Company Report

Huadian Fuxin (816 HK) – Buy
Independent Power Producers Industry
12-month target price: HK$1.70

Key data

Share price (HK$)	1.46
Target price (HK$)	1.70
Upside potential (%)	16.4
52Wk H/L(HK$)	1.75 / 1.46
Issued shares (mn)	7,623
H-shares	1,785
Unlisted shares	5,838
H-share market cap (HK$mn)	2,606
30-day avg vol (HK$mn)	1.95
Major shareholder (%):	
Huadian group	68.0

Source: Company & Bloomberg

Revenue composition in FY11 (%)

Coal-fired power	57.9
Hydropower	20.4
Wind power	17.3
Other clean energy	4.4

Source: Company

Share performance (%)

	Absolute	Relative*
1-mth	(11.5)	(12.7)
3-mth	-	-
6-mth	-	-

**Relative to Hang Seng Index*
Source: Bloomberg

Price performance since listing on 28 Jun

Remarks: H-shares dealing starts on 28 Jun
Source: Bloomberg

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Hydropower benefits from high precipitation

Fujian Province posted 52.2%YoY growth in hydropower generation in 1H2012. We expect Huadian Fuxin, the largest hydropower operator in Fujian, will be one of the biggest beneficiaries from high precipitation in the province. In view of market valuation of comparable peers and the expected earnings growth of the group, we value the share at HK$1.70, which represents 10.2x of our est. FY12 EPS. We initiate coverage with "Buy" rating.

Significant growth in hydropower generation in 1H2012 especially in Fujian province. Total power generation output in China in 1H2012 rose 3.8%YoY, mainly driven by hydropower. In 1H2012, hydro power generation which accounted for 13% of total power generation output in China, increased by 8.3%YoY as compared to 1.6%YoY increase in thermal power generation, which accounted for 81% of total power generation output. The higher growth in hydropower is contributed to high precipitation in 1H2012. For the five largest provinces in terms of hydropower generation, hydropower in Fujian province posted the highest growth of 52.2%YoY in 1H2012.

Largest hydropower operator in Fujian. With over 56 years of experiences in the operation of hydropower business in China, the group has established a leadership position with 19.8% of market share in Fujian province. Through acquisitions of mid- to small-sized hydropower projects and increasing shareholdings in existing hydropower subsidiaries or associates, we expect the consolidated installed capacity of hydropower of the group to increase by 8.1%YoY to 2,403MW in 2012 and 15.0%YoY to 2,763MW in 2013.

Holding key resources for hydropower industry. Of the nine key reservoirs in Fujian, seven of which belong to the group, which accounted for 68.6% of the total water storage capacity of all key reservoirs in Fujian. Currently, the reservoirs contribute to over 90% of the water resources to the group, ensuring a stable supply of water resources to the group.

Risk factors: Competition with parent group assets, geographical concentration risk; customer concentration risk; grid connection risk; high gearing.

Results and valuation

(FY ended Dec 31)	FY09A	FY10A	FY11A	FY12F	FY13E
Revenue (Rmb mn)	7,349.2	8,397.6	7,147.4	8,003.5	9,722.9
Chg (%YoY)	-	14.27	-14.89	11.98	21.48
Net Income (Rmb mn)	385.2	521.1	561.6	1,033.3	1,197.6
Chg (%YoY)	-	35.3	7.8	84.0	15.9
EPS (Rmb)	0.064	0.087	0.094	0.136	0.157
Chg (%YoY)	-	35.3	7.8	44.8	15.9
PE (x)	-	-	-	8.75	7.55
PB (x)	-	-	-	0.89	0.81
ROAA (%)	-	1.3	1.2	1.9	1.9
ROAE (%)	-	9.4	7.9	11.7	11.2
Net D/E (%)	465.6	380.2	385.3	338.0	372.7

**We assume Rmb1 = HK$1.23; Source: Company, ABCI Securities estimates*

Contents

Investment Themes

Leadership in hydropower in Fujian

With over 56 years of experiences in the operation of hydropower business in China, the group has established a leadership position in Fujian province. Through acquisitions of mid- to small-sized hydropower projects and increasing shareholdings in existing hydropower subsidiaries or associates, the group has proved to be successful in expanding their hydropower business through M&A. Consolidated installed capacity of hydro power of the group reached 2,223MW at the end of 2011, accounted for 19.8% of the market share in Fujian.

Fujian: Market share of top five hydropower companies, 31 Dec 2011

Size	Company name	Installed capacity (MW)	Market share
1	Huadian Fuxin	2,223	19.8%
2	Fujian Electric Power	1,942	17.3%
3	China Power Investment Corp	459	4.1%
4	Fujian Mindong Electric Power	298	2.6%
5	Fujian Dachuang	152	1.4%
	Total installed capacity in Fujian	**11,250**	**100.0%**

Source: China Electricity Council; Company annual reports; Frost & Sullivan

Riding on the consolidation trend in the hydropower industry in Fujian, the group planned to speed up its acquisitions after its IPO in Jun 2012 and 8% of the raised funds or Rmb160mn will be used for expansion in hydropower business. In addition, a hydropower project with 80.0MW capacity is under construction in Fujian province and a proposed expansion project with capacity of 110MW is under development. We expect the consolidated installed capacity of hydropower of the group to increase by 8.1%YoY to 2,403MW in 2012 and 15.0%YoY to 2,763MW in 2013. The capacity growth of hydropower projects is one of the major growth drivers of the group in coming years.

Holding key resources for hydropower industry: Reservoirs

Hydropower plants built at the reservoirs have a significant advantage to run-of-river units with no water storage capacity. Excess electricity generated at the times with low electricity demand is used to pump water into higher reservoir. At the times with high electricity demands, water is then released back into the lower reservoir through the turbines. This improves the daily capacity of electricity generation and also allows large hydropower plants to be built.

Of the nine key reservoirs in Fujian, seven of which belong to the group, which accounted for 68.6% of the total water storage capacity of all key reservoirs in Fujian. Key reservoirs are reservoirs with water storage capacities of over 100mn cubic meters, which are normally located at the upper end of rivers, and have the ability to regulate water flow, allowing the group to generate electricity during non-rain seasons or generate more electricity during peak season. Currently, the reservoirs contribute to over

90% of the water resources to the group, ensuring a stable supply of water resources to the group.

Fujian: Reservoirs details, 2011

Key Reservoir	Ownership	Location	Water Storage (m^3)	% of total
Mianhuatan	Huadian Fuxin	Tingjiang River	2,035	28.1%
Jiemian	Fujian Provincial Electric Power	Minjiang River	1,824	25.2%
Chitan	Huadian Fuxin	Minjiang River	870	12.0%
Ansha	Huadian Fuxin	Minjiang River	740	10.2%
Gutianxi	Huadian Fuxin	Minjiang River	640	8.8%
Hongkou	Private Business Owner	Huotongxi River	450	6.2%
Mindong	Huadian Fuxin	Muyangxi River	265	3.7%
Wan'anxi	Huadian Fuxin	Jiulong River	229	3.2%
Baisha	Huadian Fuxin	Jiulong River	199	2.7%
		Total	**7,252**	**100.0%**

Source: Company

High potential for on-grid tariffs increments for hydropower business

As of 31 Dec 2011, all of the group's consolidated hydropower installed capacity is located in Fujian. As most of the hydropower plants of the group are built in 2005, the relatively low construction costs (which was taken into consideration when setting on-grid tariff by the time it was built) has led to considerably low on-grid tariffs.

