Consolidated cash flow statement (2011A-2015E)**

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
<b>EBITDA</b>	<b>1,400.7</b>	<b>1,670.0</b>	<b>2,196.1</b>	<b>3,872.5</b>	<b>4,712.8</b>
Change in working capital	3.9	(607.9)	321.6	1,878.4	(1,143.6)
Others	960.8	685.4	1,030.7	0.0	0.0
<b>Cash (used in)/generated from operations</b>	<b>2,365.3</b>	<b>1,747.5</b>	<b>3,548.4</b>	<b>5,750.9</b>	<b>3,569.2</b>
Income tax paid	(183.2)	(180.7)	(193.9)	(215.6)	(257.0)
<b>CF from operating activities</b>	<b>2,182.0</b>	<b>1,566.8</b>	<b>3,354.5</b>	<b>5,535.3</b>	<b>3,312.2</b>
CAPEX	(3,674.0)	(4,110.3)	(5,000.0)	(8,000.0)	(8,000.0)
Others	176.0	663.0	13.0	13.0	13.0
<b>Cash flows from investing activities</b>	<b>(3,498.0)</b>	<b>(3,447.3)</b>	<b>(4,987.0)</b>	<b>(7,987.0)</b>	<b>(7,987.0)</b>
Net borrowing	2,627.3	(625.0)	5,000.0	5,000.0	5,000.0
Proceeds from issue of shares	1,382.8	(940.4)	714.2	0.0	0.0
Bonds issuance	0.0	4,580.2	0.0	0.0	0.0
Dividends paid	(105.0)	(671.6)	(230.6)	(263.1)	(306.9)
Interest paid	(584.3)	(586.3)	(835.8)	(942.9)	(1,142.9)
Others	105.9	(445.5)	0.0	0.0	0.0
<b>Cash flows from financing activities</b>	<b>3,426.7</b>	<b>1,311.3</b>	<b>4,647.8</b>	<b>3,794.0</b>	<b>3,550.2</b>
Net (decrease)/increase in cash and cash equivalents	<b>2,110.7</b>	<b>(569.2)</b>	<b>3,015.3</b>	<b>1,342.3</b>	<b>(1,124.6)</b>
Cash and cash equivalents at beginning of year/period	638.8	2,747.3	1,330.1	5,275.0	6,698.7
Effect of foreign exchange rates, net	(4.0)	0.0	0.0	0.0	0.0
<b>Cash and cash equivalents at end of year/period</b>	<b>2,745.5</b>	<b>2,178.1</b>	<b>4,345.5</b>	<b>6,617.3</b>	<b>5,574.1</b>

Source(s): Company, ABCI Securities estimates

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## Disclosures

### Analyst Certification

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### Definition of equity rating

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

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

Market return: 5-year average market return rate from 2007-2011

Time horizon of share price target: 12-month

### Definition of share price risk

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

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

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

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