7 March 2011 (No. of pages: 92)

China City Gas Sector

Utilities: China

Neutral

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Initiation: short-term gain versus long-term pain

Summary

- We initiate coverage of the China City Gas Sector with a **Neutral** rating. This contrasts with other analysts' positive views. While the market focus on the gas-supply boost (we forecast a 19% CAGR from 2010-15) may be a near-term share-price catalyst, we believe there are sector-wide risks that are likely to materialise over the next few years and dampen the sector's appeal.

- Since the natural-gas cost hike in June 2010, the sector's PER has been derated, which we believe has factored in the rising risks in cost pass-through, following its substantial outperformance against the HSCEI since its October 2008 low. However, along with profit-margin risks, we see four other risks that we believe could reduce the sector's attractiveness over the coming years. We have assessed qualitatively the companies' exposure to the risks of cost pass-through, supply competition, connection-fee reductions, the weather impact, and earnings downside for the non-gas businesses.

- Despite our expectation of rising risks over the long term, we believe companies with strong earnings visibility and shareholder returns will outperform the sector over the short term. Our top pick is ENN Energy (ENN), given its track record of positive earnings surprises and expansion into new, lucrative industries. Our least-favoured stock is China Gas (CHG), given the overhang from management changes and the earnings volatility of its liquefied petroleum gas (LPG) business. We initiate coverage with a **2** (*Outperform*) rating for China Resources Gas (CRG) and **3** (*Hold*) ratings for Beijing Enterprises (BJE) and China Suntien Green (CSG).

China City Gas Sector: valuation summary

Company name	Bloomberg code	Share price (local curr.)	Rating	Target price (local curr.)	+/- (%)	Year end	PER (x) 2009	PER (x) 2010E	PER (x) 2011E	PER (x) 2012E	EV/EBITDA (x) 2009	EV/EBITDA (x) 2010E	EV/EBITDA (x) 2011E	EV/EBITDA (x) 2012E	Dividend yield (%) 2009	Dividend yield (%) 2010E	Dividend yield (%) 2011E	Dividend yield (%) 2012E
ENN Energy	2688 HK	24.15	1	30.00	24.2	Dec	26.3	19.8	15.6	13.3	12.1	10.6	9.1	8.0	1.0	1.3	1.9	2.6
China Resources Gas	1193 HK	10.02	2	11.50	14.8	Dec	32.3	26.7	19.5	15.2	19.2	12.8	9.6	7.3	0.4	0.7	1.1	1.6
China Suntien Green Energy	956 HK	2.00	3	2.20	10.0	Dec	20.3	14.0	13.1	10.4	12.6	13.7	10.3	8.6	5.0	0.7	0.8	1.0
Beijing Enterprises	392 HK	44.20	3	46.00	4.1	Dec	20.9	18.4	15.2	12.5	11.7	10.8	9.5	8.0	1.5	1.7	2.0	2.5
China Gas	384 HK	2.79	4	2.50	(10.4)	Mar	89.7	10.7	14.7	13.3	17.8	10.4	9.3	8.6	0.5	0.6	0.7	0.8

Source: Company, Daiwa forecasts Note: share prices as at the close on 3 March 2011

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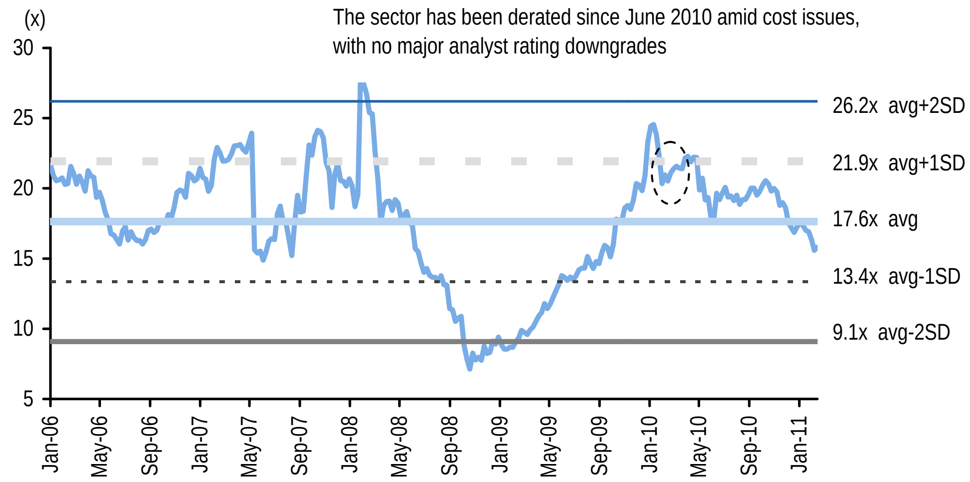
The three most important charts in this report ...

The sector has been derated recently on cost concerns following a strong outperformance since the lows of October 2008

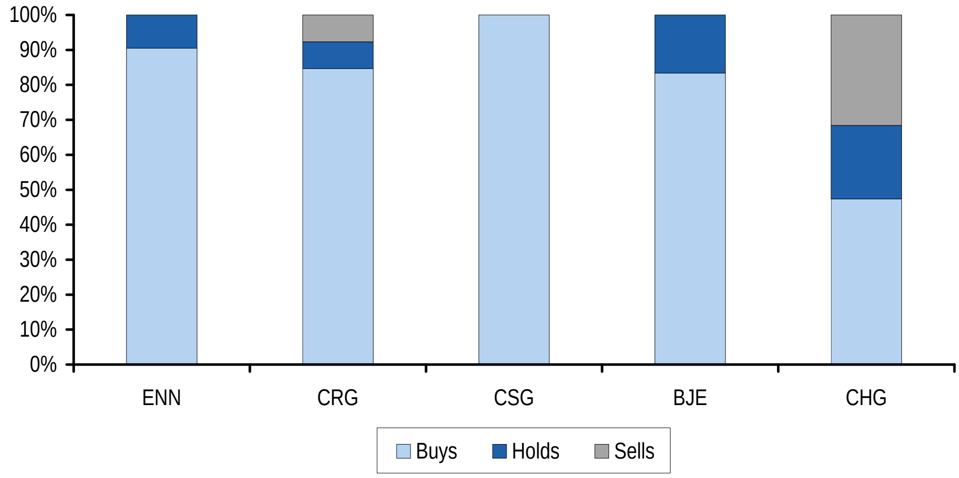
China City Gas Sector: 12-month-forward PER



Source: Bloomberg, Daiwa forecasts

However, most analysts remain bullish on the sector

China City Gas Sector: analysts' company ratings



Source: Bloomberg

ENN stands out in our risk assessments

China City Gas Sector: our qualitative ratings on risks and returns

Risk	ENN	CRG	BJE	CSG	CHG
Benefit from new gas source	4	3	5	4	2
Margin squeeze from pass-through difficulty	4	2	5	2	4
Connection-fee reductions	3	4	5	4	2
Weather impact	3	4	2	4	1
Non-gas business	4	5	2	3	1
Risk score	18	18	19	17	10
ROE improvement	5	4	2	2	2
Total score	23	22	21	19	12

Source: Daiwa
Note: On a scale of 1 to 5 where 1 is the highest risk and 5 the lowest

Executive summary

Consensus remains optimistic despite sector's recent derating

The sector's PER has been derated by 12% since June 2010, but analysts remain bullish

The China City Gas Sector was once perceived by investors as one with high-revenue growth and limited profit-margin risks. Fuelled by market expectations of a gas-supply boost, the sector outperformed the HSCEI by 107% from its low in October 2008 to May 2010. However, the sector has been derated over the past nine months, with its 12-month-forward PER declining from 18x in June 2010 to 16x currently, due to we what believe are changes in the market's perception of the risks associated with further natural-gas cost increases. However, there have not been major downward earnings-forecast revisions to the Bloomberg consensus and stock ratings since June 2010, which suggests to us a biased bullish consensus.

We see more risks over the coming years

In addition to profit-margin concerns, we see four other risks that are likely to matter

We have a **Neutral** rating for the sector, compared with the positive consensus view. We have identified five major risks that could reduce the sector's risk-reward profile. They are: competition for gas sources, a gross-margin squeeze from rising costs, connection-fee reductions, the weather impact, and non-gas business risks. Based on our qualitative assessments, BJE appears to have the greatest resilience to the different risk factors, and CHG the lowest. ENN and CRG rank only marginally below BJE.

Risk 1: short-term gas-supply boost unlikely to benefit all

A rising tide does not lift all boats

We see 2011 as a key year for gas-supply increases given the scheduled ramp-up of several gas sources, but we only expect certain geographic regions to benefit. We believe that BJE, ENN and CSG are best-positioned to take advantage of such increases given their geographic locations.

Risk 2: cost pass-through likely to be increasingly difficult for households

The cost-plus model is becoming difficult

The difficulties encountered by a number of provinces in passing on the June 2010 costs to households reflect the increasing risks of the cost-plus model. We believe this could continue with China raising gas prices gradually, and that the companies with high sales contributions to households will be affected the most.

Risk 3: connection fees may be on a downward trend

Connection fees are likely to be reduced or amortised

We believe that the trend of more provinces considering reductions in or the amortisation of connection fees will continue, and that companies with high levels of connection-fee revenue or low profit-margin buffers may be the most affected.

Risk 4: weather impact can be hazardous

Weather can affect C&I users

Bad weather can also have an effect on gas supplies to commercial and industrial (C&I) users, which are a lower priority than households. We therefore prefer those companies with low sales exposure to C&I users.

Risk 5: don't ignore non-gas risks

We see various risks outside gas distribution

For non-gas businesses, we like ENN energy-saving services the most, as we expect this area to receive huge policy support over the next five years. CHG's LPG business has the highest risks, in our view.

ENN is our top pick

ENN is our only* Buy *as a well-positioned low-carbon pioneer

Our risk assessments are balanced with earnings visibility and shareholder returns. Although BJE scores the highest on risk resilience, its low ROE and under-utilised balance sheet makes it unattractive, in our view. We initiate coverage of ENN with a **1** (*Buy*) rating given its track record of earnings surprises and expansion into new, lucrative industries, and the highest current ROE in the sector. Our least-favoured stock is CHG given the overhang following management changes and earnings volatility in its LPG business. We initiate coverage with a **2** (*Outperform*) rating for CRG and **3** (*Hold*) ratings for Beijing BJE and CSG.

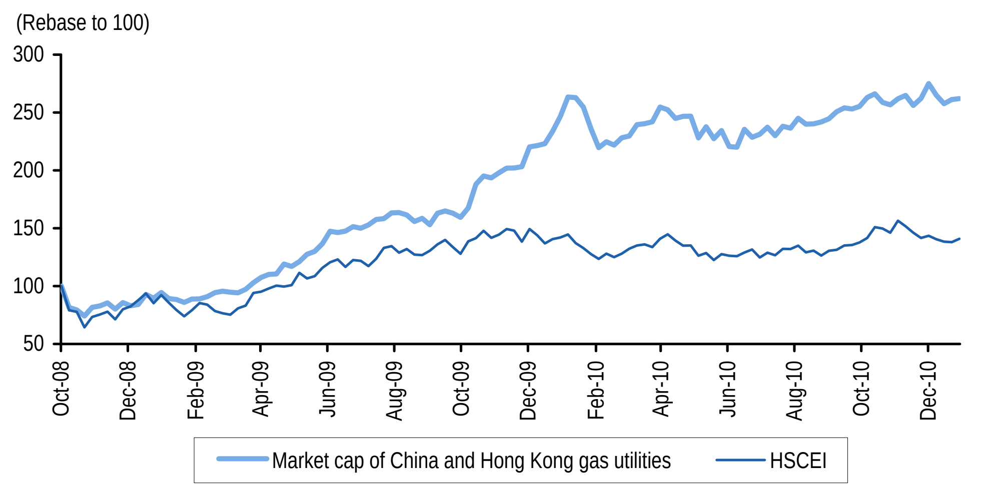
Huge outperformance and recent derating

China's boost in gas sources has been a driver of the sector's share-price performance

Since the low in October 2008, the City Gas Sector has outperformed the HSCEI by 107% as at 31 May 2010. We believe the substantial improvement in market sentiment toward the sector has been driven by China's supportive policy measures to boost gas sources in the country, where there have been gas shortages has since 2008.

The share prices of City Gas Sector companies outperformed the HSCEI by 107% between October 2008 and June 2010

China City Gas Sector: market cap relative to the HSCEI

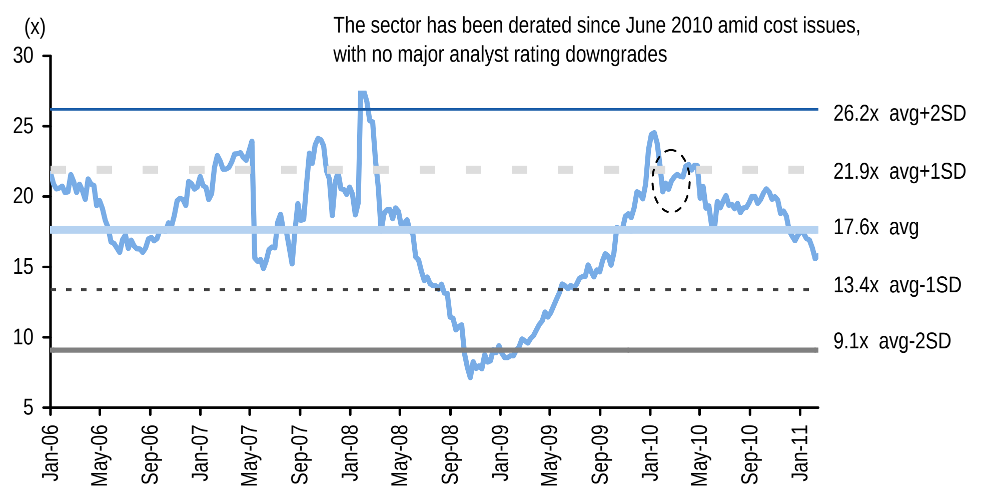


Source: Bloomberg
Note: The sector market cap includes ENN, BJE, CHG, CRG, Towngas China (Not rated) and Kunlun Energy (Not rated)

However, the valuation of the sector has been derated, with the 12-month forward PER falling from 18x in June 2010 to 16x as at the end of February 2011. We believe the key cause for this was the increase in the natural-gas price on 1 June 2010, which lead to market concerns about the cost pass-through risks, especially for residential customers.

However, the sector has derated over the past nine months due to concerns about the companies' ability to pass on costs

China City Gas Sector: forward PER

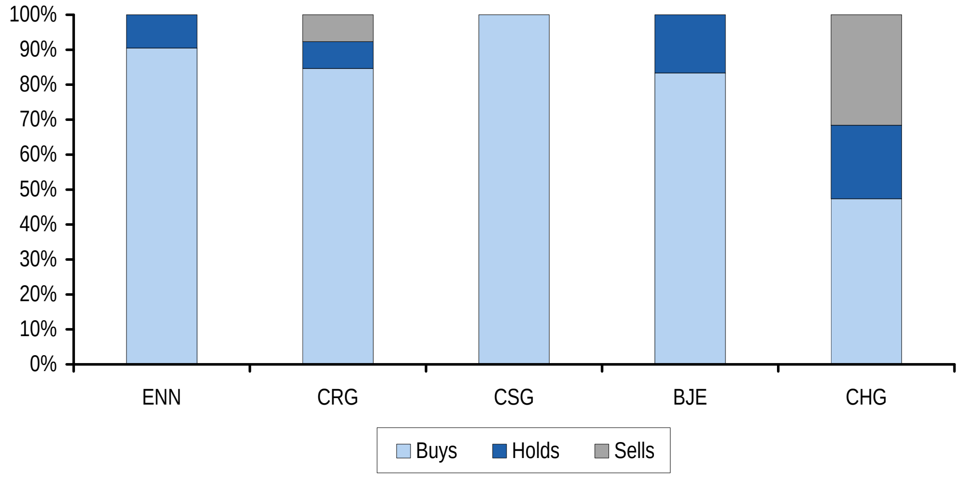


Source: Bloomberg, Daiwa forecasts

Despite rising market concerns about the impact on gross margins, there have not been any major ratings downgrades and analysts remain bullish on the sector. Based on the Bloomberg ratings (excluding those of Daiwa), 80% of the ratings for ENN, BJE, CHG and CRG are 'buys', while for CHG the rate is 47%.

Other analysts remain bullish in the sector

China City Gas Sector: analysts' company ratings



Source: Bloomberg

What happened in June 2010?

A number of provinces failed to pass on the cost increases to residential users

On 1 June 2010, the National Development and Reform Commission (NDRC) raised the well-head gas price (upstream price) by 23%, the first major increase in years, to address the discrepancy between domestic and international prices. According to the previous pricing formula, C&I prices were priced based on over-the-counter deals, whereas residential price changes required a public hearing, and therefore city gas distributors have not faced a notable margin squeeze over the past decade. However, we have found that a large number of provinces have not been able to pass on the cost increases to residential users, possibly due to reasons such as inflation pressure and affordability. We believe that the emergence of this risk led to the sector derating over the past nine months.

Other unexpected risks in the sector

We see four other risks

In this report, we assess four other major risks that could similarly affect the attractiveness of the sector. First, although investors have been attracted by the volume-growth story, supported by the expansion of the gas supply, we believe that the near-term supply increase will only benefit certain regions, and that certain companies will continue to be unable to meet their volume-growth targets due to supply shortages. Second, connection fees have been on a downward trend, as a result of both fee reductions in certain provinces and companies moving into regions with lower fees. This could lead to earnings downside for those companies with a high level of exposure to such income. A change in accounting treatment should not affect cash flow, in our view. Third, the recurring impact of bad weather can result in supply bottlenecks. This can affect C&I and compressed natural gas (CNG) users, as they have a lower supply priority than residential users, which then has a negative impact on companies with high exposure to C&I and CNG sales. Last, not all companies run a pure-gas model, and some of their non-gas businesses face substantial risks. We compare the attractiveness of the other areas in which the companies we cover are engaged: energy-saving solutions, wind power, water, breweries, toll-roads, and LPG distribution.

Three companies stand out in our qualitative assessment of risks

Our risk assessments are balanced with earnings visibility and shareholder returns. Although BJE scores the highest in terms of risk resilience, the company's low ROE and under-utilised balance sheet make it unattractive, in our view. We like ENN given its track record of positive earnings surprises and expansion into new, lucrative industries, and the highest current ROE in the sector. Our least-favoured stock is CHG given the overhang following the management changes and earnings volatility in its LPG business.