To reduce the differentials of on-grid tariffs for different hydro power plants both within the local area and nearby provinces, the government has raised average on-gird tariff of hydropower in Fujian several times in the past, which has proved the government effort in providing a sustainable growth environment for the hydropower industry.

Lists of recent tariff adjustment in Fujian during 2008 - present

Year of tariff adjustment	Events
2012	All hydropower plants connected to provincial grid : Increased by Rmb0.021/kWh
2012	New small-sized hydropower projects: Increased by Rmb0.021/kWh
2011	Five hydropower plants (Ansha, Chitan, Gutianxi, Hua'an and Shaxikou): Increased by Rmb0.04/kWh
2009	New small-sized hydropower projects: Benchmark increased from Rmb0.301-0.345/kWh in 2007 to Rmb0.323-0.367/kWh
2009	Three hydropower plants (Ansha, Chitan and Hua'an increased by Rmb0.03/kWh)
2008	Three hydropower plants (Ansha, Chitan and Hua'an increased by Rmb0.015/kWh)

Source: Company

Currently, the average on-grid tariffs in neighboring provinces Zhejiang and Guangdong are 54.8% and 58.1% higher than the average on-grid tariff for hydropower in Fujian, despite a series of tariff raise. We believe the high discount of on-grid tariff continues to provide an upside potential for on-grid tariffs in Fujian, which in turn lead to higher return. Moreover, a higher return on projects also increase the number of hydropower projects that are economically exploitable, providing more opportunity for industry growth.

China: On-grid tariffs of hydropower (Incl VAT), 2011

Province	On-grid tariffs (Rmb/kwh)	Premium to Fujian
Fujian	0.31	-
Zhejiang	0.48	54.8%
Guangdong	0.49	58.1%
East China (Excl: Fujian)	0.40	29.0%

Source: Pricing Bureau of Fujian province, Pricing Bureau of Zhejiang province, Pricing Bureau of Guangdong province, Pricing Bureau of Jiangxi province, Pricing Bureau of Shandong province, Pricing Bureau of Anhui province, Pricing Bureau of Jiangsu province

Diversification of clean energy business

Apart from hydropower business, the group planned to develop its wind power business and is expected to become a key growth driver to the group. Consolidated installed wind power capacity of the group grew from 471MW in 2009 to 2,171MW in 2011, representing CAGR of 114.7%. Provided that the group had 941MW of installed capacity under construction by the end of 2011, we believe wind power installed capacity of the group can reach 3,000MW by the end of 2012, representing 41.4%YoY growth.

Since utilization hours of hydropower and wind power are dependent on the availability of natural resources, the coal-fired power business as well as the development of the distributed energy business help smooth out the natural resources risks. In addition, since the hydropower projects of the group were constructed and financed before 2005 which have lower debt-servicing obligations and relatively low operation and maintenance costs, the business has, as proved in track record, bring in a positive cash flow to support the development of the group's wind power and other clean energy projects. The group recorded a positive cash flow of Rmb2,572mn, Rmb3,014 and Rmb1,482mn from operating activities in 2009, 2010 and 2011 respectively.

Growth potential from distributed energy business and nuclear power business

The group held a 43.0% equity interest in the Guangzhou University Town Distributed Energy Project as of 31 Dec 2011 after the group disposed 12% of the equity interest to the group's controlling shareholder in Aug 2011 which the group used to supplement their working capital. For the years ended 31 Dec 2009, 2010 and 2011, the profit of the Guangzhou University Town Distributed Energy Project was Rmb7.3mn, 38.2mn and Rmb45.4mn respectively. Going forward, the group plans to construct the distributed energy projects along the network of "West-to-East Gas Pipeline", a government project for transporting natural gas from Xinjiang province to the Yangtze River Delta area, for easier access to natural gas. In Jan 2011, the group entered into a strategic framework agreement with Kunlun Natural Gas, which agreed to supply a sufficient amount of natural gas to the group's future distributed energy projects on a priority basis.

Nuclear business – a new driver from 2013 onward

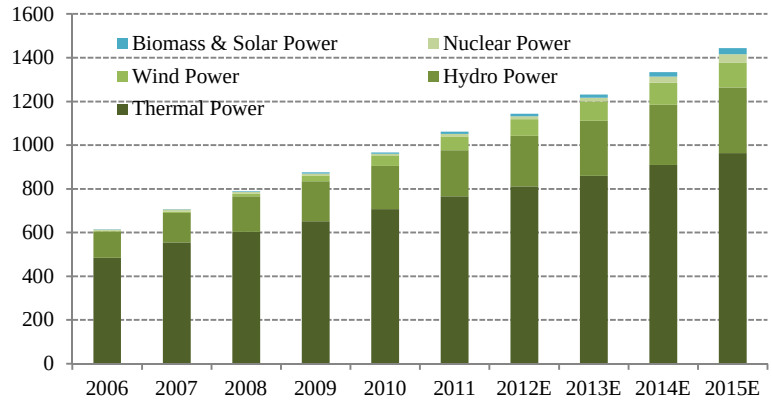
In addition, the group is planning to make approx. Rmb800mn investment each year from 2012 to 2014 to fund the construction of the Fuqing Nuclear Power Plant, in which the group holds 39.0% equity interest. As of 31 Dec 2011, the Fuqing Nuclear Power Plant had four 1,000MW nuclear generating units under construction, and the nuclear power plant will commission one generating unit each year from 2013 to 2016.

Industry Analysis

Power Industry in China

Total installed capacity of power supply in China grew significantly from 615GW in 2006 to 1,061GW in 2011, representing CAGR of 11.5%, while electricity generation grew at a CAGR of 10.6% from 2,834TWh in 2006 to 4,700TWh in 2011. It is expected that total installed capacity in China to reach 1,444GW in 2015, representing 4-yr CAGR of 8.0%.

China: Total installed capacity by energy sources, 2006-2015 (GW)



Source: NBSC; China Wind Energy Council; Frost & Sullivan

With growing power generation capacity, the structure of energy sources production is shifting from heavier reliance on traditional thermal power to increasing diversification into various forms of clean energies. According to China Electricity Council, hydropower and wind power are the two largest sources of renewable energy in China during 2008-2011. China generated 4,721.7TWh electricity in 2011, of which, 82.5%, 14.0%, 1.9% and 1.6% are generated from thermal, hydro, nuclear and wind power respectively.

By the end of 2015, it is expected thermal power will account for 66.7% of total installed capacity of power supply, as compared to 72.1% in 2011, while hydropower as a percentage of power supply will increase from 20.0% in 2011 to 20.8% in 2015; wind power and nuclear power will increase from 7.1% in 2011 to 10.6% in 2015.

China: Total installed capacity by energy sources, 2010-2015 (GW)

GW	2010	2011	2015	11-15 CAGR	2010	2011	2015
Thermal	707	765	963	5.9%	73.1%	72.1%	66.7%
Hydro	198	212	301	9.2%	20.5%	20.0%	20.8%
Wind	45	62	112	15.9%	4.7%	5.8%	7.8%
Nuclear	11	13	40	32.4%	1.1%	1.2%	2.8%
Others	6	9	28	32.8%	0.6%	0.8%	1.9%
Total	967	1,061	1,444	8.0%	100.0%	100.0%	100.0%

Source: NBSC; China Wind Energy Council; Frost & Sullivan

Hydropower Industry in China

Economically exploitable potential (TWh/yr) refers to the amount of hydropower generation which, if generated, has on-grid tariff higher than generation costs, thereby offering a positive economic return.