China City Gas Sector: our qualitative rating on companies' risks and returns

Risk	ENN	CRG	BJE	CSG	CHG
Benefit from new gas source	4	3	5	4	2
Margin squeeze from pass-through difficulty	4	2	5	2	4
Connection fee reduction	3	4	5	4	2
Weather impact	3	4	2	4	1
Non-gas business	4	5	2	3	1
Risk score	18	18	19	17	10
ROE improvement	5	4	2	2	2
Total score	23	22	21	19	12

Source: Daiwa
Note: On a scale of 1 to 5 where 1 is the highest risk and 5 the lowest

Upside and downside risks to our investment case

We expect many of the risks we have identified to materialise over the next 1-2 years, but timing is also a major risk

Our investment thesis is built on declining industry returns amid rising policy-direction and non-policy risks. However, as many of these risks have yet to materialise, the timing of such risks is difficult to predict. Although we believe that most of these should be reflected in the companies' share-price performances over the coming 1-2 years, there may be a delay or it could happen earlier than we expect.

Despite the good visibility on the supply ramp-up in 2011, unexpected commencement delays for some pipelines or LNG terminals could lead to the market being disappointed on volume growth for the city-gas players.

On the cost side, if China allows the cost-plus model to continue fully for a few more years, even for residential users, earnings-growth momentum is likely to continue, driven by the boost in volume. However, if incremental costs are no longer allowed to be passed on to residential users nationwide, the earnings of many of the companies could face downside risks.

Similar arguments apply to the trend in connection fees and weather-related effects. We provide a detailed analysis of these and the related earnings sensitivity in the following sections.

The non-gas businesses are company-specific. ENN's move into energy-saving services will depend on factors such as customer commitment, the scale of the services, government subsidies, and profitability of such products. As there is limited guidance on the size of the business over the next 1-2 years, there could be upside or downside surprises to this business. CHG has expanded into the LPG market but its limited track record there means it is unlikely to support a rise in the gross margin, while unforeseen cost factors could provide upside or downside surprises to our forecasts for the margin. BJE's fast-expanding water business may face construction delays or lower-than-expected returns, while its brewery business may see upside or downside risks to our forecasts for the gross margin as commodity prices remain volatile. We are also concerned about the capacity addition in CSG's wind power business, which may see upside or downside to management's capacity guidance.

ENN and CRG's valuations appear appealing

Only ENN and CRG offer reasonably attractive ROEs, in our opinion

As utilities companies, we use ROE as our major valuation benchmark, and prefer those business models that support a rising ROE. Based on our forecasts, ENN's ROE will reach 21% by 2012, with that for CRG reaching 15%. BJE, while those for CSG and CHG will only be about 10-11% by 2012, which we regard as unattractive.

Gas companies: valuation comparison

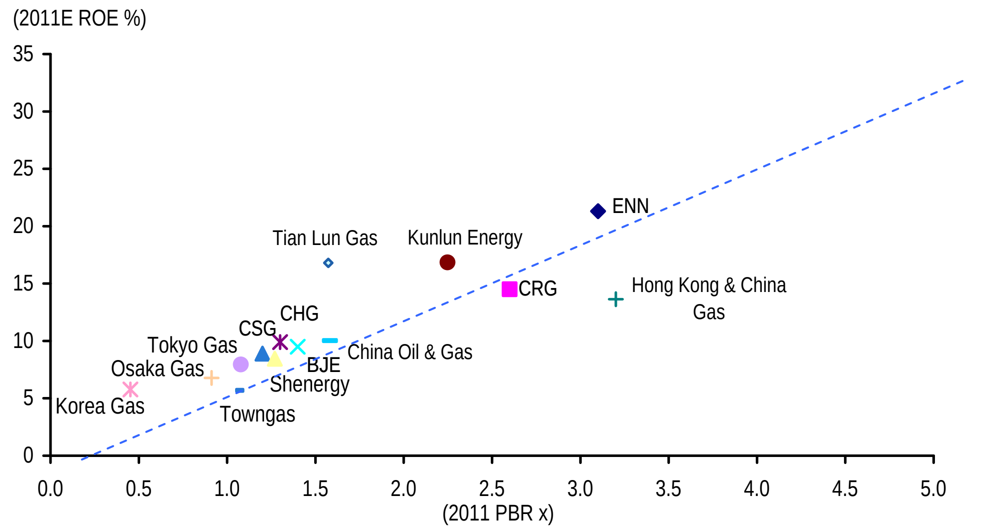
Company name	Bloomberg code	Daiwa rating	Share price (local curr.)	Market cap (US$m)	PER (x) 2010E	PER (x) 2011E	PER (x) 2012E	PBR (x) 2010E	PBR (x) 2011E	PBR (x) 2012E	EV/EBITDA (x) 2010E	EV/EBITDA (x) 2011E	EV/EBITDA (x) 2012E	ROE (%) 2010E	ROE (%) 2011E	ROE (%) 2012E	Div. yield (%) 2010E	Div. yield (%) 2011E	Div. yield (%) 2012E	EPS CAGR (%) 10-12E
China city-gas distributors																				
ENN Energy	2688 HK	1	24.2	3,251	19.8	15.6	13.3	3.6	3.1	2.6	8.9	7.8	6.8	19.4	21.3	21.3	1.3	1.9	1.9	22.1
CR Gas	1193 HK	2	10.0	2,352	26.7	19.5	15.2	3.0	2.6	2.2	12.8	9.6	7.3	19.4	14.5	15.9	0.7	1.1	1.6	32.8
Suntien Green Energy	956 HK	3	2.0	830	14.0	13.1	10.4	1.3	1.2	1.1	13.7	10.3	8.6	9.8	8.9	10.2	0.7	0.8	1.0	15.7
Beijing Enterprises	392 HK	3	44.2	6,445	18.4	15.2	12.5	1.5	1.4	1.3	10.8	9.5	8.0	8.4	9.5	10.7	1.7	2.0	2.5	21.1
China Gas	384 HK	3	2.8	1,568	14.7	13.3	11.1	1.2	1.3	1.1	9.5	8.8	7.7	11.3	9.9	10.9	0.7	0.8	0.9	15.2
Simple average				2,889	18.0	15.8	13.0	2.4	1.9	1.7	11.5	9.4	7.9	16.2	13.1	13.7	1.0	1.3	1.5	22.6
Weighted average					18.8	15.9	13.1	2.3	2.0	1.7	10.9	9.2	7.7	14.6	13.1	13.9	1.3	1.6	1.9	21.2
Hong Kong & China city-gas distributors																				
Kunlun Energy*	135 HK	NR	11.7	7,456	24.9	17.1	14.0	3.7	2.2	2.0	19.7	9.5	6.9	15.5	16.8	17.3	1.0	1.4	1.7	33.2
Hong Kong & China Gas*	3 HK	NR	17.8	16,354	25.8	23.7	22.0	3.4	3.2	3.0	23.9	21.7	20.0	13.4	13.6	13.7	2.0	2.1	2.3	8.2
Towngas*	1083 HK	NR	3.8	1,206	22.3	18.4	15.4	1.1	1.1	1.0	22.0	17.3	14.6	4.9	5.7	6.6	0.6	0.9	1.3	20.6
China Oil & Gas*	603 HK	NR	0.8	495	24.4	15.9	10.5	1.7	1.6	1.4	7.2	4.8	3.3	7.9	10.0	13.9	0.0	0.1	0.3	52.1
Tian Lun Gas*	1600 HK	NR	1.4	146	n.a.	9.7	7.3	n.a.	1.6	1.4	8.7	5.7	4.1	20.0	16.8	20.4	n.a.	n.a.	n.a.	n.a.
Shenergy*	600642 CH	NR	7.8	3,730	15.8	14.7	13.4	1.3	1.3	1.2	14.2	14.7	11.2	8.2	8.5	9.4	2.2	2.3	2.6	8.7
Simple average				4,898	22.6	16.6	13.8	2.3	1.8	1.7	15.9	12.3	10.0	11.6	11.9	13.5	1.1	1.4	1.6	24.6
Weighted average					24.0	20.5	18.4	3.1	2.6	2.4	21.2	17.1	15.0	12.9	13.4	13.8	1.7	1.8	2.1	15.8
City-gas distributors in the region																				
PGAS*	PGAS IJ	NR	3550.0	9,529	12.9	11.4	10.2	5.6	4.4	3.7	8.4	7.7	7.0	49.0	43.6	39.3	4.2	4.9	4.9	12.6
Korea Gas*	036460 KS	NR	36750.0	2,550	9.6	8.5	10.0	0.5	0.5	n.a.	10.2	9.7	n.a.	5.6	5.8	n.a.	2.8	3.1	3.9	(2.0)
Tokyo Gas*	9531 JP	2	362.0	11,707	13.7	14.0	12.2	1.1	1.1	1.0	5.5	5.7	5.5	8.6	8.0	8.4	2.5	2.5	2.6	6.0
Osaka Gas*	9532 JP	2	312.0	8,113	14.6	13.6	12.0	1.0	0.9	0.9	6.2	6.1	5.9	6.6	6.8	7.4	2.5	2.5	2.6	10.4
Simple average				7,975	12.7	11.9	11.1	2.0	1.7	1.9	7.6	7.3	6.1	17.5	16.0	18.4	3.0	3.2	3.5	6.7
Weighted average					13.4	12.7	11.4	2.4	2.0	1.7	6.9	6.7	5.6	19.9	18.1	16.7	3.0	3.3	3.4	8.4
China upstream oil and gas player																				
PetroChina	857 HK	2	10.8	315,917	12.4	11.0	10.0	1.8	1.6	1.5	7.6	6.7	6.1	14.9	15.7	15.8	3.6	4.1	4.5	11.7
Sinopec	386 HK	2	7.8	107,999	7.8	7.3	6.7	1.3	1.2	1.0	5.9	5.4	5.1	17.9	16.8	15.9	3.3	3.7	3.7	7.8
CNOOC	883 HK	2	17.6	100,792	12.6	10.9	10.3	3.2	2.7	2.3	6.7	5.7	5.3	27.5	26.9	23.9	2.9	3.4	3.5	10.7
Simple average				174,903	11.0	9.7	9.0	2.1	1.8	1.6	6.7	5.9	5.5	20.1	19.8	18.5	3.3	3.7	3.9	10.1
Weighted average					11.5	10.2	9.4	2.0	1.7	1.6	7.1	6.2	5.7	17.9	18.1	17.4	3.4	3.8	4.1	10.7

Source: Daiwa forecasts, *Bloomberg, updated as of March 3, 2011
Note: China Gas' financial-year end is 31 March, and the data presented is for FY11, FY12 and FY13 for the company

Comparing ROEs with the 12-month forward PBRs, ENN appears to be attractive, based on our forecasts. CRG looks expensive, considering the market is partially pricing in the forthcoming asset injections from its parent company.

ENN is most attractive in terms of ROE and PBR

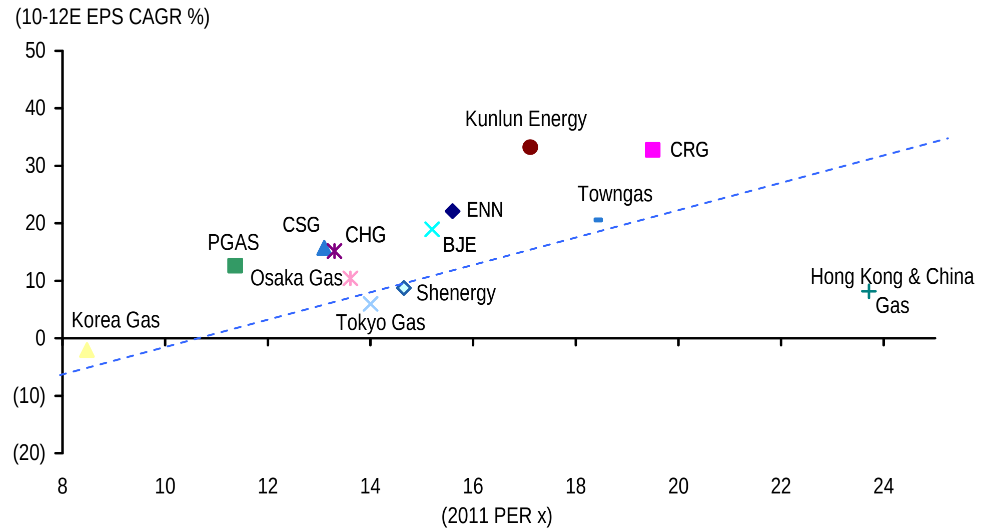
ROE-PBR matrix



Source: Bloomberg, Daiwa forecasts

Both ENN and CRG perform well in an EPS-PER matrix

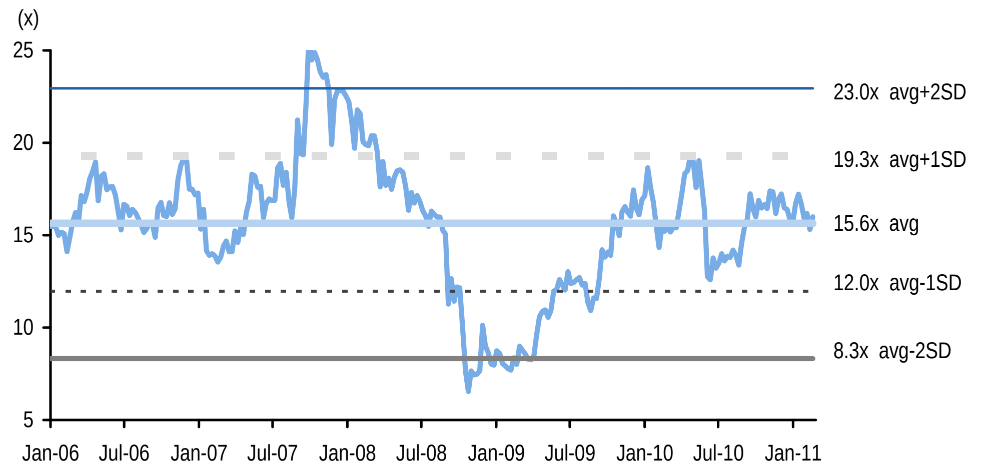
EPS-PER matrix



Source: Bloomberg, Daiwa forecasts

ENN is trading in line with the five-year average of its forward PER

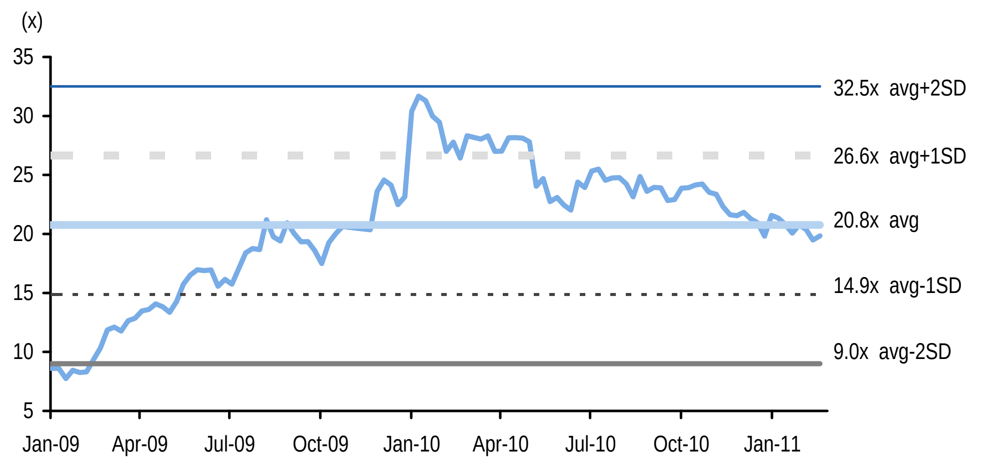
ENN: forward PER



Source: Bloomberg, Daiwa forecasts

CRG is trading in line with its two-year-average forward PER (it had a different business model before 2009)

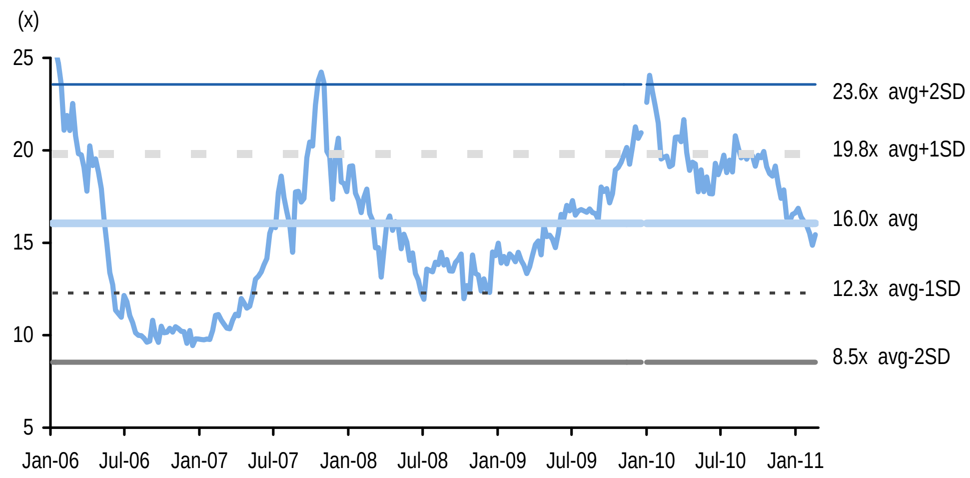
CRG: forward PER



Source: Bloomberg, Daiwa forecasts

BJE is trading slightly below its five-year-average forward PER, given slowing earnings growth

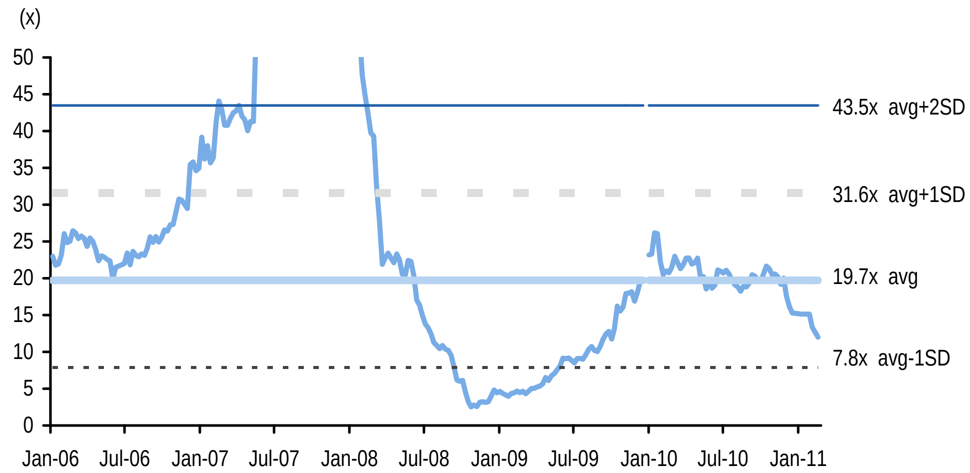
BJE: forward PER



Source: Bloomberg, Daiwa forecasts

CHG is trading substantially below its five-year-average forward PER following the recent arrests of senior management members

CHG: forward PER



Source: Bloomberg, Daiwa forecasts

Summary of our earning forecasts

Our net-profit forecasts are 3-9% above those of the Bloomberg consensus for ENN from 2011-12, as we have factored in higher connection fees than the consensus and the new earnings-growth driver of the energy-saving business, which management expects to account for 10% of revenue over the medium term. Our 2011-12 net-profit forecasts for CRG do not include potential asset injections and are essentially in line with the consensus forecast. Our net-profit forecast for CSG is below that of the consensus as we have factored in 450MW of new wind-capacity additions a year starting form 2011 compared with the management's guidance of 500MW a year. Our 2011-12 net-profit forecasts for CHG is based on no year-on-year improvement in the LPG gross margin.