Installed capacity of hydropower in China grew at a CAGR of 12.1% from 120GW in 2006 to 212GW in 2011. In terms of installed capacity, China is the world's largest hydropower country during 2006-2011. In particular, the newly installed hydropower capacity in 2011 in China accounted for 48.2% of all the new capacity installed globally. But despite its leading hydropower position in the world, China still has a high potential for economically exploitable hydropower. As at the end of 2011, China has a total unexploited hydropower potential of 1,090TWh per year compared to 672TWh per year in Russia and 453TWh per year in Brazil.

According to China Electricity Council, installed capacity of hydropower is planned to reach 301GW in 2015 in China, with a CAGR of 9.2% from 212GW in 2011.

China: Hydropower capacity, electricity generation, utilization hours

	2006	2007	2008	2009	2010	2011
Installed capacity (GW)	615	707	789	875	967	1,061
Electricity generated (Twh)	2,834	3,278	3,467	3,715	4,207	4,700
Utilization hours* (hours)	3,393	3,520	3,589	3,328	3,404	3,028

*With unit capacity equal to or over 6,000KW

Source: China Electricity Council

Consolidation is expected for hydropower in Fujian

With 663 rivers, Fujian Province is one of the provinces in China with the richest water resources. As of 31 Dec 2011, total installed capacity of hydropower in China reached 11.2GW, accounted for 30.8% of total installed capacity of power supply in Fujian, which is higher than China's national average of 20.0% in 2011. But due to its mature structure in hydropower, it is expected total installed capacity of hydropower in Fujian to grow at a CAGR of 2.2% from 11.3GW in 2011 to 12.3GW in 2015, which is lower than the China average of 9.2%. We expect that the growth of large hydropower operators in Fujian will be supported by inorganic growth rather than organic growth in coming years.

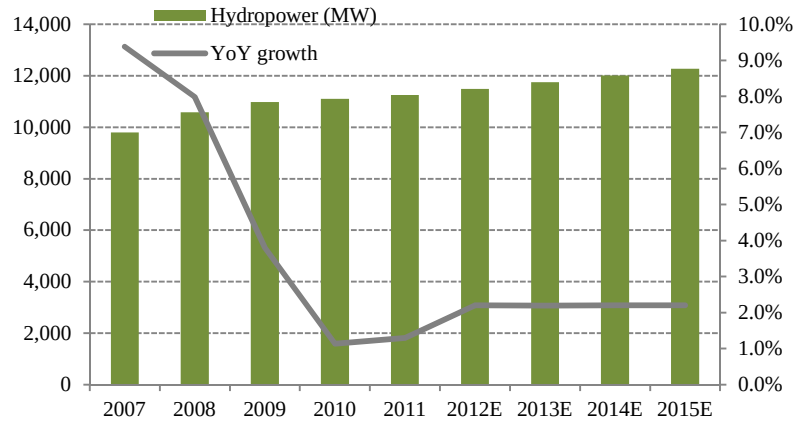
Fujian: Hydropower capacity, electricity generation, utilization hours

	2006	2007	2008	2009	2010	2011
Installed capacity (GW)	9.0	9.8	10.6	11.0	11.1	11.3
Electricity generated (Twh)	34.7	31.2	33.2	27.6	45.4	29.5
Utilization hours* (hours)	-	3,296	3,201	2,534	4,108	-

*With unit capacity equal to or over 6,000KW

Source: China Electricity Council

Fujian: Installed capacity of Hydropower, 2007-2015 (MW)



Source: Fujian Yearbook; China Electricity Council; Frost & Sullivan

Hydropower industry in Fujian is dominated by small-sized hydropower (installed capacity of less than 50MW) due to its relatively high flexibility and energy return rate. In terms of installed capacity, small-sized hydropower plant accounted for 61.3% of total installed hydropower capacity in Fujian as at the end of 2011.

Most small hydropower plants are currently owned by private or local state-owned enterprises. To ensure the effective use of hydropower, government is encouraging experienced and financially capable hydropower operators to acquire ownership of small hydropower plants, especially for those hydropower plants located along the same river. Therefore, we expect the group, which is the largest hydropower operator in Fujian, is well-positioned to acquire smaller peers, bringing inorganic growth to the group.

Fujian: Classification of Hydropower plants, As at 31 Dec 2011

Size	Installed capacity (MW)	No. in Fujian	Total installed capacity (MW)
Large	>=300	4	2,600
Medium	50-300	20	1,757
Small	<=50	About 6,630	6,893

Source: Ministry of Water Resources, China Electricity Council, Forst & Sullivan

Recent update on the hydropower industry

Electricity generated by hydropower in China grew at a CAGR of 11.9% from 415TWh in 2006 to 663TWh in 2011. The negative YoY growth rate of hydropower generated in 2011 is mainly a result of low precipitation in 2011.

According to the 2011 China Meteorological Report, the average precipitation in 2011 was 556.8mm, down by 18%YoY and was the lowest yearly record since 1951. Due to a lower base last year, we are expecting a higher precipitation this year in terms of YoY growth and hence a higher electricity generation. In 1H2012, hydro power generation which accounted for 13% of total power generation output in China, increased by 8.3%YoY as compared to 1.6%YoY increase in thermal power generation, which accounted for 81% of total power generation output. The higher growth in hydropower is contributed to high precipitation in 1H2012. For the five largest provinces (Hubei, Sichuan, Yunan, Hunan and Fujian) in terms of hydropower generation, hydropower in Fujian province posted the highest growth of 52.2%YoY in 1H2012.

We expect Huadian Fuxin, the largest hydropower operator in Fujian, will be one of the biggest beneficiaries from high precipitation in the province.