Daiwa net-profit forecasts vs. consensus

Company	Bloomberg code	Daiwa rating	Consensus % of 'buy' ratings	Daiwa net-profit forecast (local currency m)			Consensus net-profit forecast (local currency m)			Difference (%)		
				2010E	2011E	2012E	2010E	2011E	2012E	2010E	2011E	2012E
ENN	2688 HK	1	90	1,078	1,372	1,606	1,090	1,343	1,479	(1.1)	2.2	8.6
CRG	1193 HK	2	85	687	942	1,210	693	921	1,224	(0.8)	2.3	(1.1)
CSG	956 HK	3	100	274	397	497	279	433	584	(1.6)	(8.3)	(14.9)
BJE	392 HK	3	83	2,733	3,308	4,009	2,864	3,344	3,780	(4.6)	(1.1)	6.1
CHG	384 HK	4	47	876	735	958	876	740	1,069	0.0	(0.7)	(10.3)

Source: Bloomberg, Daiwa forecasts

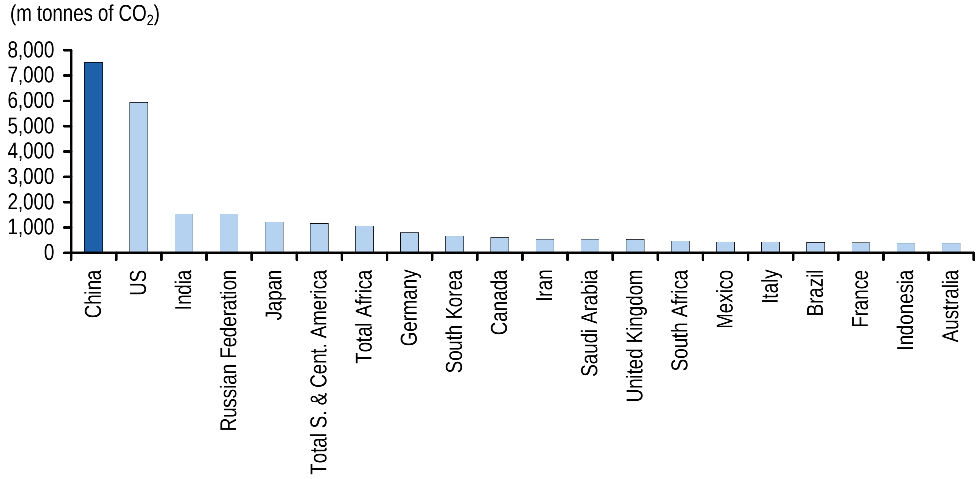
What has driven the sector rally since the 2008 low?

As the world's biggest polluter, China can no longer have an independent energy policy

As the biggest emitter of CO_2 in the world, China's energy strategies can no longer remain independent from the rest of the world. In 2009 alone, the country produced close to 7.5bn tonnes of CO_2, which was substantially greater than the previous biggest emitter, the US. The use of coal is the main problem, as it accounts for more than 70% of total primary energy consumption for 2009.

China has surpassed the US to become the world's No.1 CO_2 emitter

Total CO_2 emissions by country (2009)

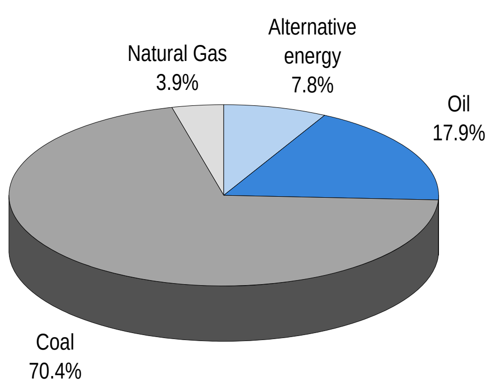


Source: BP Statistics Review of Energy

China's total gas supply could reach 260bn m^3 by 2015, accounting for about 8.3% of the country's primary energy needs

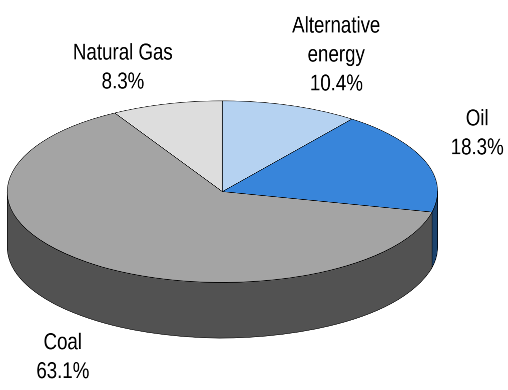
Over the past five years, China's energy policies have become more environmentally aware. Besides aggressive policy targets for alternative energy (hydro power, wind, nuclear, solar, biomass, and others), natural gas is another energy substitute that is supported by the government. Recent public comments by NDRC officials suggested that China was likely to have domestic gas sources of 170bn m^3 and net imports of 90bn m^3 by 2015, implying a total CAGR of 20% from 2009-15. We believe this is consistent with the NDRC's goal of gas accounting for 8.3% of the overall primary energy mix by 2015. Our estimates suggest that China's energy dependence on coal will fall from 70% for 2010 to 66% by 2015. Note that we do not foresee any supply surplus in the medium term given the long-term nature of the demand drivers.

China: primary energy-mix forecast (2010)



Source: Daiwa forecasts

China: primary energy-mix forecast (2015)



Source: Daiwa forecasts

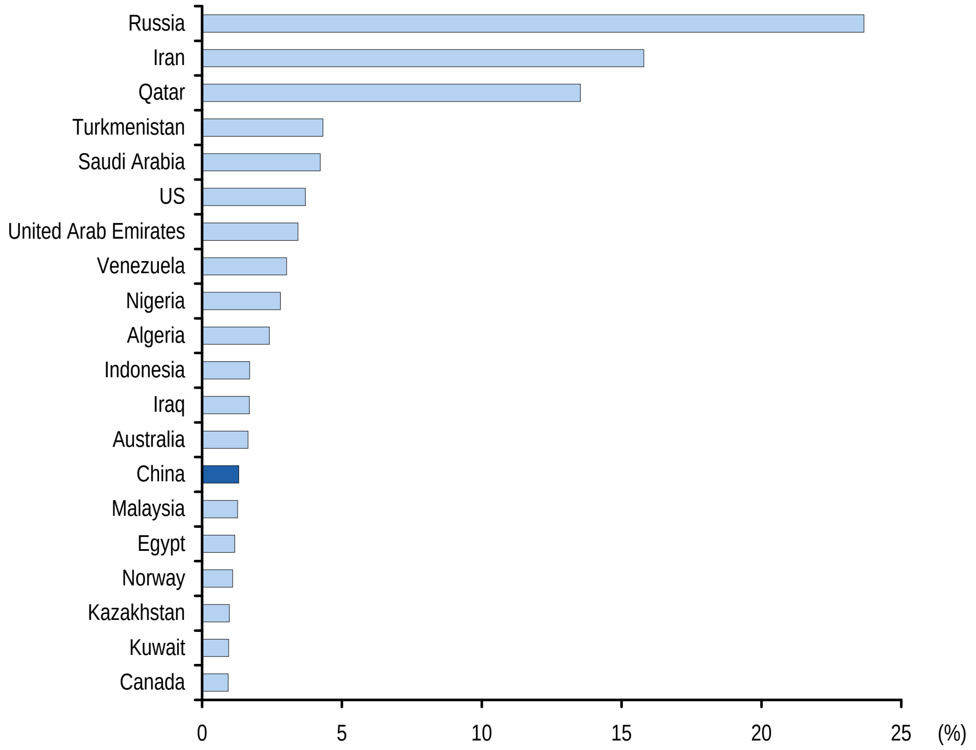
Acceleration in gas-supply growth

Demand has been constrained by domestic supply

With only 1.3% of the world's proven gas reserves in 2009, China's demand has been constrained by domestic production over the past few years. Since 2007, the country has been a net gas importer to satisfy requirements. Net imported volume accounted for 4% of total supply for 2009, compared with 2% for 2007.

China only had 1.3% of the world's proven gas reserves in 2009

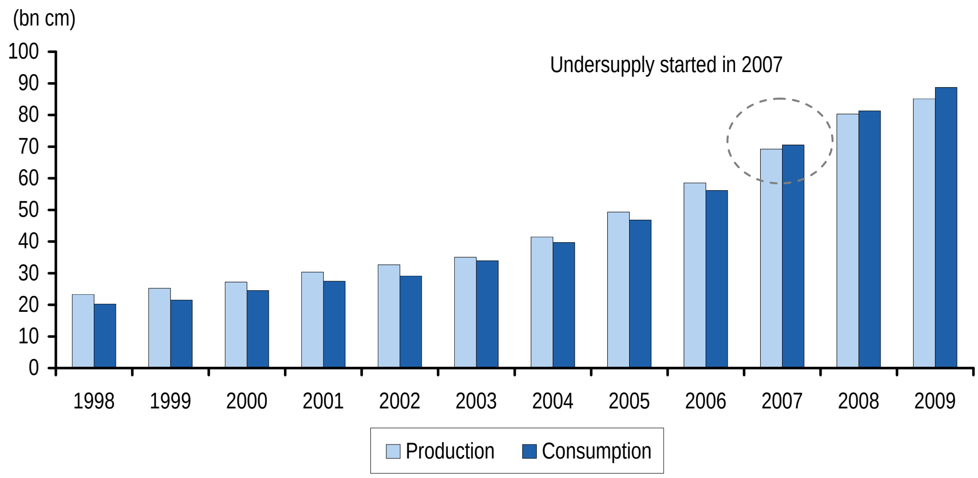
Contribution to total world gas reserves (2009)



Source: CEIC

There has been an undersupply of domestic gas since 2007

China: natural-gas demand and supply (1998-2009)



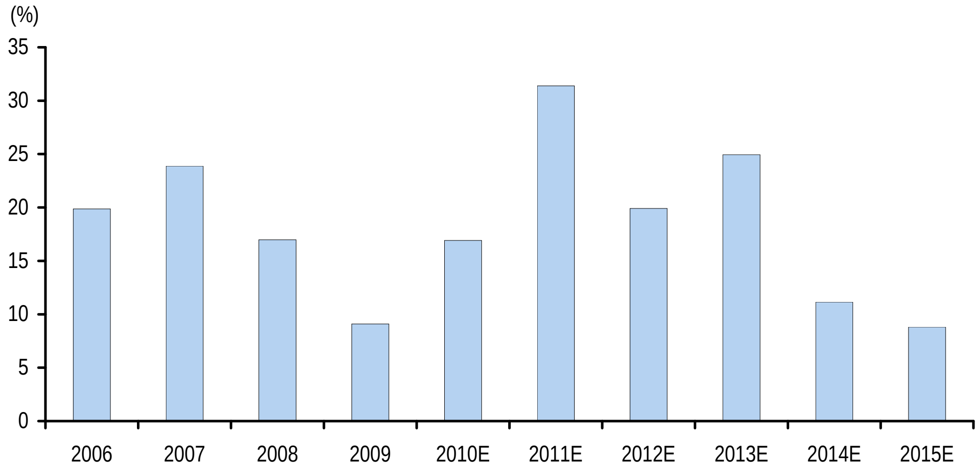
Source: CEIC

We expect an aggressive increase in gas sources over the next few years

However, we believe this will change with a further ramp-up in gas imports. Our oil and gas analyst, Andrew Chan, forecasts China's overall gas-supply capacity to increase by 31% YoY, from 104m^3 for 2010 to 136m^3 for 2011, which is as a result of an additional 10bn m^3 (*West-East Pipeline II*, *Phase II*), the 4bn m^3 expansion of the *Sichuan-Shanghai Pipeline*, 13bn m^3 from three LNG terminals (Fujian, Dalian and Jiangsu), and 6bn m^3 from domestic production. If we assume a half-year contribution from these new gas sources, we estimate total supply growth will be close to 25% YoY for 2011. After 2011, we expect further supply additions, driven by a mix of pipelines overseas, LNG imports, and domestic expansion.

Total gas-source supply may more than double over the next five years

China: natural-gas year-end supply-capacity forecasts



Source: CEIC, Daiwa forecasts
Note: The capacity figures are year-end figures based on a 100% utilisation rate

China: forecasts of total gas capacity

Major natural gas pipelines

Project	Operator	Status	Source of gas	Commencement	2005	2006	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
					Annual turnover capacity (in bcm)										
1st West-East	PetroChina	Operating	Tarim Basin, Xinjiang	2005	4.0	8.0	12.0	16.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Zhong-Wu	PetroChina	Operating	Sichuan Basin, Sichuan	2005	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1st Shaanxi-Beijing	PetroChina	Operating	Ordos Basin, Shaanxi	1997	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
2nd Shaanxi-Beijing	PetroChina	Operating	Central Asia	2006	-	12.0	12.0	12.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Sichuan-Shanghai	Sinopec	Operating	Puguang, Sichuan	Apr 2010	-	-	-	-	-	4.0	8.0	10.0	12.0	12.0	12.0
2nd West-East	PetroChina	Under construction	1. Turkmenistan, Central Asia 2. Kazakhstan, Central Asia 3. Uzbekistan, Central Asia	By 2011	-	-	-	-	-	5.0	15.0	30.0	30.0	30.0	30.0
3rd Shaanxi-Beijing	PetroChina	Under construction	Central Asia	By 2011	-	-	-	-	-	-	-	-	-	-	-
Myanmar-China	PetroChina	Under construction	Block A-1 (offshore), Myanmar	By 2013	-	-	-	-	-	-	-	-	10.0	10.0	10.0
3rd West-East	PetroChina	Preliminary planning	1. Turkmenistan, Central Asia 2. Kazakhstan, Central Asia 3. Uzbekistan, Central Asia	By 2014	-	-	-	-	-	-	-	-	-	10.0	20.0
					10.6	27.6	31.6	35.6	42.6	51.6	65.6	82.6	94.6	104.6	114.6
				Newly-added capacity		17.0	4.0	4.0	7.0	9.0	14.0	17.0	12.0	10.0	10.0

Major LNG receiving terminals

Location	Operator	Status	Source of gas	Commencement	2005	2006	2007	2008	2009	2010E	2011E	2012E	2013E	2014E	2015E
					Annual turnover capacity (in bcm)										
Dapeng, Guangdong	CNOOC Group	Operating	NWS, Australia	Sep 2006	-	5.1	5.1	5.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Xiuyu, Fujian	CNOOC Group	Operating	Tangguh, Indonesia	May 2009	-	-	-	-	3.6	3.6	7.2	7.2	7.2	7.2	7.2
Yangshan, Shanghai	CNOOC Group	Operating	1. Tiga, Malaysia 2. QCLNG, Australia	Oct 2009	-	-	-	-	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Ningbo, Zhejiang	CNOOC Group	Under construction	Qatargas 2, Qatar	By 2012	-	-	-	-	-	-	-	4.1	4.1	4.1	4.1
Zhuhai, Guangdong	CNOOC Group	Under construction	n.a.	By 2013	-	-	-	-	-	-	-	-	4.8	4.8	4.8
Yangpu, Hainan	CNOOC Group	Preliminary approval	n.a.	By 2014	-	-	-	-	-	-	-	-	-	2.8	2.8
Dalian, Liaoning	PetroChina	Under construction	Qatargas 4, Qatar	By 2011	-	-	-	-	-	-	4.1	4.1	4.1	4.1	4.1
Rudong, Jiangsu	PetroChina	Under construction	Gorgon, Australia	By 2011	-	-	-	-	-	-	4.8	4.8	4.8	4.8	4.8
Shenzhen, Guangdong	PetroChina	Initial approval	Gorgon, Australia	n.a.	-	-	-	-	-	-	-	-	-	-	-
Caofeidian, Hebei	PetroChina	Feasibility study	South Pars 11, Iran	By 2013	-	-	-	-	-	-	-	-	13.8	13.8	13.8
Qinzhou, Guangxi	PetroChina	Preliminary planning	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-
Qingdao, Shandong	Sinopec	Preliminary approval	LNG from Papua New Guinea	By 2013	-	-	-	-	-	-	-	-	4.1	4.1	4.1
Zhuhai, Guangdong	Sinopec	Preliminary approval	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-
Beihai, Guangxi	Sinopec	Preliminary approval	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-
Tianjin	Sinopec	Preliminary approval	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-
					-	5.1	5.1	5.1	15.9	15.9	28.4	32.6	55.3	58.1	58.1
Newly-added capacity						5.1	-	-	10.8	-	12.6	4.1	22.8	2.8	-
Overall newly added PNG and LNG capacity (bcm)						22.1	4.0	4.0	17.8	9.0	26.6	21.1	34.8	12.8	10.0
Estimated domestic production growth (excl Puguang) plus estimated spot LNG spot cargoes (bcm)										6.0	6.0	6.0	6.0	10.0	10.0
Total gas capacity in China (bcm)					46.8	56.1	69.5	81.3	88.7	103.7	136.3	163.4	204.2	226.9	246.9
Change YoY (%)						19.9	23.9	17.0	9.1	16.9	31.4	19.9	25.0	11.1	8.8

Source: Companies, Daiwa forecasts

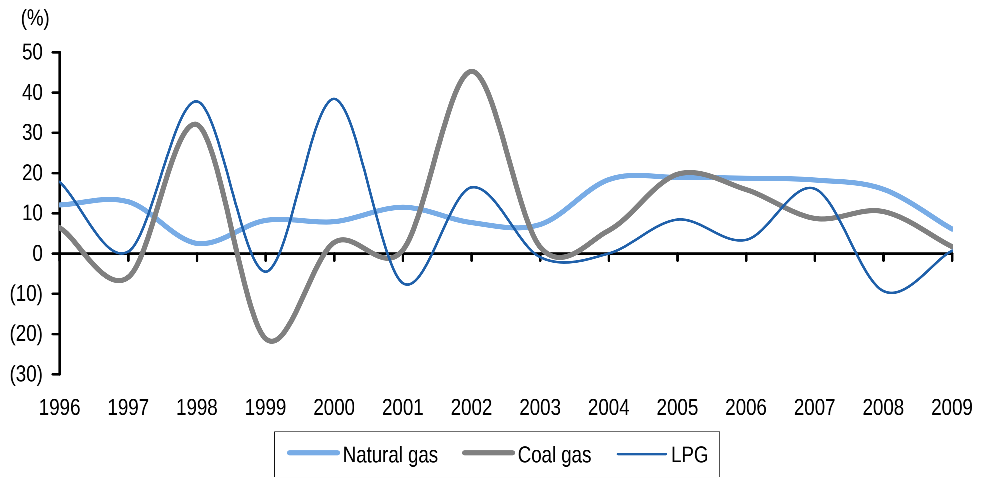
A replacement trend for LPG and coal gas

China's reliance on manufactured gas should be replaced gradually by natural gas

Before the introduction of natural gas, China relied mainly on manufactured gas, ie, LPG and coal gas. However, this has changed, with natural gas a much cleaner substitute, and over the past 10 years demand for natural gas (often called piped gas) rose by 13% a year, compared with 11% a year for coal gas and 6% a year for LPG. The government has discouraged coal gas, because it is highly polluting. LPG demand growth has been volatile as the LPG price is linked to crude oil.