China: Electricity generated by hydropower YoY growth, 1H2012

	2012-01	2012-02	2012-03	2012-04	2012-05	2012-06	1Q2012	2Q2012	1H2012
Jiangsu	566.6%	615.3%	960.6%	308.7%	836.4%	289.2%	675.3%	413.7%	537.6%
Hainan	24.8%	178.8%	223.1%	157.2%	50.4%	143.6%	106.6%	103.4%	104.8%
Jiangxi	1.2%	50.7%	75.7%	76.1%	114.0%	25.4%	43.3%	69.3%	58.2%
Chongqing	0.9%	54.8%	-23.6%	33.1%	190.8%	54.4%	4.8%	84.1%	56.0%
Fujian	**-12.6%**	**-20.9%**	**118.2%**	**192.3%**	**68.3%**	**39.7%**	**17.1%**	**83.8%**	**52.2%**
Zhejiang	-33.9%	16.4%	113.8%	142.5%	104.8%	26.5%	26.1%	75.7%	51.3%
Henan	151.7%	-9.3%	27.0%	32.1%	83.6%	66.2%	39.1%	59.4%	50.2%
Anhui	11.9%	1.8%	21.8%	75.9%	115.9%	8.3%	12.2%	53.7%	37.8%
Hunan	-9.7%	-4.9%	3.3%	48.6%	78.3%	19.9%	-3.3%	43.7%	23.9%
Shaanxi	26.0%	282.4%	101.9%	17.9%	48.4%	-43.4%	98.3%	-9.0%	20.3%
Beijing	7.8%	11.8%	12.0%	26.4%	55.0%	14.6%	10.3%	30.4%	18.7%
Hubei	-8.1%	8.7%	2.1%	-4.8%	75.1%	11.7%	0.2%	25.9%	15.0%
Xinjiang	-13.4%	11.1%	28.0%	28.6%	9.4%	16.5%	6.7%	16.9%	13.7%
Gansu	3.9%	6.8%	11.6%	-9.6%	22.7%	12.0%	7.4%	10.1%	9.3%
China	**-11.9%**	**3.5%**	**0.4%**	**4.2%**	**30.1%**	**13.4%**	**-3.0%**	**16.3%**	**8.3%**
Sichuan	-5.0%	24.8%	7.4%	13.2%	19.9%	-7.0%	7.6%	5.3%	6.3%
Guangdong	33.5%	61.0%	-7.0%	-8.7%	-2.9%	8.7%	16.8%	0.2%	5.4%
Qinghai	-5.0%	53.2%	-19.6%	-21.6%	4.8%	27.8%	1.2%	2.6%	2.1%
Yunan	-7.8%	11.0%	-6.7%	-0.1%	-6.0%	8.6%	-1.7%	1.6%	0.2%
Shanxi	-19.4%	20.0%	-3.5%	-37.6%	-34.7%	66.3%	-1.1%	-5.0%	-3.0%
Xizang	27.8%	56.0%	3.7%	-25.1%	-29.5%	-18.4%	28.6%	-23.6%	-4.1%
Liaoning	-14.0%	-27.0%	-29.4%	79.8%	15.4%	-22.0%	-23.8%	7.0%	-8.8%
Ningxia	-65.2%	-68.2%	12.0%	-16.2%	19.5%	21.3%	-42.6%	10.3%	-9.5%
Inner Mongolia	1.8%	0.6%	-95.4%	14.3%	-7.5%	103.8%	-57.0%	35.2%	-11.1%
Guizhou	-31.7%	-48.6%	-39.2%	-48.4%	15.2%	81.6%	-39.4%	16.0%	-11.6%
Jilin	-19.1%	-31.3%	-8.9%	-6.2%	-9.0%	-32.2%	-20.3%	-20.1%	-20.2%
Hebei	10.2%	-2.8%	-39.7%	3.0%	-38.1%	-81.2%	-8.5%	-46.6%	-27.0%
Shandong	-61.0%	-47.6%	197.5%	-39.1%	62.4%	-40.2%	-35.4%	-9.7%	-32.0%
Guangxi	-63.6%	-41.6%	-42.5%	-51.8%	-31.0%	8.9%	-49.5%	-23.4%	-33.6%
Heilongjiang	-1.1%	-53.3%	-52.7%	-62.8%	-59.8%	-71.0%	-34.7%	-67.9%	-59.9%

Source: National Bureau of Statistics

Wind industry in PRC

China wind energy is expected to experience outstanding growth

China has been ranked the largest country in terms of total wind installed capacity since 2010. As of 31 Dec 2011, China total wind installed capacity reached 62 GW (including unconnected capacity) in 2011, compared with 47 GW of the second largest country, USA. It is expected China will continue to be the largest wind power country for next 3 years till 2015. Consolidated capacity will grow at a CAGR of 21.8% for 2010-2015 compared with 19.2% of USA.

Global: Consolidated installed capacity growth of wind power; 2010-2015 (MW)

	PRC	India	Rest of Asia	US	Canada
2010	44,733	13,064	3,352	40,181	4,009
2011E	62,733	4,864	4,187	47,181	4,859
2012E	74,733	16,864	5,367	56,181	6,359
2013E	89,733	19,364	6,875	66,181	8,010
2014E	104,733	21,864	8,365	80,406	9,906
2015E	119,733	24,364	9,684	96,569	11,977
10-15E CAGR	21.8%	13.3%	23.6%	19.2%	24.5%

Source: Garrad Hassan

The strong growth of wind industry in China is partly supported by the abundant wind resources in China. According to the Medium and Long-Term Development Plan for Renewable Energy, the technically exploitable wind resources on land amount to 300 GW and total exploitable wind resources could reach 1,000GW including offshore wind resources.

China: Wind resources (GW)

Province	Technically exploitable wind resources
Inner Mongolia	=150
Xinjiang	>100
Gansu	>100
Hebei	>40
Jiangsu	>10
Jilin	>10

Source: Chinese Renewable Energy Industries Association

Wind farm operators to benefit from grid investment

Due to the rapid development of the installed capacity, the installation of wind capacity has outpaced the development of grid infrastructure, leading to wind curtailment problem. In 2011, 30% of consolidated installed wind capacity is not connected to grid.

However, China is putting effort in improving grid connection in order to achieve China's renewable energy target of 11.4% by 2015. According to NDRC, China will implement Renewable Portfolio Standards (RPS) in 2012, setting a renewable energy quota for each province's total power consumption, and total power purchased by grid companies from generation companies. During 2011-2015, it is expected the government will invest Rmb500bn in grid construction in order to develop a more technically-advance power grid system. Wind farm operators will benefit in terms of higher utilization hours, resulting in higher ROA.

Favorable policies

- **Mandatory Purchase and Dispatch Priority:** The Renewable Energy Law provides that grid companies must purchase the full amount of on-grid electricity generated by approved renewable energy projects within their coverage. And that the Provisional Measures on the Dispatch of Energy Saving Power Generation provides that power producers are entitled to enjoy the highest dispatch priority if they use renewable energy including wind, solar and tidal power.
- **Taxation:** Approved wind projects are fully exempted from enterprise income tax for 3 years starting from the year when operating income is first derived from sales of electricity, followed by 50% exemption from enterprise income tax for another 3 years thereafter.

Business Analysis and Projection

Key operational statistics and assumptions

Our earnings model is based on various assumptions. In particular, consolidated installed capacity, gross generation, net generation, average utilization hours and average on-grid tariffs are the 5 major assumptions we made in each power segment of the group.

Hydropower

Consolidated installed capacity: We expect the group to add 180MW and 360 MW newly installed capacity in 2012 and 2013 respectively through M&A and building new hydropower plants. The group currently has one hydropower expansion project with a capacity of 80.0MW under construction, which we expect to be completed by the end of 2012. In addition, there is another hydropower project with a capacity of 110MW that is under development, which we expect to be completed by the end of 2013.

Av utilization hours: The group is confident that utilization hours to reach 4,000 hours in 2012 due to a relatively high precipitation this year. Although fluctuation in annual precipitation is high, it tends to fluctuate around the same level for every three to four years. Therefore, we expect utilization hours to fall back to 3,200 hours in 2013, which is the long term average utilization hour of the group.

Wind power

Consolidated installed capacity: The group plans to add 900MW and 1,000 MW newly installed capacity in 2012 and 2013 respectively. Currently, the group has 941MW of wind power projects under construction and we believe 900MW of newly installed capacity is an achievable target for 2012.

Av utilization hours: The group has achieved utilization hours above industry average during 2009-2011, mainly due to its relatively small-sized of its wind power projects. But we expect utilization hours to drop to 1,950 hours in 2012 from 2,072 in 2011 due to its high exposure in Gansu and Western Inner Mongolia where wind curtailment problem remains a severe problem during first half of this year. As at the end of 2011, 49.2% of its installed capacity is located in Gansu and Western Inner Mongolia, and out of the 941MW of newly installed capacity that is under construction, 47.4% of it is located in Gansu and Western Inner Mongolia. But as grid connection continues to improve with a possible release of “Quota System” which could hopefully alleviate the wind curtailment problem by the end of 2012, we expect utilization hours to pick up gradually in 2013.

Coal-fired power

Consolidated installed capacity: The group currently had two coal-fired generating unit (Yong’an Power Plant and Zhangping Power Plant), each with a capacity of 300MW, under construction. We expect consolidated installed capacity of the group to increase by 600MW by the end of 2012. The construction was approved by the government in 2009 to replace the existing inefficient coal-fired power plants owned by the group, and the

group has no intention to construct additional coal-fired generating units in near future.

Av utilization hours: As compared to hydro power and wind power, coal-fired plants are less prone to seasonality factors and we expect utilization hours to be 5,000 hours in both 2012 and 2013.

Group: Major assumptions; 2009-2013F

FY ended Dec 31	2009	2010	2011	2012F	2013F
Consolidated installed capacity (MW)	**5,425**	**6,351**	**6,524**	**8,204**	**9,564**
Hydro	2,146	2,199	2,223	2,403	2,763
Wind	471	1,334	2,171	3,071	4,071
Coal-fired	2,650	2,650	2,050	2,650	2,650
Other clean energy	157	167	79	79	79
Gross generation (GWh)	**18,164**	**21,742**	**17,327**	**22,574**	**26,434**
Hydro	4,989	8,753	5,733	8,894	7,691
Wind	784	1,332	3,104	4,234	6,296
Coal-fired	12,223	10,964	8,043	9,000	12,000
Other clean energy	168	693	447	447	447
Net generation (GWh)	**21,530**	**24,554**	**19,720**	**22,146**	**25,431**
Hydro	4,903	8,623	5,647	8,760	7,576
Wind	558	1,205	2,514	3,387	5,037
Coal-fired	15,903	14,045	11,120	9,560	12,380
- Self-generation	11,482	10,327	7,587	8,460	11,280
- Substituted generation	4,421	3,719	3,533	1,100	1,100
Other clean energy	165	681	438	438	438
Av utilization hours					
Hydro	2,379.3	4,015.0	2,583.2	4,000.0	3,200.0
Wind	2,726.2	2,232.0	2,072.0	1,950.0	2,050.0
Coal-fired	4,942.5	4,466.5	6,045.2	5,000.0	5,000.0
Av on-grid tariffs (Rmb/kwh; Ex VAT)					
Hydro	0.251	0.254	0.253	0.266	0.271
(YoY)		*1.2%*	*-0.4%*	5.0%	2.0%
Wind	0.418	0.454	0.481	0.481	0.481
(YoY)		*8.6%*	*5.9%*	*0.0%*	*0.0%*
Coal-fired	0.360	0.354	0.364	0.391	0.399
(YoY)		*-1.7%*	*2.8%*	*7.5%*	*2.0%*

F: ABCI Securities estimates

Source: Company (for historical figures only), ABCI Securities estimates

Revenue analysis and projection

Assuming the group manages to secure funding sources internally or externally to complete pipeline projects as well as hydropower plants M&A in 2012 and 2013, we estimate the group to post strong revenue growth in 2012 and 2013 as new installed capacity comes into stream. We expect the group's revenue to increase by 14.5%YoY to Rmb8003.5mn in 2012 and 21.5%YoY to Rmb9,722.9mn in 2013.

Coal-fired power plant contributed most of the revenues but without further capacity plan after the 600MW new capacity under construction (300MW from Yong'an and 300MW from Zhangping) which will be come into stream by the end of 2012, hydropower and wind power will become the major growth drivers of the group in the future. We expect hydropower and wind power will account for a total of 49.5% and 46.0% of the total electricity sales in 2012 and 2013 as compared to 37.7% in 2011. The high growth of hydropower in 2012 is partly due to the high precipitation this year and hence a higher utilization hour assumptions as compared to 2013.

Group: Revenue projection; 2009-2013F (Rmb mn)

FY ended Dec 31	2009	2010	2011	2012F	2013F
Sales of electricity					
Hydropower	1,228.6	2,187.1	1,427.7	2,327.1	2,052.7
Wind power	233.1	546.6	1,209.9	1,629.3	2,422.8
Coal-fired power	**5,730.4**	**4,973.7**	**4,044.0**	**3,740.8**	**4,941.2**
From self-generation	4,063.7	3,592.9	2,706.1	3,310.4	4,502.1
From substituted generation	1,666.7	1,380.8	1,337.9	430.4	439.0
Other clean energy	110.6	457.3	306.2	306.2	306.2
Total	**7,302.7**	**8,164.7**	**6,987.8**	**8,003.5**	**9,722.9**
Others	46.6	39.7	108.6	-	-
Service concession construction revenue	0.0	193.3	43.9	-	-
Unallocated head office and corporate revenue	0.0	0.0	7.1		
Consolidated revenue	**7,349.2**	**8,397.7**	**7,147.4**	**8,003.5**	**9,722.9**
Composition					
Sales of electricity					
Hydropower	16.8%	26.8%	20.4%	29.1%	21.1%
Wind power	3.2%	6.7%	17.3%	20.4%	24.9%
Coal-fired power	78.5%	60.9%	57.9%	46.7%	50.8%
From self-generation	55.6%	44.0%	38.7%	41.4%	46.3%
From substituted generation	22.8%	16.9%	19.1%	5.4%	4.5%
Other clean energy	1.5%	5.6%	4.4%	3.8%	3.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Revenue Growth (YoY)					
Sales of electricity					
Hydropower	-	78.0%	-34.7%	63.0%	-11.8%
Wind power	-	134.5%	121.4%	34.7%	48.7%
Coal-fired power	-	-13.2%	-18.7%	-7.5%	32.1%
From self-generation	-	-11.6%	-24.7%	22.3%	36.0%
From substituted generation	-	-17.2%	-3.1%	-67.8%	2.0%
Other clean energy	-	313.6%	-33.0%	0.0%	0.0%
Total	-	**11.8%**	**-14.4%**	**14.5%**	**21.5%**

F: ABCI Securities estimates

Source: Company (for historical figures only), ABCI Securities estimates

Financial positions analysis

Net debt to equity

We expect net debt to equity of the group to decrease slightly to 328.9% in 2012 from 385.3% in 2011 after IPO in June. But due to the aggressive CAPEX plan throughout 2012 and 2013 (planned CAPEX of Rmb103mn in 2012 and Rmb100mn in 2013), we expect the ratio will increase slightly again to 362.4% in 2013. The high gearing will continue to leverage up the ROAE of the group and we expect ROAE of the group to reach 11.59% in 2012 and 11.31% in 2013.

Since the parent of the group, Huadian group, is a state-owned enterprise, we believe the bankruptcy risk of the group is low. And the historical record has proved that the high gearing ratio has not reduced its ability to borrow from banks. The group borrowed Rmb14.1bn and Rmb16.9bn in 2010 and 2011 when its net debt to equity ratio reached 380.2% and 385.3% respectively in 2010 and 2011. Based on historical figures, most of the borrowings made by the group are mid to long term loans. Loans that were repayable within one year accounted for less than 35% of the total borrowing portfolio during 2009-2011.

Group: Borrowings repayable schedule; 2009-2013F (Rmb mn)

	2009	2010	2011
Within 1 year or on demand	3,352	40,181	4,009
1< x < 2	4,187	47,181	4,859
2 < x < 5	5,367	56,181	6,359
> 5	6,875	66,181	8,010
Total	8,365	80,406	9,906
Within 1 year or on demand	32.7%	24.4%	28.3%
1< x < 2	6.6%	8.6%	8.2%
2 < x < 5	23.8%	21.6%	24.2%
> 5	36.9%	45.4%	39.3%
Total	**100.0%**	**100.0%**	**100.0%**

Source: Company

Interest coverage ratio

Despite a high gearing ratio, the group manages to maintain a healthy interest coverage ratio. We calculated the particular ratio by dividing EBITDA by interest expense, and we estimate that the group can maintain the ratio at above 2.5x in 2012 and 2013.

Sensitivity Analysis

Since coal-fired business segment remains the major contributor of revenue, the group is relatively sensitive to the variable factors affecting the sector. Based on our sensitivity analysis, we estimated that a +/-5% change in coal price will lead to a -/+7.45% change in the group's net profit while a +/-5% change in on-grid tariff of coal-fired plants will lead to a -/+10.34% change in the group's net profit.