Demand growth for natural gas has been the most resilient and secular

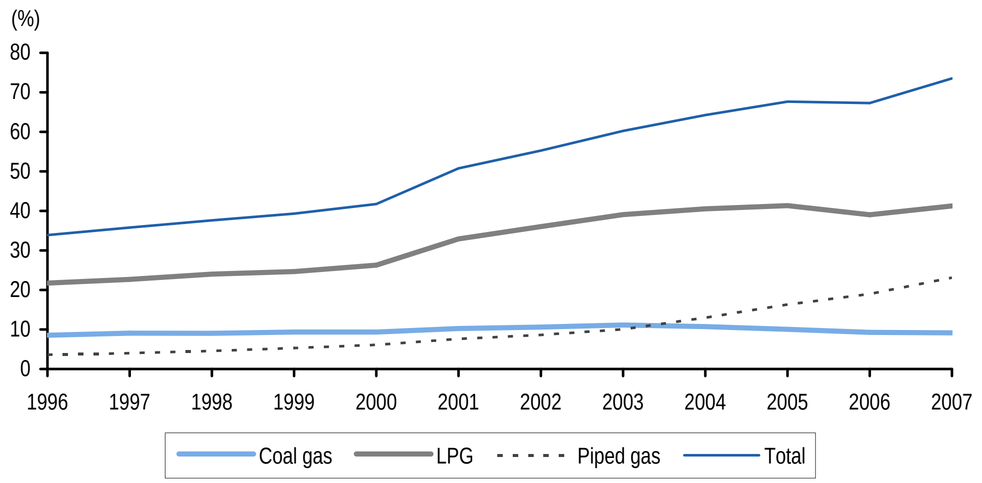
China: demand-growth rate of different types of gas



Source: CEIC, calculated by Daiwa

As a result, natural gas gradually should replace demand for coal gas and LPG

China population ratio: access to different types of gas



Source: CEIC, calculated by Daiwa

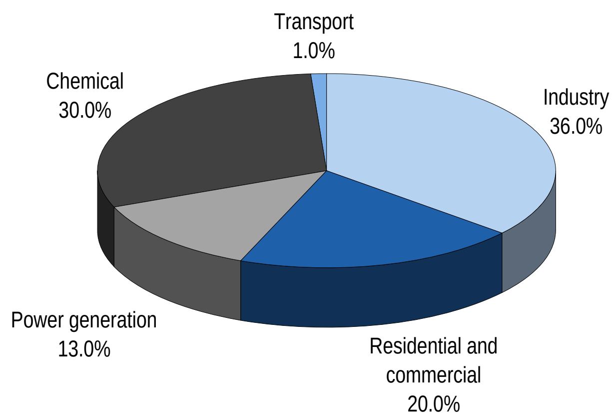
Gas demand is strong and secular

We expect China's gas demand to grow by 20% a year until 2015

There are a whole range of forecasts for China's gas demand. In 2009, Residential and Commercial, Industry, Chemical, Power and Transport account for 20%, 36%, 30%, 13% and 1% of the overall demand.

A good mix of demand drivers

China: gas demand breakdown (2009)



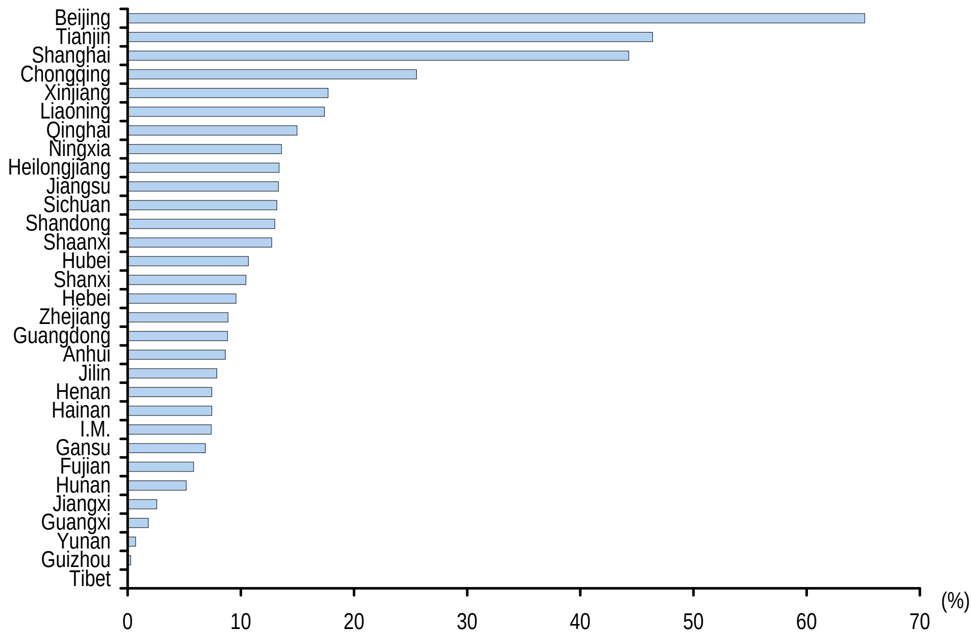
Source: CEIC, calculated by Daiwa

Residential demand should be driven by a low penetration rate

Over the past decade, China has achieved meaningful progress in terms of the natural-gas penetration rate in households in major cities. As at the end of 2009, Beijing (including suburban areas) had a penetration rate of 70%, followed by Tianjin, Shanghai and Chongqing. However, there are a large number of provinces and cities that continue to have low penetration rates, either due to the government's priority on development in certain regions or an absence of arm-length gas sources. We forecast the country's overall penetration rate to increase by about 2-3% a year over the next few years.

The household penetration rate for natural gas is low

Natural gas: household penetration ratio (2009)



Source: CEIC

Continued strong demand from industrial and commercial customers

C&I demand is strong

We believe that over the next few years, demand growth from C&I customers will outpace that from the residential segment. Typical industrial customers include glass-makers, and ceramics, cement and steel companies. Currently, many of these producers are using coal or heavy oil as their main fuel, but we believe there is a strong likelihood of them switching to gas given its cost advantage (relative to oil) and potential environmental (ie, pollution) charges (relative to coal). Commercial customers include hotels and restaurants, the demand from which has been strong given China's ramp-up in service industries.

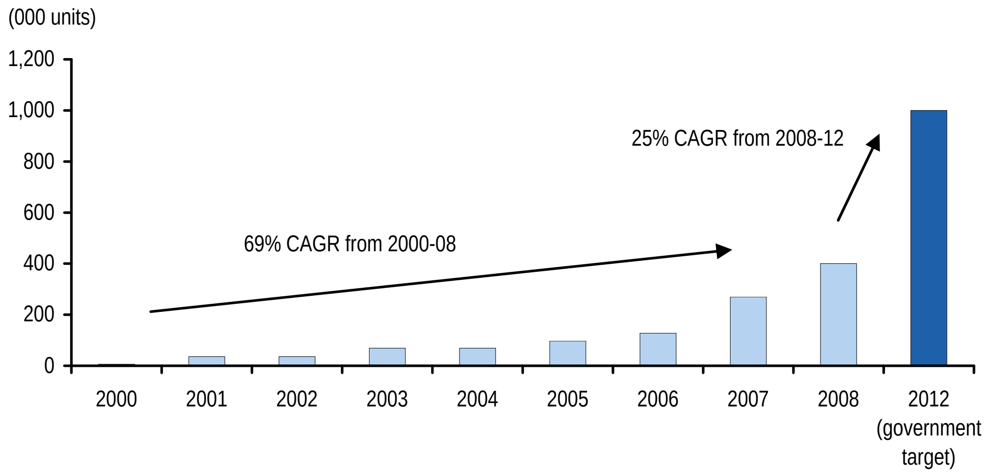
Natural-gas vehicles come off low base

NGV demand is coming off a low base

General concerns about climate change and rising crude-oil prices should also boost demand for natural-gas vehicles (NGV), which not only reduce emissions but provide better fuel utilisation. According to a research report by The Federal Office for the Environment published in September 2010, hybrid cars and NGVs can substantially reduce CO_2 emissions compared with petrol-fuelled vehicles. Also, compared with hybrid cars, NGVs are more suitable for long-distance travel. From 2000-08, China saw a 69% CAGR in the total number of NGVs, and based on government plans, the total number will reach 1m units by 2010, suggesting a 25% CAGR from 2008-12. Most of the NGVs have been used as public-transportation vehicles, such as city buses and taxis, but a number of automakers have launched a wide range of NGV models for individual use, which should add to gas demand.

Natural-gas vehicles may grow by 25% CAGR from 2008 to 2012

China: total NGVs



Source: China Energy Efficient and New Energy Vehicles

Power and heating should be the next demand drivers

We expect China to ramp up further demand in case of excessive supply in the future

The NDRC announced the sector priorities in its *Policy of Natural Gas Usage* document in August 2007. The priority list included residential and public facilities, NGVs, and power generation. It encouraged heating, air-conditioning and fertiliser production, as well as recommending central-heating systems and substitute projects for oil and LPG, low-economy hydrogen projects and peak-sharing power generation. In the event of excessive gas supply, we expect the government to place more demand drivers from the 'allowance' list into the 'priority' category. Gas-fired power and centralised or decentralised heating are among the possible candidates.

Natural-gas priority policy in 2007

	Residential sector	Industrial fuel	Chemical feedstock	Power sector
Priority	City residential Public facilities Natural-gas vehicles			Combined heat and power system
Allowance	Centralised heating Decentralised heating Central air conditioning	Substitution projects for oil and LPG Substitution projects for coal with environmental benefits Consumers for which supply can be interrupted	Low-return hydrogen projects Low-return nitrogenous fertiliser projects	Peak-sharing power generation in areas with sufficient supply
Confined			Expansion of ammonia projects Some chemical projects using methane	Non-essential lead power-generation
Prohibited			Methanol projects	Base-load generation in large-scale coal-based areas

Source: NDRC

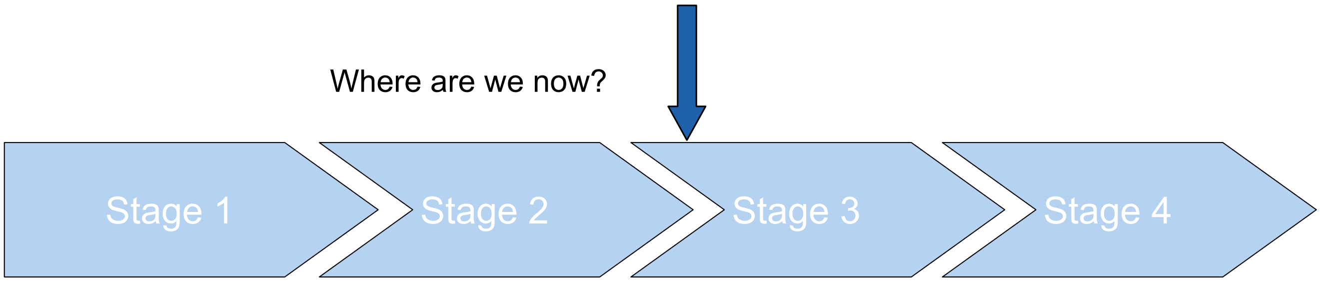
What are the five biggest risks for the sector?

We expect policy risks to increase over the next few years before full-scale industry consolidation takes place

Despite the positive demand outlook, we do not expect a similarly attractive risk-reward profile for the gas distributors over the next few years given the risk of policy tightening. We believe we are currently near the end of the high demand-growth stage, following a decade of government privatisation. The general market expectation is that industry consolidation will take place soon, with the large government-owned gas groups taking over the small private players.

However, we believe that the current investment return for city-gas projects remains attractive, especially compared with other utilities such as power or water, which means there are limited incentives for operators to sell their attractive assets. Therefore, in our hypothetical growth cycle, we expect to see a third stage between high-growth and consolidation stages, which we call the mature stage, whereby the slowdown in project additions will be coupled with a tightening policy environment to reduce the likely return. This has been seen in the power industry, where almost no pricing power remains.

Stages in the natural-gas growth cycle



Household penetration in major cities:

0-10%	10-40%	40-80%	80-100%
Early stage: start of privatisation of government projects **Characteristics:** low penetration rate, debate on natural gas applications, limited number of participants **Catalysts:** first-mover advantage, ease of negotiation on pricing **Risks:** lack of policy structure and pricing mechanism	**High-growth stage:** fast rise in privatised projects and rising penetration rates, demand is capped by supply shortages **Characteristics:** increasing number of participants and new projects, shortages occur frequently throughout the year **Catalysts:** multiple demand drivers emerge, not just households **Risks:** gas sources become competitive as demand soars **Similar industry**: water utilities	**Mature stage:** slowdown of new project additions but demand continues to rise, gas supply becomes a lesser issue **Characteristics:** onset of M&A activities within the industry **Catalysts:** gas sources become less undersupplied **Risks:** policies start to tighten for gas distributors amid lucrative profitability and returns	**Consolidation stage:** reduction in number of industry participants **Characteristics:** reduced number of participants and state-owned companies acquire privately-owned companies **Catalysts:** consolidation creates synergies in the value chain **Risks:** slowdown of demand will dampen profitability and returns, pricing power declines substantially **Similar industry**: IPPs

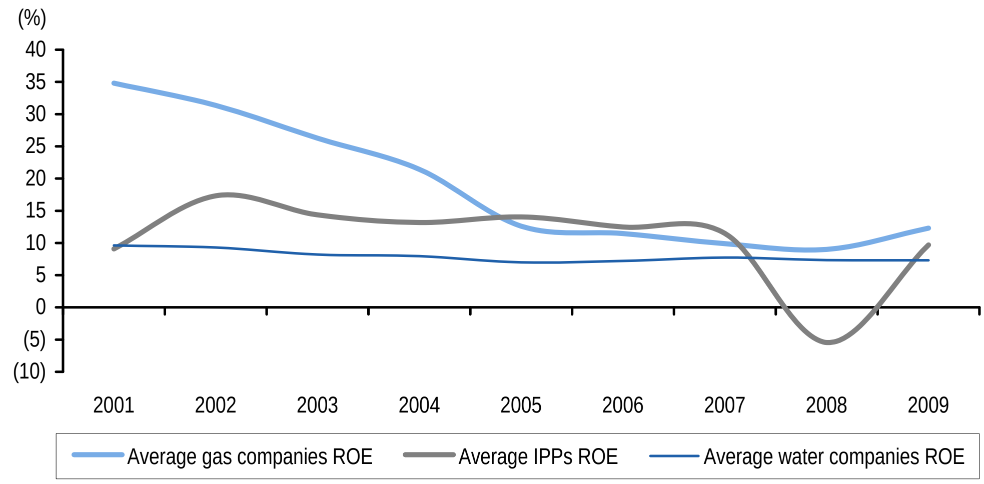
Source: Daiwa

Gas utilities have achieved far greater ROEs than the power and water utilities

Over the past eight years, the listed gas utilities have achieved a much better average ROE (19%) than the listed independent power producers (IPPs) (11%) and listed water utilities (8%). The utilities' benchmark IRR is usually 12% and it is not difficult to see that gas utilities exceed the minimum return. The IPPs have seen their returns decline over recent years due to the delay in the implementation of cost pass-through on power tariffs.

We believe the poor ROEs of the power utilities are a future indicator of the ROEs of the gas utilities

ROE: gas utilities vs. power utilities vs. water utilities



Source: Bloomberg, Daiwa calculation.
Note: The gas sector comprises ENN, BJE, CSG, CHG, CRG, Towngas China (Not rated); the power sector comprises China Resources Power, Huaneng Power International, Datang International Power, Huadian Power International and China Power International; the water utilities sector comprises Tianjin Capital (Not rated), Guangdong Investment (Not rated), Beijing Capital (Not rated), Shanghai Chengtou (Not rated), Qianjiang Water (Not rated), Wuhan Sanzhen (Not rated) and Jiangxi Hongcheng (Not rated)

We rate ENN as the most attractive based on our risks and ROE scores

In this section, we identify those companies that offer reasonably low exposure to risks, balanced with reasonable shareholder returns. We have indentified five major risks that could reduce their attractiveness and rank the companies from 1-5 scale with 5 representing the lowest risk. We regard ROE as an important metric and our total score is a sum of the risks score and the score for the ROE improvement. Based on this, ENN is the most attractive, followed by CRG and BJE on the same score, CSG and CHG.

China City Gas Sector: our qualitative ratings on companies' risks and returns

Risk	ENN	CRG	BJE	CSG	CHG
Benefit from new gas source	4	3	5	4	2
Margin squeeze from pass-through difficulty	4	2	5	2	4
Connection fee reduction	3	4	5	4	2
Weather impact	3	4	2	4	1
Non-gas business	4	5	2	3	1
Risk score	18	18	19	17	10
ROE improvement	5	4	2	2	2
Total score	23	22	21	19	12

Source: Daiwa
Note: On a scale of 1 to 5 where 1 is the highest risk and 5 the lowest

1. Competition for gas sources

Only some regions will benefit from the incremental rise in domestic supply

We expect the supply of domestic gas sources to increase by no less than 20% YoY for 2011, but this rising tide will not lift all boats, with only a handful of provinces seeing a rise in incremental supply. As we expect the major incremental supply to come from *Shaanxi-Beijing III*, *Sichuan-East expansion*, *West-East II Pipeline Phase 2*, as well as the three new LNG terminals. We believe the key beneficiaries will be the following areas/provinces: Beijing, Hebei, Shanxi, Shaanxi, Shanghai, Jiangsu, Zhejiang, Anhui, Hubei, Jiangxi, Henan, Hunan, Guangdong, Guangxi, Fujian and Liaoning.

We believe BJE has the lowest risks in terms of gas sources

Based on the gas-sales exposure to these regions, we expect BJE to be the biggest beneficiary, with Beijing a national priority, followed by ENN, CRG, CSG, and CHG. The reason we see limited incremental benefit for CRG is due to its large gas-sales exposure to Chongqing and Sichuan, where gas shortages have not been a major issue. CHG's issue is a lack of supply to northeast China.

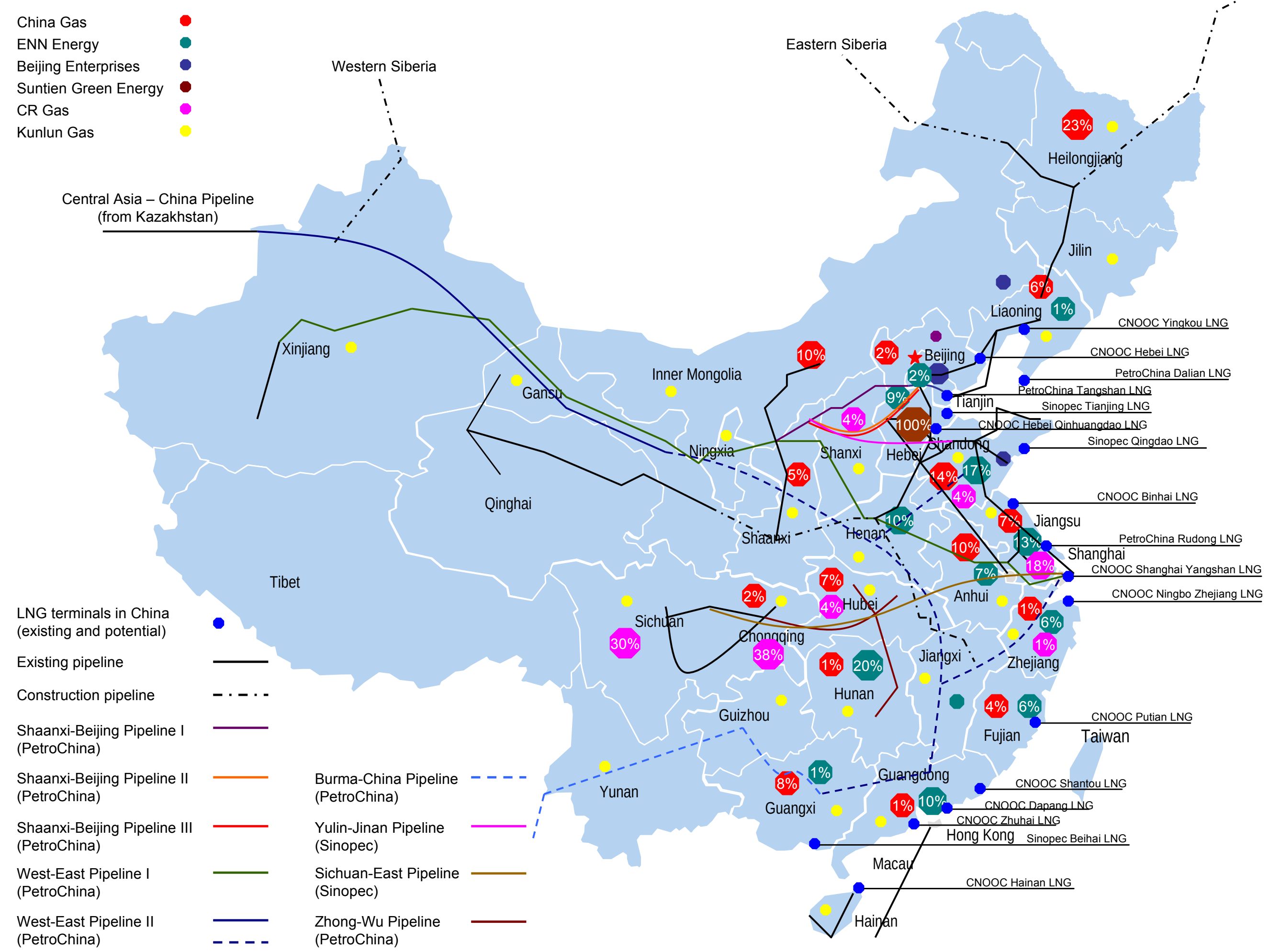
Provinces and players to benefit

	Provinces to benefit	ENN	CHG*	CRG	CSG	BJE
Shaanxi-Beijing III	Beijing, Hebei, Shanxi, Shaanxi	Beijing (2%), Hebei (9%)	Hebei (2%)	-	Hebei (100%)	Beijing (~100%)
Sichuan-East	Shanghai, Jiangsu, Zhejiang, Anhui, Hubei, Jiangxi	Jiangsu (13%), Zhejiang (6%), Anhui (7%)	Jiangsu (7%), Zhejiang (1%), Anhui (10%), Hubei (7%)	Jiangsu (18%), Zhejiang (1%), Hubei (4%)	-	-
West-East Pipeline II	Henan, Hubei, Jiangxi, Hunan, Guangdong, Guangxi, Zhejiang, Shanghai, Jiangsu, Anhui	Henan (10%), Hunan (20%), Guangdong (10%), Guangxi (1%), Zhejiang (6%), Jiangsu (13%), Anhui (7%)	Hubei (7%), Hunan (1%), Guangdong (1%), Guangxi (8%), Zhejiang (1%), Jiangsu (7%), Anhui (10%)	Hubei (4%), Zhejiang (1%), Jiangsu (18%)	-	-
Putian LNG	Fujian	Fujian (6%)	Fujian (4%)		-	-
Dalian LNG	Liaoning	Liaoning (1%)	Liaoning (6%)		-	-
Rudong LNG	Jiangsu	Jiangsu (13%)	Jiangsu (7%)	Jiangsu (18%)	-	-
Total exposure		85%	47%	23%	100%	~100%

Source: Daiwa

Note: *CHG's exposure is based on connected households, not gas-sales volume

Gas pipeline details and project exposure of different gas companies



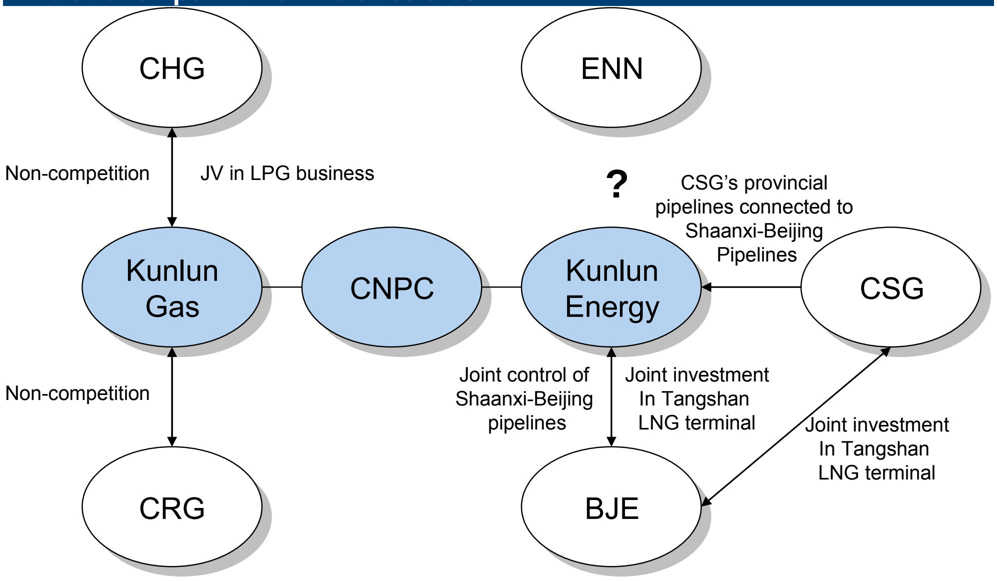
Source: Daiwa

Only some regions will benefit from the incremental rise in gas supply

Another swing factor we monitor is the expansion of CNPC, which has been extending aggressively its dominant position in gas supply to gas distribution. Two of its subsidies, Kunlun Gas (Not listed) and Kunlun Energy (Not rated), have expanded into the gas business. We prefer companies (such as CRG and CHG) that have existing close ties and non-competition clauses with CNPC's subsidiaries. Also, regional joint ventures will help reduce the risks to gas sources, such as BJE's jointly-controlled Huayou China (Huayou) (Not listed) with Kunlun Energy. Of the five companies we cover in the report, only ENN has not announced any form of co-operation with a CNPC subsidiary. However, we do not exclude the possibility of a new relationship being established given ENN's reputation in the gas industry.

Non-competition agreements have been signed between CNPC subsidiaries and CHG and CRG

Relationships with CNPC subsidies



Source: Daiwa

Based on information on Kunlun Gas' website, the company controls close to 100 city-gas projects in China. Although many of these projects are small compared with those of the listed companies, we cannot exclude future expansion into the cities where gas distribution has yet to be privatised.

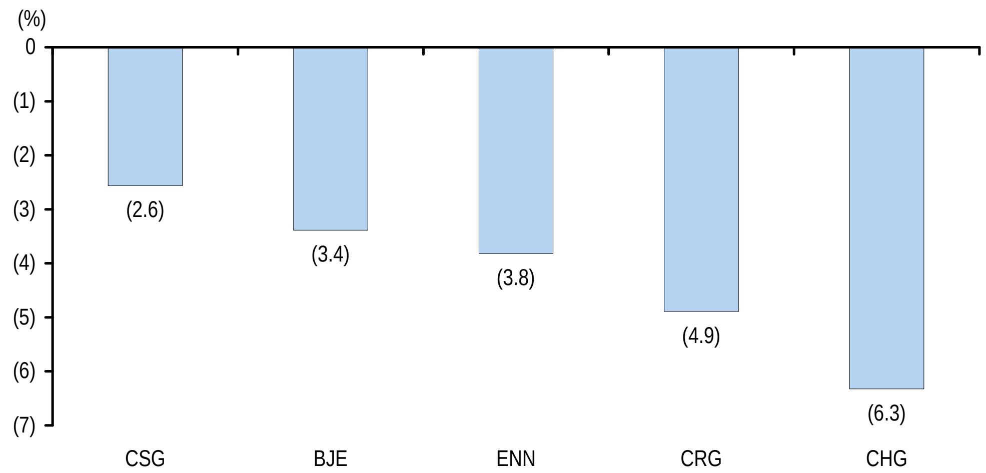
Key city projects and their existing operators

Province	Capital/important industrial cities	Gas project (CBD)
Anhui	Hefei	Hefei Gas
Beijing	Beijing	BJE
Chongqing	Chongqing	CR Gas
Fujian	Fuzhou	CR Gas
Fujian	Xiamen	CR Gas
Gansu	Lanzhou	Lanzhou Gas
Guangdong	Guangzhou	Guangzhou Gas
Guangdong	Shenzhen	HK&China Gas
Guangxi	Nanning	China Gas
Guizhou	Guiyang	Guizhou Gas
Hainan	Haikou	Haikou Gas
Hebei	Shijiazhuang	ENN
Hebei	Tangshan	Tangshan Gas (jointly owned by BJE)
Heilongjiang	Harbin	Harbin Zhongqing Gas (51% owned by Kunlun Gas, 49% owned by China Gas)
Henan	Zhengzhou	CR Gas (via Zhengzhou Gas)
Hubei	Wuhan	CR Gas, HK&China Gas, Kunlun Gas
Hunan	Changsha	ENN
Inner Mongolia	Baotou	China Gas
Inner Mongolia	Hohhot	China Gas
Jiangsu	Nanjing	CR Gas, HK&China Gas
Jiangsu	Suzhou	CR Gas, HK&China Gas
Jiangxi	Nanchang	CR Gas
Jilin	Changchun	HK&China Gas
Liaoning	Shenyang	Shenyang Gas
Liaoning	Dalian	China Gas
Liaoning	Anshan	Anshan Gas
Ningxia	Yinchuan	n.a.
Qinghai	Xining	Xining Zhongyou Gas (60% owned by Kunlun Energy, 40% owned by BJE)
Shaanxi	Xi'an	HK&China Gas, Kunlun Gas
Shandong	Jinan	CR Gas, HK&China Gas
Shandong	Qingdao	China Gas
Shanghai	Shanghai	Shenergy
Shanxi	Taiyuan	Taiyuan Gas
Sichuan	Chengdu	Chengdu Gas (jointly owned by CR Gas and HK&China Gas and others)
Tianjin	Tianjin	JV owned by CR Gas and Tianjin Gas
Tibet	Lhasa	N/A
Xinjiang	Urumqi	Kunlun Gas
Yunnan	Kunming	CR Gas, Kunlun Gas
Zhejiang	Hangzhou	Hangzhou Gas
Zhejiang	Ningbo	ENN

Source: Company

A disappointment in the volume supply would affect CHG the most and CSG the least, in our view

EPS sensitivity to a 5% fall in volume for 2011E



Source: Daiwa forecasts

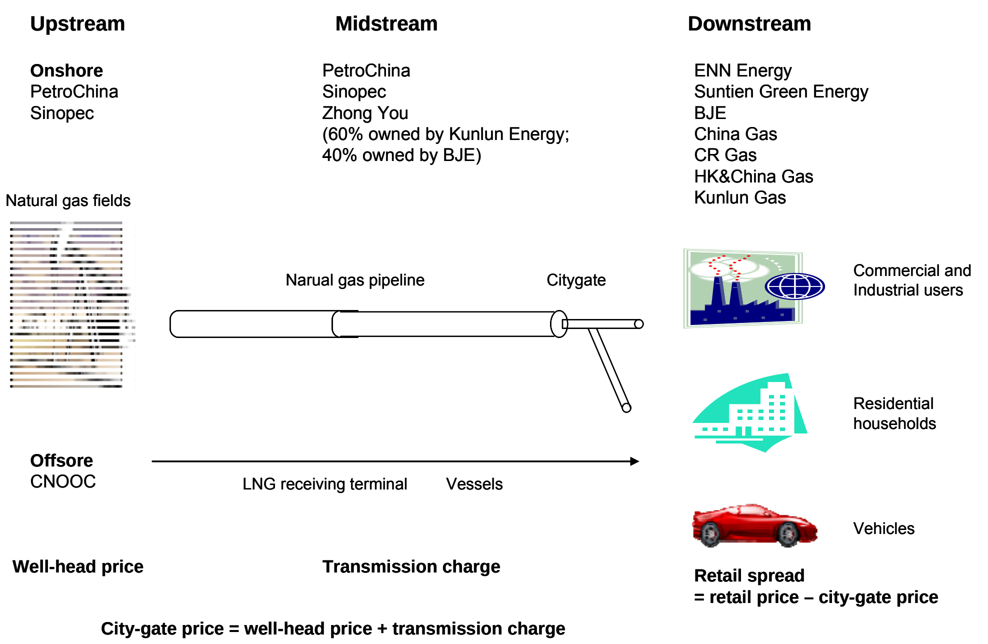
2. Increasing difficulty in passing on costs to households

Gas prices are on an uptrend

In the gas industry, the NDRC regulates upstream (gas wells) and midstream transmission prices. At the end-user level (those charged by project operators to residential and C&I customers), prices are regulated by local government, either at the municipal or provincial level. Based on market expectations, new pipelines and new LNG imports will have higher costs than the old gas wells, which implies increased city-gate price pressure for the gas distributors. The current pricing mechanism is flexible for C&I customers with price increases passed on on an over-the-counter basis. Pricing for households is more complex, requiring local hearing sessions with the participation of government, pricing-bureau and household representatives.

The NDRC regulates upstream and midstream prices, while downstream prices are regulated locally

Natural-gas pricing



Source: Daiwa

Details of the price hike in June 2010

Oil field	User	Previous benchmark price (Rmb/'000m³)	Revised benchmark price (Rmb/'000 m³)	Chg	Chg (Rmb/'000 m³)
Sichuan-to-Chongqing	Fertilisers	690	920	33	230
	Direct supply to industrial users	1,275	1,505	18	230
	City gas (Industrial)	1,320	1,550	17	230
	City gas (non-Industrial)	920	1,150	25	230
Changqing oil field	Fertilisers	710	940	32	230
	Direct supply to industrial users	1,125	1,355	20	230
	City gas (Industrial)	1,170	1,400	20	230
	City gas (non-Industrial)	770	1,000	30	230
Qinghai oil field	Fertilisers	660	890	35	230
	Direct supply to industrial users	1,060	1,290	22	230
	City gas (Industrial)	1,060	1,290	22	230
	City gas (non-Industrial)	660	890	35	230
Xinjiang oil fields	Fertilisers	560	790	41	230
	Direct supply to industrial users	985	1,215	23	230
	City gas (Industrial)	960	1,190	24	230
	City gas (non-Industrial)	560	790	41	230
Dagang, Liaohe, Zhongyuan oil fields (average)	Fertilisers	710	940	32	230
	Direct supply to industrial users	1,340	1,570	17	230
	City gas (Industrial)	1,340	1,570	17	230
	City gas (non-Industrial)	940	1,170	24	230
Other oil fields	Fertilisers	980	1,210	23	230
	Direct supply to industrial users	1,380	1,610	17	230
	City gas (Industrial)	1,380	1,610	17	230
	City gas (non-Industrial)	980	1,210	23	230
West-East pipeline	Fertilisers	560	790	41	230
	Direct supply to industrial users	960	1,190	24	230
	City gas (Industrial)	960	1,190	24	230
	City gas (non-Industrial)	560	790	41	230
Zhongwu pipeline	Fertilisers	911	1,141	25	230
	Direct supply to industrial users	1,311	1,541	18	230
	City gas (Industrial)	1,311	1,541	18	230
	City gas (non-Industrial)	911	1,141	25	230
Shaanxi-Beijing pipeline	Fertilisers	830	1,060	28	230
	Direct supply to industrial users	1,230	1,460	19	230
	City gas (Industrial)	1,230	1,460	19	230
	City gas (non-Industrial)	830	1,060	28	230
Sichuan-to-East		1,280	1,510	18	230
Average		984	1,214	23	230