However, with its high net debt position, the group is most sensitive to interest rate changes. In 2011, for a +/-1% change in interest rate, the group net profit will increase/decrease by 29.5% and we estimate that the figure will drop slightly to -/+26.7% in 2012. A longer-than-expected interest rate cut cycle due to economic slowdown will provide an upside potential to the group.

Group: Sensitivity Analysis, 2010-2012F

Yr to Dec 31 (Rmb mn)	2010	2011	2012F
Base case (Net profit)	521.1	561.6	1033.3
For +/-1% change in interest rate			-/+26.7%
For +/-5% change on coal price			-/+7.45%
For +/-5% change on on-grid tariff			
Coal-fired			+/-10.34%
Hydro			+/-7.29%
Wind			+/-5.11%
For +/-5% change utilization hours			
Coal-fired			+/-2.93%
Hydro			+/-7.29%
Wind			+/-5.11%

Source: ABCI Securities estimates

Sector Comparison

Peers: Profitability comparison, 2011

Ticker	Stock name	Latest FY end	EBIT margin (%)	EBITDA margin (%)	ROAA (%)	ROAE (%)	Net D/E (%)
816	**Huadian Fuxin**	**12/2011**	26.82	44.04	1.18	7.85	385.3
Coal-fired power							
902	HUANENG POWER	12/2011	6.87	15.95	0.49	2.26	265.8
991	DATANG POWER	12/2011	13.11	25.11	0.86	5.65	301.4
836	CHINA RESOURCES POWER	12/2011	13.33	22.39	2.86	9.93	128.3
1071	HUADIAN POWER	12/2011	7.03	27.61	0.05	0.45	430.5
2380	CHINA POWER	12/2011	12.98	24.29	0.84	3.98	249.1
	Simple average		**10.66**	**23.07**	**1.02**	**4.45**	-
	Max		13.33	27.61	2.86	9.93	-
	Min		6.87	15.95	0.05	0.45	-
Wind Power							
916	CHINA LONGYUAN	12/2011	76.70	43.53	3.20	9.21	146.08
1798	DATANG RENEWABLE	12/2011	49.90	85.44	1.53	6.56	268.42
958	HUANENG RENEWABLES	12/2011	52.22	88.81	4.20	12.31	174.06
956	SUNTIEN GREEN ENERGY	12/2011	33.15	11.89	2.59	5.13	50.64
182	CHINA WINDPOWER	12/2011	59.35	60.89	5.76	8.87	8.42
735	CHINA POWER NEW ENERGY	12/2011	18.33	36.73	1.59	3.49	87.37
	Simple average		**46.70**	**52.30**	**3.62**	**8.50**	-
	Max		76.70	88.81	6.48	13.90	-
	Min		18.33	11.89	1.53	3.49	-

EBITDA margin = Profit before tax, net interest expenses, depreciation and amortization; Net D/E= Net debt/Total equity

Source: The group, Bloomberg, ABCI Securities estimates

The group engaged mainly in coal-fired, hydro and wind power businesses and we identify two groups of peers which are the traditional IPPS or coal-fired power operators and the wind power operators.

Wind power business generally have a higher EBITDA margin than coal-fired business because there is no cost of fuel. Therefore, EBITDA margin of the group lie within the two groups of peers. EBITDA margin of the group's coal-fired, hydro and wind power segment were 23.0%, 59.5% and 87.6% respectively in 2011. While its EBITDA margin of its coal fired business is in line with the traditional IPPs average of 23.1%, its EBITDA margin of its wind power business is also in line with the pure wind farm operators Datang Renewable (1798) and Huaneng Renewables (958), which achieved an EBITDA margin of 85.4% and 88.8% respectively.

Likewise, due to its diversified business structure, the ROAA and ROAE of the group also lie within its two groups of peers. Similar to the power generators, the group has a low ROAA of 1.18% due to large amount of fixed assets and ROAE are usually geared up by debt. Given its 58%/20%/17% mix in coal/hydro/wind business, the group has a considerably high ROAE of 7.85% that is close to the profitability of the wind power operators and is also 3.4% higher than its coal-fired business.

Valuation

We appraise the equity of the group in two different approaches. We use comparison method to evaluate the group against the market valuation of comparable peers. We also use the discount cash flow method to value the equity value of the group. Our appraised share value of HK$1.70-1.79 provides 16.4-22.6% of upside potential and we initiate coverage with BUY rating.

Group: Valuation summary

Valuation method	Appraised share value HK$/share	Appraised share value / Estimated FY12 EPS
PB rating	1.70	10.18x
Discount cash flow	1.79	10.72x

Source: ABCI Securities estimates

Market Valuation Comparison

Ticker	Stock name	Price* HK$	Latest FY end	FY2011 PER (x)	Estimate FY2012 PER (x)	Historical P/B (x) Historical
816	**Huadian Fuxin**	**1.46**	**12/2011**	**-**	**8.87**	**0.90**
Fossil fuel power						
902	HUANENG POWER	5.08	12/2011	10.05	8.38	1.14
991	DATANG POWER	2.63	12/2011	8.27	6.75	0.74
836	CHINA RESOURCES POWER	15.54	12/2011	11.02	9.22	1.55
1071	HUADIAN POWER	2.28	12/2011	8.75	6.86	0.78
2380	CHINA POWER	2.05	12/2011	7.29	6.03	0.66
	Wt. average			**9.63**	**7.95**	**1.09**
	Max			**11.02**	**9.22**	**1.55**
	Min			**7.29**	**6.03**	**0.66**
Renewable Energy Power						
916	CHINA LONGYUAN	4.78	12/2011	10.18	9.32	1.19
1798	DATANG RENEWABLE	0.84	12/2011	5.30	4.71	0.54
958	HUANENG RENEWABLES	0.99	12/2011	5.21	4.66	0.59
956	SUNTIEN GREEN ENERGY	1.34	12/2011	6.36	5.37	0.68
182	CHINA WINDPOWER	0.23	12/2011	3.69	-	0.38
	Wt. average			**8.48**	**7.59**	**0.98**
	Max			**14.80**	**12.96**	**2.42**
	Min			**3.69**	**4.66**	**0.38**

*: The share prices were dated on 7 Aug, 2012

Source: Bloomberg, ABCI Securities estimates

PB rating method

Despite of having a lower ROAE in 2011, coal-fired operators are given a higher valuation than wind power operators as variable factors are moving into favour of coal-fired power plants in terms of declining interest costs and coal prices while wind farm operators are still suffering from grid curtailment issues.

Coal-fired power operators and wind-fired power operators are trading at 2011 PB of 1.09x and 0.98x respectively and we believe this indicates the upper and lower valuation bound for the group. We estimate the PB band of 0.98-1.09x would give a valuation range of HK$1.61-1.79 and the mid-point PB of 1.04x would give a valuation of HK$1.70 based on est 2012 NBV.

Discount cash flow method

We also appraise the group based on the discount cash flow method. We estimate that the group will not generate positive cash flow until 2017 without factoring in the possible income generated from the nuclear business starting in 2013.