Source: Company, Daiwa forecasts

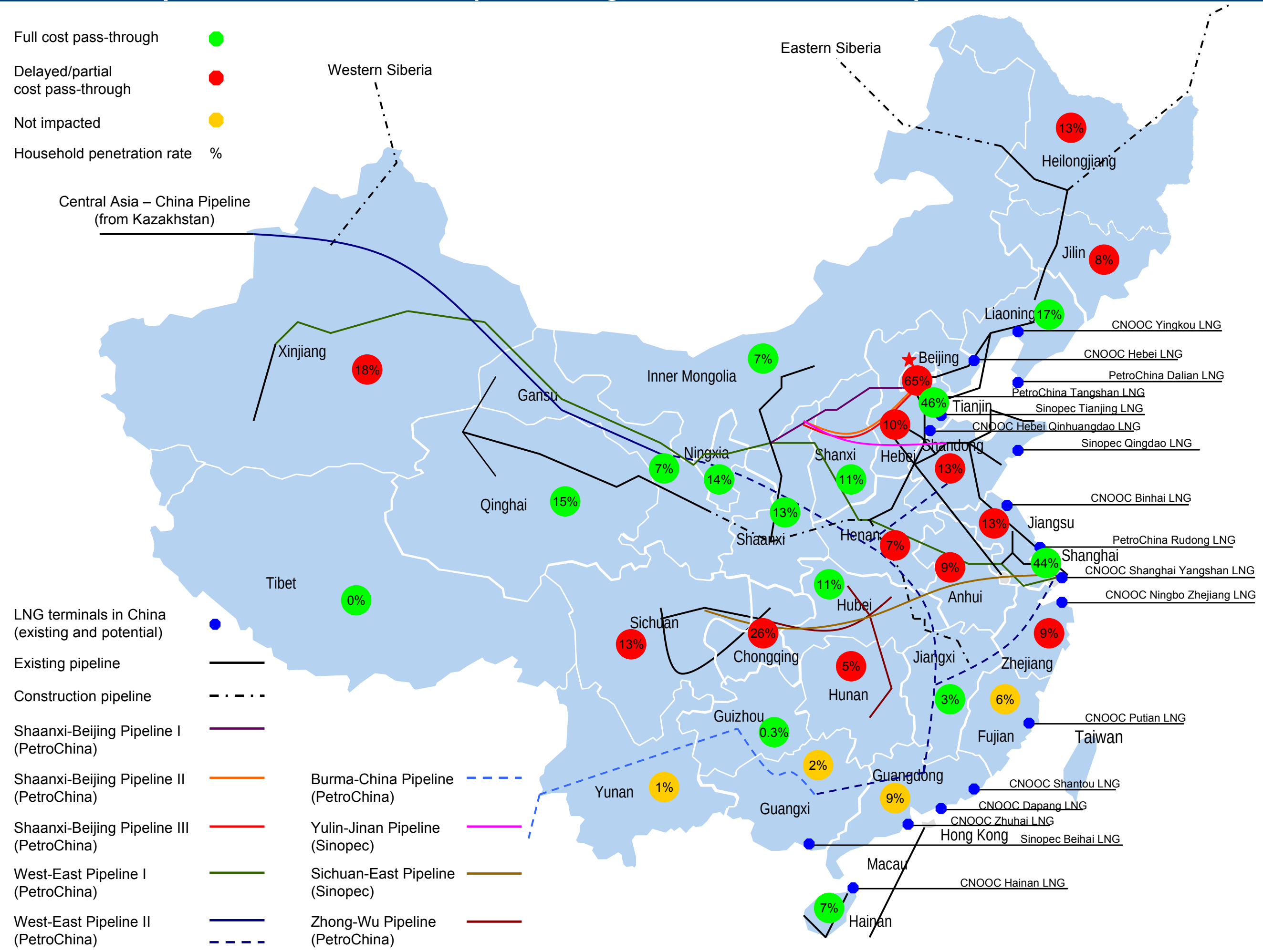
A number of provinces/cities have yet to pass on the price hike to residential users

On 30 June 2010, the NDRC raised the well-head price by Rmb0.23m^3 (an average increase of 23% YoY). The gas distributors managed to increase prices for their C&I customers but there have delays in doing this for residential customers. For example, in ENN's case, 28 projects were under cost-hike pressure but eight of them have yet to raise prices. For CHG, the number of projects that have yet to raise prices totals 11. Meanwhile, in Beijing, the largest gas-consuming city in the country, the hearing session was not held until January 2011.

Three possible reasons for the delay

The following map shows the regions where the cost pass-through to households has been delayed or had been partial (several cities in the same province). These delays or partial pass-through are due to at least three reasons, in our view: 1) provinces with a relatively high household penetration rate have encountered difficulties in receiving support from households, which can be due to local inflation, 2) some local governments introduced the price rises immediately after the June price-hike announcement and therefore implemented them successfully before inflation rose sharply, and 3) regions with a mix of gas sources, and therefore gas costs, found it difficult to justify the reasonable level of increase.

Household penetration rate and cost pass-through status for the June 10 price hike



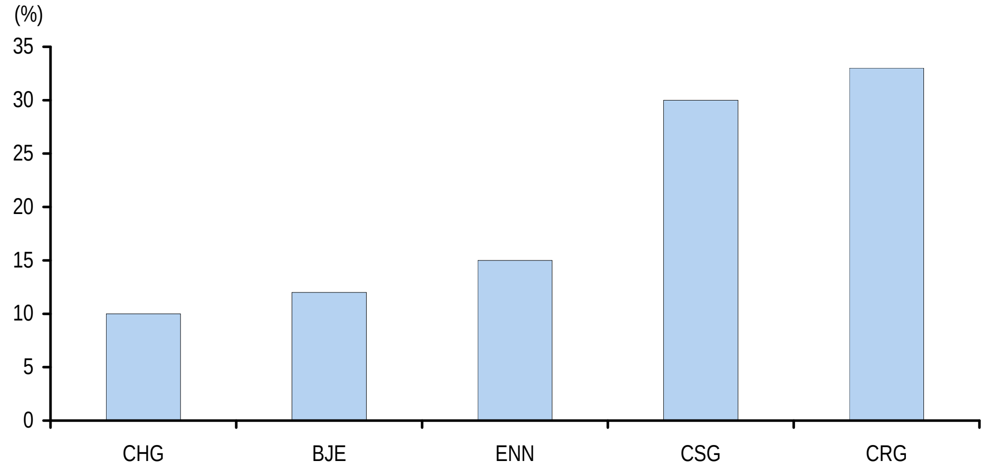
Source: Daiwa

Risks may persist

As penetration rates increase, we expect further price increase to have a greater impact on provincial inflation especially given the recent CPI weighting adjustment in February 2011 and therefore become part of the NDRC's arsenal in fighting inflation. We do not believe that any of the listed gas companies will offer an absolutely safe haven against the uncertainties of household pass-through. However, we prefer those with relatively lower sales to households, assuming symmetrical risks in all regions. CHG has the lowest sales contribution from households, while CRG has the highest. Investors need to bear in mind that geographical differences may continue to matter. For example, cities with more expensive gas sources (*West-East II*, *Sichuan-East* and new LNG terminals) may end up facing more pressure.

CHG should continue to have the lowest percentage of gas sales to households

China: gas sales as a % to households (2011E)



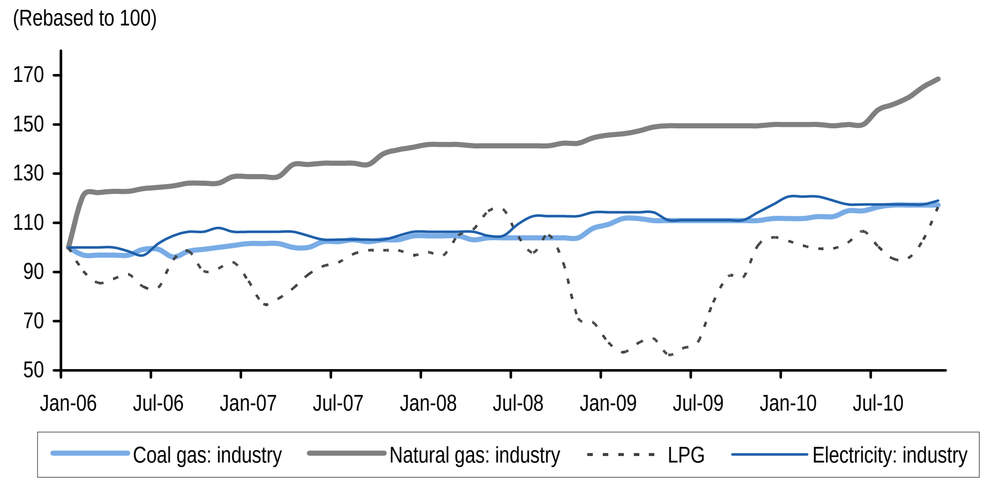
Source: Daiwa forecasts

Pass-through to C&I customers should continue to be easier than for residential users

For C&I users, especially industrials, we believe there is a much higher price tolerance than for households. For example, from January 2006 to November 2010, we observe that the natural-gas price for industrial users was raised by as much as 68%, compared with alternatives such as coal gas (17%), LPG (16%), and electricity (19%). Based on our recent discussions with the listed gas companies, the waiting list of new industrial customers remains long, and therefore the pricing power of the distributors should remain strong over the near term. However, gas prices have increased by 68% since January 2006, outpacing the increases of LPG, coal gas, and electricity. So we do not expect high tolerance to last for ever.

Since January 2006, the price of natural gas has increased by 68% compared with respective price rises of 17%, 16% and 19% for coal-gas, LPG and electricity

China: energy prices for industrial users



Source: CEIC

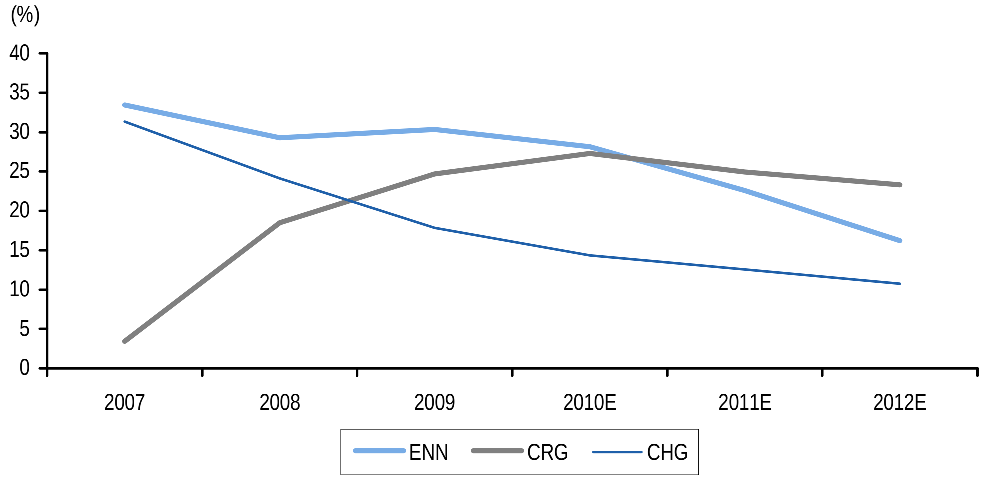
3. Connection fees on a downtrend

Connection fees are important revenue sources for early stage of gas projects

Just like many other countries in the world, China charges one-off upfront connection fees to newly connected customers (both residential and C&I users). The average connection fee is roughly Rmb2,500/household and Rmb200/C&I user. These connection fees have been an important source of revenue for downstream gas players to smooth out operating losses for the first few years of the construction work. However, reliance on connection fees has declined in past years as piped gas sales have matured.

Gas companies' reliance on connection fees has declined

Connection fees as a % of revenue



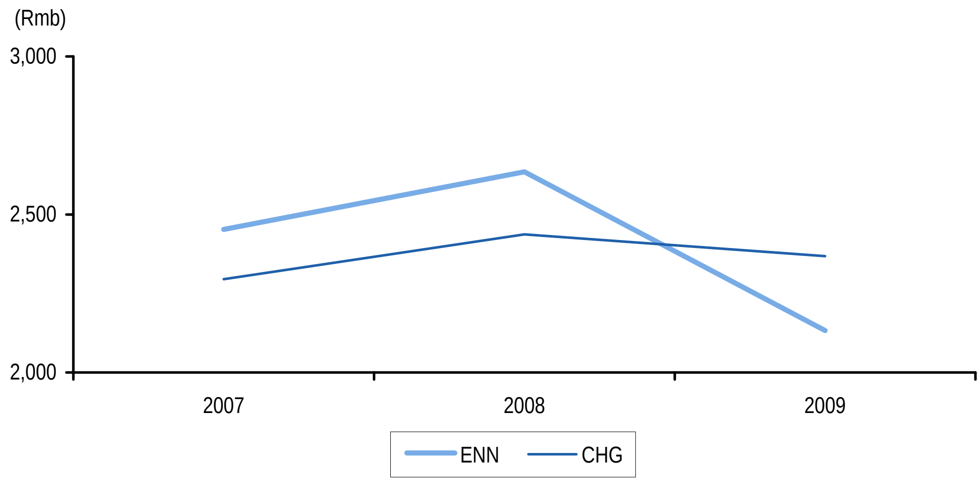
Source: Company, Daiwa forecasts

A few provinces have tried to cut down connection fees

As the city-gas companies' revenue mix improves with rising ROEs, connection fees are not without risk, in terms of either potential reductions in fees, or changes in accounting treatment. The first open case occurred in Guangdong, where the provincial government proposed cancelling connection fee charges in December 2006. To replace the connection fees, the gas operators raised property and capacity fees, and gas tariffs, so it was ultimately positive for them. However, this marked the start of fee reductions, with provinces such as Anhui having reduced connection fees recently. Looking at the listed companies' disclosures, the average connection fees for both ENN and CHG dropped in 2009 compared with 2008. We expect this to continue and forecast connection fees for all the listed companies to drop by 3% per year starting in 2013.

We expect ENN's and CHG's connection fees to fall on average given their higher weight in under-penetrated cities and the rising risk of a connection fee cut from existing cities

Household connection fees: ENN vs. CHG



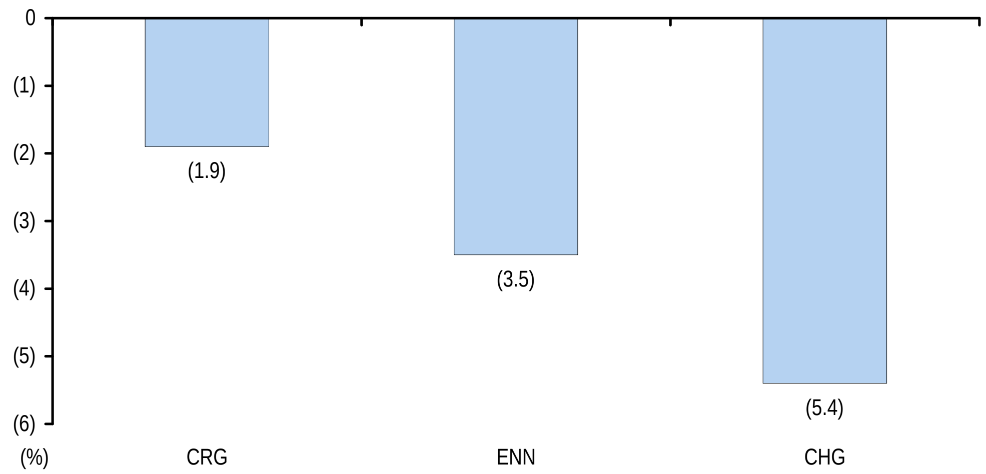
Source: Company

A few provinces have tried to cut down connection fees

As BJE and CSG find it almost impossible to charge connection fees, we assess the earnings sensitivity for the other three companies. We estimate that every 5% decline in average connection fees would have a 1.9%, 3.5% and 5.4% impact on our 2011 EPS forecasts for CRG, ENN and CHG, respectively.

CHG should be the most affected by connection-fee reductions

EPS impact on 5% reduction in connection-fee charges (2011E)



Source: Daiwa forecasts

Change in accounting treatment should not have an impact on cash flow

Some argue that connection fees should be amortised throughout a project's life. In 2008, the Hunan Provincial Government proposed that connection fees be amortised over a period of 10 years. This would not affect the cash flow or cash earnings power of gas companies, but would reduce accounting earnings on an accrual basis, in our view. If we assume China follows Hunan's case and implements 10-year amortisation next year, we estimate connection fees would fall by 90% and the earnings impact in 2010 would be only slightly better than the case of a complete cancellation of connection fees, which would mean CHG could almost make losses on its book. Again, this should not affect the cash-based project value, but we highlight this as a risk because investors often focus on accounting earnings.

4. Don't forget about short-term weather impact on supply

Despite multiple demand drivers, the government ranks households as a top priority when it comes down to gas supply. In winter times, cold weather sometimes strikes pipeline pressure and can result in a temporary supply bottleneck, such as occurred during the winter of 2009. Based on the priority, we expect residential demand to be met before demand for C&I and CNG.

Gas supply may see a bottleneck during cold winters

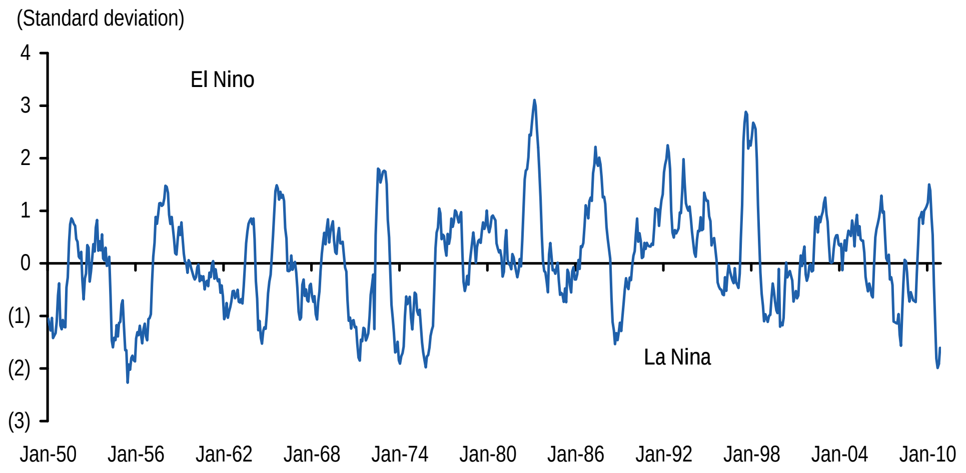
CNG vehicles waiting to get to a gas station in Langfang, Hebei

Source: Daiwa

According to data released by the US National Oceanic & Atmospheric Administration, the likelihood of *La Niña* weather conditions affecting the Earth is even greater in the winter of 2011 than it was in early 2008, when southern China was hit by the most severe snowstorms for 50 years. In fact, the probability of *La Niña* returning this winter is the highest since 1955. Although the weather has been improving in China recently, the recurrence of weather shocks will always be a risk for the industry, in our view.

La Niña effects became more serious in early 2011

Multivariate ENSO Index

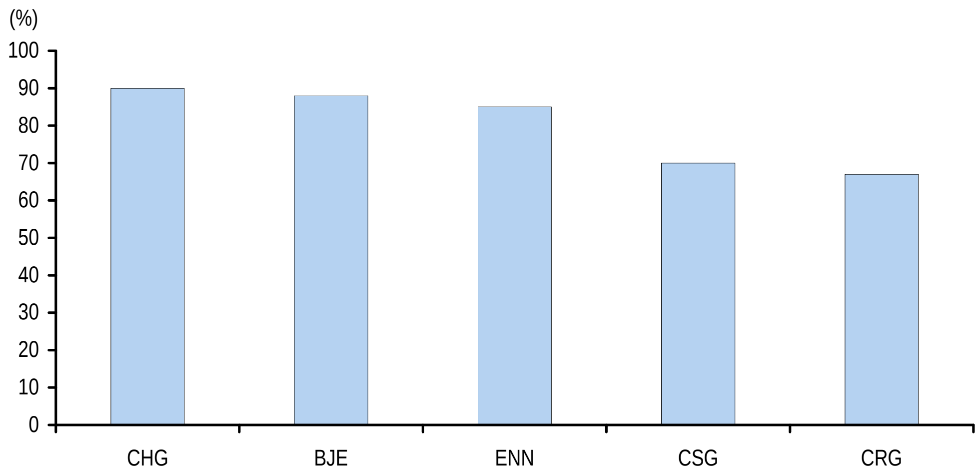


Source: US National Oceanic & Atmospheric Administration

On a relative basis, we prefer those city-gas companies with relatively lower sales to C&I and CNG customers with respect to supply disruptions during periods of bad weather. CRG has the lowest sales contribution from these users, while CHG has the highest. Investors need to bear in mind that geographical differentiation may continue to matter. For example, cities with more expensive sources of gas (West-East II, Sichuan-East and new LNG terminals) may end up receiving more pressure

CHG has the highest sales exposure to C&I and CNG customers

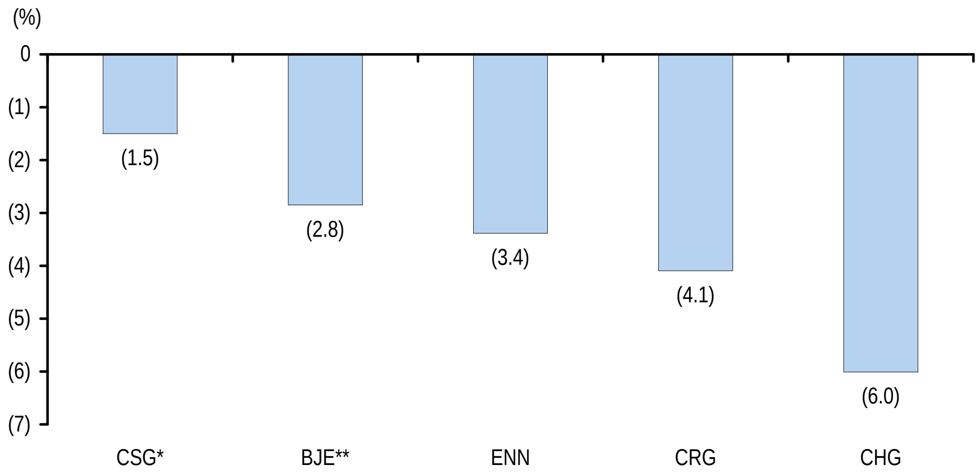
Percentage of gas sales to C&I and CNG users (2011)



Source: US National Oceanic & Atmospheric Administration

Volume disappointments would will impact CHG the most and CSG the least

EPS sensitivity to 5% volume downside on C&I and CNG sales in 2011



Source: Daiwa forecasts
Note: *The data presented shows the earnings sensitivity to a 5% decrease in retail volume (residential volume is not disclosed for CSG).
**The data presented shows the earnings sensitivity to a 5% decrease in C&I, cooling and heating, and gas-fired power volume.

5. Risks related to the non-gas business

We like ENN's energy solution business and BJE's water expansion, while we see highest risks with CHG's LPG

Last, we look at non-gas businesses, as not all companies are running a pure gas model. We believe that ENN's energy solution business is the most attractive given its early industry stage and full policy support. For BJE, we believe the water business is more attractive than its brewery and toll-road segments. We like CHG's LPG business the least, as it has seen volatile gross margins.

Industry attractiveness of gas companies' other businesses

	Other businesses	Industry cycle	Pricing power	Threat of substitutes	Competition	Attractiveness
ENN	Energy solutions	Early stage	High	Low	Low	High
CRG	n.a	n.a	n.a	n.a	n.a	n.a
CSG	Wind power	High-growth stage	Medium	Medium	High	Medium
BJE	Brewery	Maturity stage	Medium	Medium	High	Low
	Water	High-growth stage	High	Low	Medium	High
	Toll road	Maturity stage	Low	Medium	High	Low
CHG	LPG	Maturity stage	Low	High	High	Low

Source: Daiwa

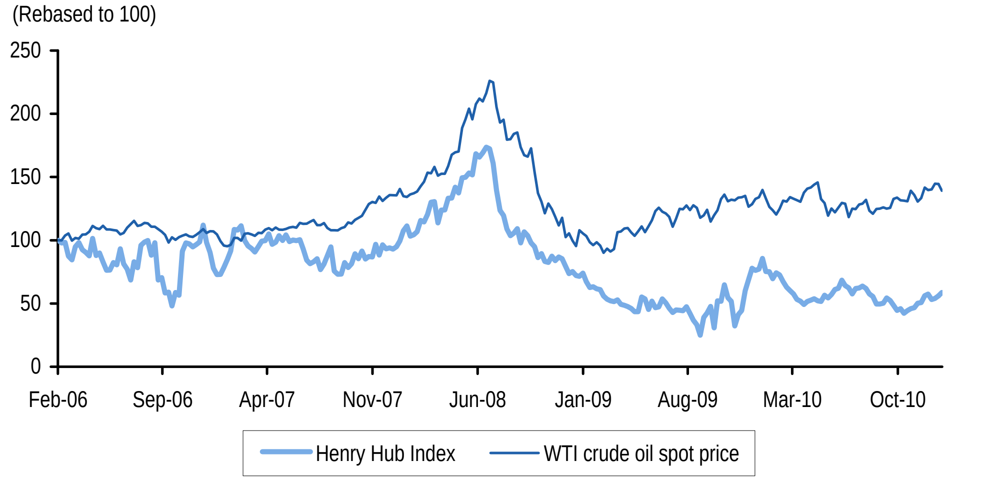
What could surprise on the positive side?

Ramp-up of non-conventional gas in the US may lead to supply being rerouted to China

The ramp-up of non-conventional gas (shale gas and coal-bed methane [CBM]) in the US has led to increasing public concerns about the viability of natural gas. This, coupled with depressed industrial demand, has resulted in the Henry Hub price index underperforming crude-oil prices substantially since the peak in 2008. The risks of this include a re-routing of some of the LNG shipments to China, a rising major consumer of gas. If this happens, we may see upside to the gas supply and therefore potential top-line surprises for the city gas companies. However, we do not believe that an increase in supply will signal any encouraging policy direction in terms of reducing the ROEs of the downstream players.

The Henry Hub gas price has underperformed the crude-oil price

Price trend of Henry Hub gas and WTI crude-oil price



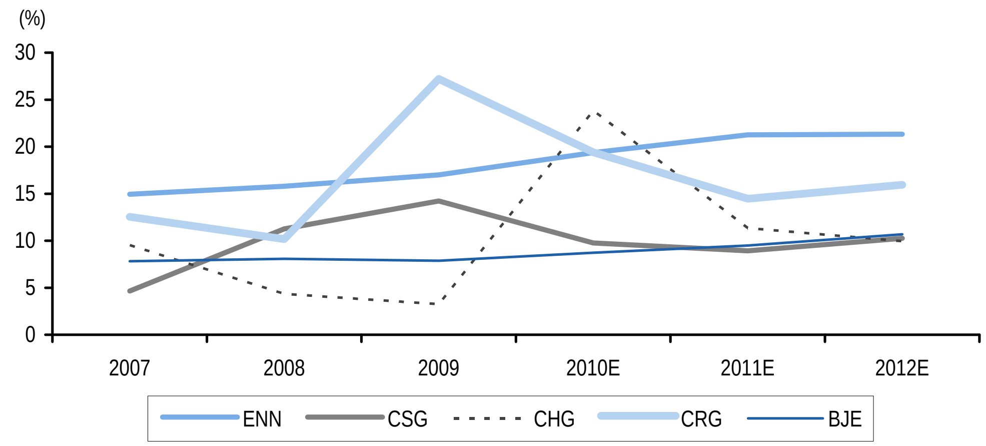
Source: US National Oceanic & Atmospheric Administration

Return and cash flow are important

With utilities companies, we believe that a large part of the value is created through rising ROE and improving free cash flow. Looking at ROE, the five companies stand in two extreme camps, with ENN and CRG offering more than a 15% ROE by 2012 (based on our forecasts), while CSG, CHG and BJE hover around 10%.

Only ENN and CRG offer attractive ROEs

ROE trend of gas utilities companies



Source: Company, Daiwa forecasts
Note: CHG has a March year-end, so 2007-12E refers to FY08-13E

More focused gas model brings in higher return

Our DuPont analysis shows that with comparable asset leverage, ENN and CRG have performed much better than their three peers in terms of net-profit margin and asset-turnover ratio over the past three years. We believe that a lot of the differences are due to the focused nature of their business models, whereby returns are much lower for BJE's brewery and toll-road business, CHG's LPG segment and CSG's wind farm business. Between ENN and CRG, the former enjoys a higher net margin mainly because the company has entered into a quasi-organic cycle, whereby fixed costs do not rise as quickly as revenue, especially following stability of depreciation expenses. On the other hand, CRG's fixed costs have continued to increase following asset acquisitions and parent injections.

DuPont analysis of gas companies' ROEs

	2007	2008	2009	2010E	2011E	2012E
ROE (%)						
ENN	14.9	15.8	17.0	19.4	21.3	21.6
CSG	4.6	11.3	14.2	9.8	8.9	10.2
CHG	9.5	4.3	3.3	23.8	11.3	9.9
CRG	12.5	10.2	27.2	19.4	14.5	15.9
BJE	7.8	8.1	7.9	8.4	9.5	10.7
Net profit margin (%)						
ENN	8.8	7.6	9.5	10.9	11.2	10.9
CSG	4.1	8.5	11.0	12.4	12.0	11.0
CHG	16.2	4.7	1.6	8.6	5.0	5.0
CRG	6.5	8.8	11.8	10.2	9.1	9.1
BJE	12.7	11.6	9.9	8.4	8.1	8.8
Asset turnover (%)						
ENN	51.0	60.9	53.8	55.0	61.0	67.2
CSG	32.8	34.1	30.8	25.7	24.5	26.1
CHG	20.0	27.4	43.0	49.7	59.5	66.3
CRG	66.8	44.6	57.2	63.9	69.8	70.8
BJE	35.2	40.7	43.7	50.0	55.6	58.6
Asset to equity (x)						
ENN	3.3	3.4	3.3	3.2	3.1	2.9
CSG	3.5	3.9	4.2	3.1	3.0	3.6
CHG	2.9	3.4	4.6	5.6	3.8	3.0
CRG	2.9	2.6	4.0	3.0	2.3	2.5
BJE	1.7	1.7	1.8	2.0	2.1	2.1

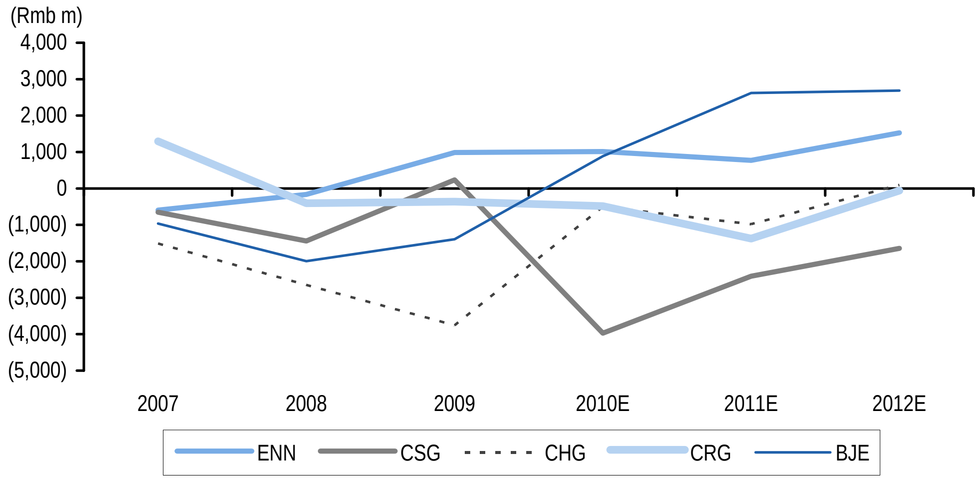
Source: Company, Daiwa forecasts;
Note: CHG has a March year-end, so 2007-12E refers to FY08-13E

Cash flow is king

More focused gas model brings in higher returns

ENN provides a good case of cash-flow harvesting, whereby free cash flow turned positive in 2009 and should be on a rising trend in the future. BJE's gas business also runs on steady free cash flow, while we think CRG and CHG may see a turning-point by 2012. Greater cash flow will allow ENN to boost its net-profit growth through deleveraging while raising the chances of a dividend payout. We forecast ENN to increase its payout ratio from 25% in 2009 to up to 35% in 2012, while we forecast CRG to increase its ratio to up to 24% by 2012. BJE is likely to maintain its ratio at 31% up to 2012, while we believe CHG and CRG have limited room to increase their ratios given the capex pressure they face.

Free cash flow of gas utilities companies



Source: Company, Daiwa forecasts
Note: *BJE, gas business only; CHG has a March year-end, so 2007-12E refers to FY08-13E

Dividend-payout ratios

(%)	2007	2008	2009	2010E	2011E	2012E
ENN	25.0	25.0	25.0	25.0	30.0	35.0
CSG	0.0	0.0	101.6	10.0	10.0	10.0
CHG	19.2	33.5	45.0	6.5	10.0	10.0
CRG	7.0	19.1	14.5	17.5	20.5	23.5
BJE	48.9	32.4	30.8	30.8	30.8	30.8

Source: Companies, Daiwa forecasts; CHG has a March year end, so 2007-12E refers to FY08-13E

Average net gearing to be reduced over the next few years

More focused gas model brings higher returns

On the back of a slowdown in new project additions, we forecast the average net-gearing ratio of the gas companies to improve from 109% for 2009 to 64% by 2012. As the only company in a net-cash position, CRG is likely to leverage up for future capex. Although not included in our earnings forecasts, CRG is likely, in our view, to use partial debt finance for the next round of asset injection from the parent company. BJE is unlikely to leverage further, in our view, given the stability of most of its assets. We expect CSG to suffer from rising gearing due to its aggressive expansion in the wind-power business.

Net-gearing ratios

(%)	2007	2008	2009	2010E	2011E	2012E
ENN	90.0	86.4	61.4	44.1	35.9	21.8
CSG	148.2	198.3	200.5	114.0	168.9	200.6
CHG	82.5	136.6	255.9	229.1	80.1	77.2
CRG	7.9	(47.2)	32.2	(25.4)	(1.4)	0.6
BJE	(6.8)	1.4	(3.0)	21.0	23.9	19.1

Source: Companies, Daiwa forecasts; CHG has a March year-end, so 2007-12E refers to FY08-13E

Operating comparison

	2003	2004	2005	2006	2007	2008	2009	2010E	2011E	2012E
Penetration (%)										
ENN Energy	0.0	10.0	16.6	18.9	23.6	27.0	32.4	31.8	37.5	41.5
Suntien Green Energy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China Gas	0.0	9.4	9.0	11.2	16.5	20.6	24.7	30.3	30.5	37.0
CR Gas	0.0	0.0	1.4	29.9	31.8	31.3	22.7	30.3	35.4	39.9
BJ Enterprise	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Connectible population ('000)										
ENN Energy	27.8	34.2	35.0	39.4	40.2	40.3	44.0	54.6	54.6	54.6
Suntien Green Energy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China Gas	0.0	0.0	10.4	19.1	29.9	40.0	46.4	51.1	54.6	54.6
CR Gas	7.4	7.4	26.8	28.9	28.9	35.1	90.6	102.8	144.7	159.7
BJ Enterprise	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Piped gas (% of sales)										
ENN Energy	21.2	29.8	37.3	47.8	45.9	45.4	57.9	69.3	75.3	77.6
Suntien Green Energy					97.3	97.1	95.2	95.6	96.4	97.0
China Gas			25.6	45.8	60.7	66.3	42.4	37.6	44.4	46.0
CR Gas	0.0	0.0	0.0	0.0	21.5	56.5	75.3	72.7	75.1	76.7
BJ Enterprise		94.3	95.0	93.2	97.2	97.6	97.7	98.2	98.5	98.7
Connection fee (% of sales)										
ENN Energy	58.8	57.1	50.2	39.9	33.4	29.3	30.4	28.1	22.6	16.2
Suntien Green Energy					2.7	2.4	2.1	2.0	1.8	1.7
China Gas			71.2	51.8	31.3	24.1	17.8	14.3	12.6	10.8
CR Gas	0.0	0.0	0.0	0.0	3.4	18.5	24.7	27.3	24.9	23.3
BJ Enterprise		1.1	1.0	0.8	0.7	0.5	0.4	0.4	0.3	0.3
LPG (% of sales)										
ENN Energy	18.4	10.4	9.3	8.3	19.0	24.3	10.7	2.0	0.8	0.3
Suntien Green Energy					0.0	0.0	0.0	0.0	0.0	0.0
China Gas			0.0	0.0	0.0	0.0	35.9	45.5	41.0	41.5
CR Gas	0.0	0.0	0.0	0.0	0.4	0.6	0.8	0.5	0.3	0.3
BJ Enterprise		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Piped gas for C&I (%)										
ENN Energy	13.1	17.3	24.9	31.0	34.0	31.9	39.1	41.6	47.0	50.8
Suntien Green Energy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China Gas					38.5	32.4	30.1	32.1	34.0	35.8
CR Gas	0.0	0.0	0.0	0.0	13.5	36.2	46.7	43.1	45.3	47.2
BJ Enterprise		19.3	17.9	17.9	19.6	15.8	13.5	12.7	12.8	12.8
Piped gas for residences (%)										
ENN Energy	8.0	12.6	12.4	15.2	8.7	5.9	8.6	14.9	16.2	15.9
Suntien Green Energy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China Gas					30.0	9.9	6.3	5.4	4.8	4.9
CR Gas	0.0	0.0	0.0	0.0	7.5	19.8	21.8	22.9	24.2	24.3
BJ Enterprise		21.8	21.0	21.4	21.6	16.7	15.5	14.2	13.0	12.0
Piped gas for CNG (%)										
ENN Energy	0.0	0.0	0.0	1.7	3.2	7.7	10.3	12.8	12.1	10.9
Suntien Green Energy	n.a.	n.a.	n.a.	n.a.	8.6	7.5	6.0	5.1	4.8	4.4
China Gas					-7.8	9.2	6.3	6.0	5.6	5.3
CR Gas	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.2	5.2	4.9
BJ Enterprise		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross margin (%)										
ENN Energy	42.7	40.9	37.5	34.8	30.4	27.2	30.2	31.0	28.5	26.3
Suntien Green Energy (gas)					14.3	21.7	22.4	20.1	17.7	16.3
China Gas		43.5	60.1	48.4	33.9	29.2	22.6	20.7	19.5	18.9
CR Gas	23.8	27.6	26.6	24.6	25.6	29.9	31.0	28.6	27.9	27.5
BJ Enterprise (gas)					18.3	14.2	15.1	14.2	12.3	12.1
Operating margin (%)										
ENN Energy	26.5	24.9	26.0	20.0	18.1	15.7	19.3	18.9	18.8	17.9
Suntien Green Energy (gas)					9.9	18.0	18.9	18.6	16.4	15.3
China Gas		30.5	35.1	27.3	24.4	18.8	13.5	13.1	9.7	9.4
CR Gas	11.3	14.6	14.0	10.4	10.1	13.0	17.6	17.4	16.2	16.3
BJ Enterprise (gas)					10.0	7.8	8.4	7.6	5.7	5.5
Pre-tax margin (%)										
ENN Energy	22.7	21.7	20.9	15.7	14.2	13.7	16.4	18.4	18.8	18.3
Suntien Green Energy (gas)					5.9	15.5	17.7	17.7	15.8	14.8
China Gas		34.7	32.5	29.0	20.2	7.0	3.2	11.5	6.8	7.2
CR Gas	11.7	15.6	14.2	9.1	8.1	12.2	16.7	15.5	14.7	14.8
BJ Enterprise (gas)					13.2	16.4	17.2	15.3	14.8	15.2
Net margin (%)										
ENN Energy	20.9	17.4	14.8	11.2	8.8	7.6	9.5	10.9	11.2	10.9
Suntien Green Energy (gas)					2.5	8.3	9.7	9.8	8.2	7.4
China Gas		24.4	23.5	24.9	16.2	4.7	1.6	8.6	5.0	5.0
CR Gas	9.2	11.6	10.3	6.7	6.5	8.8	11.8	10.2	9.1	9.1
BJ Enterprise (gas)						14.6	15.3	13.4	13.0	13.3