Group: Discounted Cash Flow Model; 2012F-2020F (Rmb mn)

Yr to Dec 31	2012F	2013F	2014F	2015F	2016F	2017F	2018F	2019F	2020F
EBITDA	4,288	5,018	5,470	5,962	6,379	6,826	7,304	7,815	8,362
Chg in WC	318	(241)	(248)	(255)	(263)	(271)	(279)	(287)	(296)
Tax paid	(145)	(168)	(711)	(775)	(1,276)	(1,365)	(1,461)	(1,563)	(1,672)
Capex	(10,300)	(10,000)	(8,000)	(7,000)	(5,000)	(5,000)	(1,000)	(1,000)	(1,000)
Free cash flow	(5,838)	(5,391)	(3,489)	(2,068)	(160)	190	4,564	4,965	5,394
Terminal value									77,101
PV of free cash flow	(5,668)	(5,081)	(3,193)	(1,838)	(138)	159	3,711	3,919	5,394
PV of terminal value									44,191
Total PV	41,454								
Less: Net debt after tax effect	(28,754)								
Less: MI	(1,648)								
PV of equity	11,053								
No. of issued shares	7,622.6								
Share value (Rmb)	1.45								
Exchange rate	0.8121								
Share value (HK$)	1.79								

EBITDA: Pre-tax profit before finance cost, depreciation, amortization, and other non-operating incomes & expenses

Source: ABCI Securities estimates

Our DCF is modeled using the following assumptions:

Group: Major assumptions on WACC	
Assumptions	
WACC	7.20%
Growth (2013-2015)	9.00%
Growth (2015-2020)	7.00%
Terminal growth rate	3.00%
Risk-free rate (10-year HK government bond yield)	0.97%
Hong Kong market return rate	13.27%
Average beta of peers	0.8
Net debt/asset ratio	60.00%
Cost of equity	10.80%
Cost of debt	6.00%
Effective tax rate (2013-2015)	13.00%
Effective tax rate (2015-2020)	20.00%

Source: Bloomberg, ABCI Securities estimates

Taking industry growth of the thermal, hydro and wind power sectors and China economic growth rate into account, we believe the industry can grow at 9% in 2013-2015 and 7% in 2015-2020. Based on WACC of 7.20%, we value the equity of the group at Rmb11,053mn, or HK$1.79/share, which is 2.9% higher than the share value implied by the targeted PB valuation of 1.04x. Per share value of HK$1.79 represents FY12 PER of 10.72x and PB of 1.09x.

WACC may change due to interest rate and market return fluctuations. And we estimate for WACC range between 7-8%, fair value of the share price will range of HK$0.76-2.13.

Group: Scenario analysis			
	Implied share value	Implied	Implied
Discount rate	**HK$**	FY12 PER	FY13 PER
7.00%	2.13	12.76	10.36
7.20%	1.82	10.91	8.86
7.50%	1.39	8.35	6.78
8.00%	0.76	4.56	3.70

Source: ABCI Securities estimates

Risk Factors

- **Competition with parent group assets:** The controlling shareholder of the group, Huadian, which holds 68.2% of the group's total equity, has assets that compete with the group. Hudian is a wholly state-owned enterprise established in 2003 and is engaged in the power supply business. Through its unlisted subsidiaries, Huadian currently has two wind power projects with an estimated capacity of 99.0MW under construction and one coal-fired power plant with a capacity of 1,200MW in operation. The listed companies which the group hold, including 45.95% equity interest in Huadian International (1071HK; 600627 CH), 29.8% equity interest in Shenyang Jinshan (600396 CH) and 25.78% in Qianyuan Power (002038 CH) also engage in business that may compete with the group assets. The priority of getting resources from the parent group may be lowered given the large asset base owned by the parent group.

- **Geographical concentration risk:** All of the group's hydropower plants are located in Fujian and therefore the profitability of the segment is highly dependent on the precipitation in Fujian. But the concentration risks are partly diversified by the operation of wind power and coal-fired power plants.

- **Customer concentration risk:** Instead of selling electricity directly to industrial or residential end users, the group sells most of its electricity to local grid companies. The group's electricity sales to local grid companies accounted for 98.6% and 97.3% of the group's total revenue in 2010 and 2011. Any significant non-purchase, non-payment, non-compliance, insolvency or liquidation of the group's grid company customers could affect the group's financial condition.

- **Grid connection risk:** Change in wind resources and a slower than expected grid network development will have a negative impact on the utilization hours of the wind power and the wind power business will be negatively affected.

- **Funding needs:** The wind power, distributed energy and nuclear power businesses are all capital intensive business. With a rapid capacity expansion plan, CAPEX is expected to reach Rmb10.3bn in 2012 and Rmb10.0bn in 2013. The group relied heavily on external financing such as bank borrowings. As at the end of 2011, net debt to equity ratio of the group reached 385%. The high gearing deters its ability to raise funds externally or at low cost. The increase in cost of capital will further reduce its already low ROAA and ROAE. Moreover, potential needs to raise funds from equity issuance will lead to dilution effects.

Profit Forecast

FY ended Dec 31 (Rmbmn)	2009	2010	2011	2012F	2013F
Revenue	7,349.2	8,397.6	7,147.4	8,003.5	9,722.9
Other net income	45.8	236.3	305.9	81.4	50.7
Total	**7,395.0**	**8,634.0**	**7,453.3**	**8,084.8**	**9,773.6**
Cost of fuel	(2,543.9)	(2,856.7)	(1,930.0)	(1,964.7)	(2,662.7)
Cost of substituted electricity	(1,225.1)	(1,048.3)	(1,099.7)	(365.9)	(360.0)
D&A	(978.6)	(1,138.3)	(1,230.8)	(1,584.4)	(1,864.4)
Service concession construction costs	0.0	(193.3)	(43.9)		
Personnel costs	(615.5)	(826.5)	(656.4)	(760.3)	(923.7)
Repairs and maintenance	(147.5)	(226.0)	(163.6)	(200.1)	(243.1)
Administration expenses	(184.4)	(196.9)	(221.6)	(240.1)	(291.7)
Other operating expenses	(208.8)	(249.0)	(190.6)	(184.1)	(223.6)
EBIT (Operating profit)	**1,491.3**	**1,899.0**	**1,916.7**	**2,785.3**	**3,204.4**
Finance income	31.9	30.1	70.9	120.0	120.0
Finance expenses	(945.0)	(984.6)	(1,266.3)	(1,585.9)	(1,795.3)
Net finance expenses	**(913.1)**	**(954.5)**	**(1,195.4)**	**(1,465.9)**	**(1,675.3)**
Share of profits less losses of associates and jointly controlled entity	(12.3)	11.6	13.1		
EBT	**565.9**	**956.1**	**734.4**	**1,319.4**	**1,529.1**
Income tax	(124.0)	(157.9)	(95.8)	(145.1)	(168.2)
MI	(56.7)	(277.0)	(76.9)	(140.9)	(163.3)
Net profit	**385.2**	**521.1**	**561.6**	**1,033.3**	**1,197.6**
Adjusted EBIT	1,445.5	1,662.6	1,610.7	2,703.9	3,153.7
Adjusted EBITDA	2,424.1	2,800.9	2,841.5	4,288.3	5,018.1
Dividends (post-listing)	63.1	92.0	216.0	0.0	0.0
Dividends (pre-listing)	0.0	0.0	0.0	206.7	239.5
No. of issued shares at end of period (mn)	6,000	6,000	6,000	7,623	7,623
H-shares (mn shares)	-	-	-	1,785	1,785
Domestic shares (mn shares)	-	-	-	5,838	5,838
Per share value (Rmb)					
Pro-forma EPS	-	-	-	0.1356	0.1571
NBV (Rmb/share)	-	-	-	1.332	1.462
DPS (post-listing)	-	-	-	0.0271	0.0314
Net debt per share	-	-	-	4.5022	5.4495

F: ABCI Securities estimates

Source: The group (for historical figures only), ABCI Securities estimates

Balance Sheet Forecast

As of Dec 31 (Rmbmn)	2009	2010	2011	2012F	2013F
PPE	26,933.2	35,967.2	38,307.8	47,041.4	55,194.9
Investment properties	0.0	20.9	20.1	19.2	18.4
Lease prepayments	275.2	328.8	512.1	503.7	495.2
Intangible assets	102.3	610.0	700.3	691.8	683.2
Others	2,031.2	3,361.8	4,694.4	4,694.4	4,694.4
Non-current assets	**29,342.0**	**40,288.8**	**44,234.8**	**52,950.5**	**61,086.1**
Inventories	243.4	216.5	268.4	216.1	440.5
Trade debtors and bills receivable	1,056.9	1,380.5	1,893.3	1,176.5	2,552.8
Prepayments and other current assets	609.1	995.3	1,598.9	1,598.9	1,598.9
Other current assets	2.1	76.5	80.9	80.9	80.9
Restricted deposits	131.3	58.7	134.8	134.8	134.8
Cash and cash equivalents	1,522.8	2,694.7	1,488.5	923.6	701.5
Current assets	**3,565.6**	**5,422.2**	**5,464.9**	**4,130.8**	**5,509.5**
Borrowings	7,014.9	6,996.5	8,572.8	5,286.3	6,336.3
Obligations under finance leases	192.0	43.8	219.8	219.8	219.8
Trade creditors and bills payable	768.7	1,377.5	974.9	1,068.3	1,250.5
Other payables	3,910.1	6,164.0	7,946.7	7,402.5	8,580.3
Other current liabilities	**47.3**	**135.7**	**27.4**	**27.4**	**27.4**
Current liabilities	**11,933.0**	**14,717.5**	**17,741.7**	**14,004.4**	**16,414.4**
Bank and other borrowings-due after one year	14,411.4	21,707.4	21,669.5	29,956.0	35,906.0
Deferred tax liabilities	610.9	262.8	444.5	444.5	444.5
Other non-current liabilities	401.5	553.6	734.3	734.3	734.3
Non-current liabilities	**15,423.9**	**22,523.8**	**22,848.2**	**31,134.7**	**37,084.7**
Total liabilities	**32,907.6**	**45,711.0**	**49,699.7**	**57,081.4**	**66,595.6**
Net assets	**5,550.7**	**8,469.8**	**9,109.9**	**11,942.3**	**13,096.5**
Capital and reserves					
Share capital	2,200.0	5,088.9	6,000.0	7,874.2	7,874.2
Reserves	2,074.5	1,751.3	1,462.2	2,279.5	3,270.4
Equity attributable to owners of the Company	**4,274.5**	**6,840.2**	**7,462.2**	**10,153.7**	**11,144.6**
MI	1,276.2	1,629.6	1,647.7	1,788.6	1,951.9
Total Equity	**5,550.7**	**8,469.8**	**9,109.9**	**11,942.3**	**13,096.5**

F: ABCI Securities estimates

Source: The group (for historical figures only), ABCI Securities estimates

Cash Flow Forecast

FY ended Dec 31 (Rmbmn)	2009	2010	2011F	2012F	2013F
EBITDA	**2,469.9**	**3,037.2**	**3,147.4**	**4,369.7**	**5,068.8**
Change in inventories	(46.8)	31.1	(53.1)	52.3	(224.4)
Change in trade and bill receivables	(236.2)	(243.8)	(551.0)	716.9	(1,376.4)
Change in prepayments and other current assets	(329.7)	(44.1)	(581.7)	0.0	0.0
Change in other payables	760.3	455.5	(164.4)	(450.8)	1,360.0
Others	56.0	(28.0)	(125.4)	0.0	0.0
Cash (used in)/generated from operations	**2,673.5**	**3,207.9**	**1,671.8**	**4,688.1**	**4,828.0**
Income tax paid	(101.5)	(193.3)	(189.1)	(145.1)	(168.2)
CF from operating activities	**2,572.0**	**3,014.7**	**1,482.7**	**4,542.9**	**4,659.8**
CAPEX	(6,815.5)	(6,902.3)	(5,715.5)	(10,300.0)	(10,000.0)
Others	(1,016.7)	(1,042.5)	(659.8)	120.0	120.0
Cash flows from investing activities	**(7,832.2)**	**(7,944.7)**	**(6,375.3)**	**(10,180.0)**	**(9,880.0)**
Net borrowing	5,683.6	5,904.1	4,880.0	5,000.0	7,000.0
Net proceeds from issue of shares	0.0	0.0	0.0	1,874.2	0.0
Dividends paid	(64.3)	(96.1)	(181.9)	(216.0)	(206.7)
Interest paid	**(1,102.6)**	**(1,351.6)**	**(1,755.9)**	**(1,585.9)**	**(1,795.3)**
Others	1,448.0	1,643.2	751.3	0.0	0.0
Cash flows from financing activities	**5,964.7**	**6,099.6**	**3,693.6**	**5,072.3**	**4,998.0**
Net (decrease)/increase in cash and cash equivalents	704.4	1,169.5	(1,199.0)	(564.8)	(222.1)
Cash and cash equivalents at beg of yr	818.4	1,522.8	2,694.7	1,488.5	923.6
Effect of foreign exchange rates, net	0.0	2.3	(7.2)	(0.1)	0.0
Cash and cash equivalents at end of year/period	**1,522.8**	**2,694.7**	**1,488.5**	**923.6**	**701.5**

F: ABCI Securities estimates

Source: The group (for historical figures only), ABCI Securities estimates

Financial Ratio Analysis

FY ended Dec 31	2009	2010	2011	2012F	2013F
Profitability ratio					
Adjusted EBITDA margin	33.0%	33.4%	39.8%	53.6%	51.6%
Adjusted EBIT margin	19.7%	19.8%	22.5%	33.8%	32.4%
Pre-tax profit margin	7.1%	8.6%	6.0%	15.5%	15.2%
Net profit margin	5.2%	6.2%	7.9%	12.9%	12.3%
ROAA	-	1.33%	1.18%	1.94%	1.94%
ROAE	-	9.38%	7.85%	11.73%	11.25%
Cost ratio					
Gas consumption/revenue	-34.6%	-34.0%	-27.0%	-24.5%	-27.4%
D&A/revenue	-16.7%	-12.5%	-15.4%	-4.6%	-3.7%
Personnel costs/revenue	-8.4%	-9.8%	-9.2%	-9.5%	-9.5%
Repairs and maintenance/revenue	-2.0%	-2.7%	-2.3%	-2.5%	-2.5%
Admin expenses/ revenue	-2.5%	-2.3%	-3.1%	-3.0%	-3.0%
Other expenses/revenue	-2.8%	-3.0%	-2.7%	-2.3%	-2.3%
Effective tax rate	-21.9%	-16.5%	-13.0%	-11.0%	-11.0%
Leverage					
Current ratio	0.30	0.37	0.31	0.29	0.34
Quick ratio	0.28	0.35	0.29	0.28	0.31
Total equity/total assets	13.0%	15.0%	15.0%	17.8%	16.7%
Net debt/total equity	465.6%	380.2%	385.3%	338.0%	372.7%
Working capital cycle					
Inventory turnover days		29.4	45.8	45.0	45.0
Bills receivables turnover days		52.97	83.59	70.0	70.0
Payables turnover days		100.3	141.7	160.0	140.0

ROAA= Net profit to the Group/average total assets

ROAE= Net profit to the equity owners of the company/average attributable equity to the owners of the company

EBITDA=EBIT + Depreciation & amortization

EBIT= Earnings before interest income, other income and expenses, finance cost and tax

F: ABCI Securities estimates

Source: The group (for historical figures only), ABCI Securities estimates

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