Source: Companies, Daiwa forecasts

Who else is in the value chain?

Kunlun Energy (135 HK)

Kunlun Energy has a blended oil and gas model

Kunlun Energy (Not rated), is a subsidiary of PetroChina. Its principal activities are the exploration and development of oil and gas fields. It has also invested aggressively in downstream city gas distribution businesses and is committed to becoming the largest company engaged in the gas business in China. On 31 December 2010, the company successfully acquired from its parent a 60% interest in PetroChina Beijing Gas Pipeline Co. (Not listed), which controls Beijing-Shaanxi Pipeline I, II &III. Its parent, PetroChina, controls major gas pipelines including West-East Pipeline I & II and Zhong-Wu Pipeline in China. Exploration and production and natural-gas distribution accounted for 60% and 40% of the company's revenue, respectively, for 1H10.

Hong Kong & China Gas (3 HK)

Hong Kong & China Gas is one of the largest players in China

Founded in 1862, Hong Kong & China Gas (Not rated) was Hong Kong's first public utility entity and has now grown into one of the largest energy suppliers in Hong Kong. After entering the gas business in Mainland China in 1994, the company had 114 projects across 20 provinces/autonomous regions/municipalities as at 30 June 2010, among which key cities include Shenzhen, Nanjing, Wuhan and Xi'an. It also has investments in upstream and midstream projects including Shanxi coal bed methane. Gas, water and energy-related business accounted for 98% of its 1H10 revenue, of which 62.4% and 37.6% came from Hong Kong and Mainland China, respectively.

Towngas China (1083 HK)

Towngas China is a subsidiary of Hong Kong & China Gas

A subsidiary of Hong Kong & China Gas, Towngas China (Not rated) is engaged principally in the natural-gas distribution business in Mainland China. The company had 57 projects across 12 provinces/autonomous regions/municipalities as at 30 June 2010. Piped gas sales and gas pipeline construction accounted for 79% and 21% of the company's revenue for 1H10, respectively.

China Oil and Gas (603 HK)

China Oil and Gas is a partner in gas with Kunlun Energy

China Oil and Gas (Not rated) is engaged principally in the piped city gas business, pipeline design and construction, as well as the transport, distribution and sales of CNG and LNG. The group had established 49 projects in 24 cities, five key areas (North Western district, Yellow River Delta district, Xianggan district, Guangdong district, and Yangtze Delta district) as at 30 June 2010. Sales of piped gas and gas pipeline construction & connection accounted for 86% and 14% of the company's 1H10 revenue, respectively. Besides its natural-gas business, China Oil and Gas has also successfully entered into an exclusive strategic co-operation agreement with PetroChina Coalbed Methane Co., for the purpose of using coalbed methane for CNG production.

Zhengzhou Gas (3928 HK)

Zhengzhou Gas is a subsidiary of CRG

Zhengzhou Gas (Not rated) is engaged principally in the sale of natural gas, pressure control equipment and gas appliances, the construction of gas pipelines and the provision of gas pipelines renovation services with a focus in Zhengzhou, Henan. On 8 October 2010, 56.87% of Zhengzhou Gas's shares were held by a joint venture 80% owned by CRG. Sales of natural gas and gas pipeline connection and construction accounted for 76% and 24% of the company's 1H10 revenue, respectively.

Tian Lun Gas (1600 HK)

Tian Lun Gas is a regional player in Henan

Tian Lun Gas (Not rated) is engaged principally in gas pipeline connections operation and sales of piped gas in Henan Province. The company was listed on Hong Kong Stock Exchange in November 2010. The revenue generated from gas pipeline connection and sales of piped gas accounted for 51% and 44% of the company's total 1H10 revenue, respectively.

Shenzhen Gas (601139 CH)

Shenzhen Gas is a regional player in Shenzhen

Founded in 1982, Shenzhen Gas (Not rated) is engaged principally in sales and distribution of piped gas and LPG, as well as pipeline connection and construction in Shenzhen and other parts of China. The revenue generated from sales of piped gas, wholesale of petroleum gas, and sales of LPG accounted for 30%, 55% and 15% of the company's total 1H10 revenue, respectively.

CIMC Enric (3899 CH)

CIMC Enric makes gas-compressing machinery

CIMC Enric (Not rated) is engaged principally in the design, development, manufacturing, engineering and sales of, and the provision of technical maintenance services for, a wide spectrum of transportation, storage and processing equipment that is widely used in the energy, chemical and liquid food industries. The company's key products include CNG trailers, LNG trailers and tanks, LPG tank trucks and tanks, natural-gas compressors for energy transportation and storage, and other tanks and trailers for chemical and liquid food uses. The revenue generated from its energy, chemical and liquid food segments accounted for 61%, 26% and 13% of the company's total 1H10 revenue, respectively.

Shengli Oil & Gas Pipe (1080 HK)

Shengli Oil & Gas Pipe is a pipeline constructor

Shengli Oil & Gas Pipe (Not rated) is engaged principally in manufacturing, processing and sales of welded steel pipes for oil and gas pipelines and other construction and manufacturing applications. The company's two main segments include a spiral submerged arc welded pipe operation (SSAW pipes business) and a cold-formed section steel operation (cold-formed section steel business). The company is one of the few suppliers in China of SSAW pipes that meet the high pressure and large diameter requirements for the transportation of crude oil, refined petroleum products and natural gas over long distances. Utilizing welding technologies, it also produces cold-formed section steel. The revenue generated by the two segments accounted for 91% and 9% of the company's total 1H10 revenue, respectively.

ENN Energy (2688 HK)

Utilities: China

6-mth rating: 1

Target price: HK$30.00

Share price: HK$24.15 (3 Mar)

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Initiation: quality at a good price

A *Buy* rating on the experienced and proven player

- We initiate coverage of ENN with **1** (*Buy*) rating and DCF-based six-month target price of HK$30.0. With a good operating track record (a 1998-2009 net-profit CAGR of 50%), we forecast a 2010-12 net-profit CAGR of 22%, based on our assumption of sustainable earnings growth for its gas projects and the newly launched energy-saving services products.

A good balance of catalysts and risks

- ENN's venture into energy-saving services makes strategic sense to us, as this area will likely receive strong policy support during the period covered by China's *12th Five Year Plan*, for which we estimate a Rmb300bn industry size for services products alone. We believe the acquisition of overseas gas projects could provide an additional boost for earnings, but that this is likely to be small in the near term. Also, we expect the benefit of China's incremental supply to outweigh the risks such as unexpected reduction in connection fees and increased difficulty with cost pass-through.

Superior ROE and strong cash flow support appeal

- Besides its earnings transparency and visibility, we believe that ENN's investment appeal should be supported by its strong ROE, which we forecast to reach 22% by 2012. ENN is also one of the few gas companies with positive free cash flow, which should help to reduce its debt and enhance the dividend payout. As a result, we expect the current valuation rerating to continue.

Reuters code		2688.HK

Market data

HSI		23,122.42
Market cap	(US$bn)	3.26
EV	(US$bn; 10E)	3.69
3-mth avg daily T/O	(US$m)	6.21
Shares outstanding	(m)	1,050
Free float	(%)	69.0
Major shareholder		Xinao Group Intl Investment Ltd. (31.1%)
Exchange rate	Rmb/US$	6.572
	HK$/US$	7.788

Performance (%)*	1M	3M	6M
Absolute	(0.2)	(3.2)	15.8
Relative	3.1	(2.4)	5.6

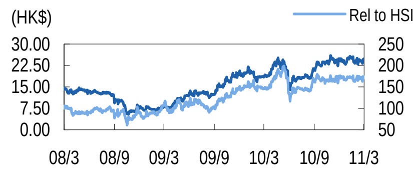
Source: Daiwa
Note: *Relative to HSI

Investment indicators

		2010E	2011E	2012E
PER	(x)	19.8	15.6	13.3
PCFR	(x)	9.6	10.4	7.6
EV/EBITDA	(x)	10.6	9.1	8.0
PBR	(x)	3.6	3.1	2.7
Dividend yield	(%)	1.3	1.9	2.6
ROE	(%)	19.4	21.3	21.6
ROA	(%)	6.0	6.8	7.3
Net debt equity	(%)	44.1	35.9	21.8

Source: Daiwa forecasts

Price and relative performance



Source: Bloomberg, Daiwa

Income summary

Year to 31 Dec	Revenue (Rmb m)	(%)	EBITDA (Rmb m)	(%)	Net profit (Rmb m)	(%)	EPS (Rmb)	(%)	*EPS (HK$)*	CFPS (Rmb)	DPS (Rmb)	*DPS (HK$)*
2008	8,266	*43.6*	1,583	*28.4*	631	*24.3*	0.625	*21.8*	*0.741*	1.249	0.156	*0.185*
2009	8,413	*1.8*	1,996	*26.1*	801	*26.9*	0.775	*24.0*	*0.919*	2.516	0.194	*0.230*
2010E	9,892	*17.6*	2,278	*14.1*	1,078	*34.7*	1.027	*32.5*	*1.218*	2.121	0.257	*0.304*
2011E	12,280	*24.1*	2,686	*17.9*	1,372	*27.2*	1.306	*27.2*	*1.549*	1.958	0.392	*0.465*
2012E	14,748	*20.1*	3,034	*12.9*	1,606	*17.1*	1.530	*17.1*	*1.814*	2.678	0.535	*0.635*

Source: Company, Daiwa forecasts

Company background

Founded in 1989, ENN Energy is engaged principally in investing in, and the operation and management of, gas-pipeline infrastructure and the sale and the distribution of piped and bottled gas in more than 80 cities in the PRC.

ENN Energy – financial summary

Profit and loss (Rmb m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Sales of piped gas	3,095	4,078	5,521	7,508	9,369
Gas connection	2,422	2,554	2,783	2,771	2,393
Others	2,749	1,782	1,588	2,000	2,986
Total revenue	8,266	8,413	9,892	12,280	14,748
Other income	184	84	86	103	115
COGS	(6,019)	(5,875)	(6,827)	(8,779)	(10,864)
SG&A	(847)	(625)	(872)	(917)	(964)
Other op. expenses	(313)	(391)	(432)	(469)	(513)
EBIT	1,270	1,606	1,847	2,218	2,521
Net-interest inc./(exp.)	(351)	(308)	(296)	(230)	(189)
Assoc/forex/extraord./others	211	83	265	323	373
Pre-tax profit	1,131	1,381	1,816	2,311	2,706
Tax	(260)	(304)	(412)	(524)	(614)
Min. int./pref. div./others	(240)	(276)	(326)	(415)	(486)
Net profit (reported)	631	801	1,078	1,372	1,606
Net profit (adj.)	631	801	1,078	1,372	1,606
EPS (reported) (Rmb)	0.625	0.775	1.027	1.306	1.530
EPS (adj.) (Rmb)	0.625	0.775	1.027	1.306	1.530
DPS (Rmb)	0.156	0.194	0.257	0.392	0.535
EBIT (adj.)	1,270	1,606	1,847	2,218	2,521
EBITDA (adj.)	1,583	1,996	2,278	2,686	3,034

Balance sheet (Rmb m)

As at 31 Dec	2008	2009	2010E	2011E	2012E
Cash & short-term investment	1,725	2,713	3,757	3,579	3,825
Inventory	254	286	332	427	529
Accounts receivable	1,431	1,208	1,475	1,898	2,361
Other current assets	866	547	685	1,015	1,139
Total current assets	4,277	4,754	6,249	6,920	7,854
Fixed assets	7,855	9,092	9,794	10,858	11,879
Goodwill & intangibles	634	622	608	575	542
Other non-current assets	1,731	2,236	2,617	2,617	2,617
Total assets	14,497	16,703	19,269	20,971	22,891
Short-term debt	1,869	1,485	2,171	2,077	1,826
Accounts payable	2,752	2,772	3,183	4,045	4,857
Other current liabilities	732	1,108	1,442	1,478	1,507
Total current liabilities	5,353	5,364	6,797	7,601	8,190
Long-term debt	3,534	4,400	4,221	3,993	3,740
Other non-current liabilities	171	461	638	389	443
Total liabilities	9,058	10,225	11,656	11,983	12,373
Share capital	106	110	110	110	110
Reserves/R.E./others	4,149	5,052	5,861	6,821	7,865
Shareholders' equity	4,256	5,162	5,970	6,931	7,975
Minority interests	1,186	1,316	1,643	2,058	2,543
Total equity & liabilities	14,499	16,703	19,269	20,971	22,891
Net debt/(cash)	3,678	3,172	2,635	2,491	1,741

Cash flow (Rmb m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Profit before tax	1,131	1,381	1,816	2,311	2,706
Depreciation and amortisation	313	391	432	469	513
Tax paid	(260)	(304)	(412)	(524)	(614)
Change in working capital	55	910	45	13	125
Other operational CF items	22	222	346	(213)	82
Cash flow from operations	1,260	2,599	2,227	2,056	2,812
Capex	(1,418)	(1,615)	(1,120)	(1,500)	(1,500)
Net (acquisitions)/disposal	(180)	(289)	(103)	0	0
Other investing CF items	111	(149)	(198)	0	0
Cash flow from investing	(1,487)	(2,053)	(1,421)	(1,500)	(1,500)
Change in debt	349	481	507	(322)	(504)
Net share issues/(repurchases)	47	306	0	0	0
Dividends paid	(158)	(200)	(270)	(411)	(562)
Other financing CF items	20	(145)	0	0	0
Cash flow from financing	258	442	238	(733)	(1,066)
Forex effect/others	0	0	0	0	0
Change in cash	31	988	1,044	(177)	246

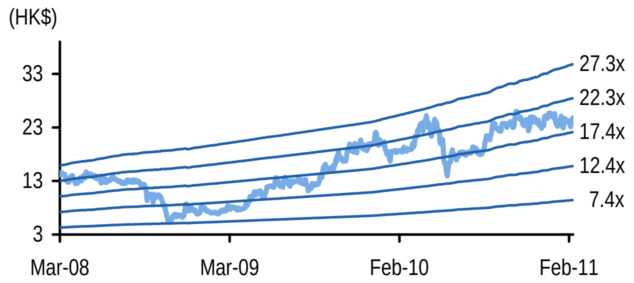
Key ratios

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Sales – YoY %	43.6	1.8	17.6	24.1	20.1
EBITDA (adj.) – YoY %	28.4	26.1	14.1	17.9	12.9
Net profit (adj.) – YoY %	24.3	26.9	34.7	27.2	17.1
EPS (adj.) – YoY %	21.8	24.0	32.5	27.2	17.1
EBITDA margin % (adj.)	19.2	23.7	23.0	21.9	20.6
EBIT margin % (adj.)	15.4	19.1	18.7	18.1	17.1
Net-profit margin % (adj.)	7.6	9.5	10.9	11.2	10.9
ROAE (%)	15.8	17.0	19.4	21.3	21.6
ROAA (%)	4.7	5.1	6.0	6.8	7.3
ROCE (%)	12.4	13.8	14.0	15.3	16.2
ROIC (%)	11.4	13.3	14.4	15.8	16.4
Net debt to equity (%)	86.4	61.4	44.1	35.9	21.8
Effective tax rate (%)	23.0	22.0	22.7	22.7	22.7
Accounts receivable (days)	55.2	57.3	49.5	50.1	52.7
Payables (days)	109.5	119.8	109.9	107.4	110.2
Net interest cover (x)	3.6	5.2	6.2	9.6	13.4
Net dividend payout (%)	25.0	25.0	25.0	30.0	35.0

Key assumptions

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Gas sales volume (m cm)	2,888.9	3,308.5	4,383.9	5,596.9	7,071.5
Gas ASP - retail (Rmb/cm)	2.5	2.5	2.6	2.7	2.7
Gas ASP - CNG (Rmb/cm)	2.3	2.6	2.7	2.8	2.8
Gas purchase cost (Rmb/cm)	1.7	1.7	1.8	1.9	1.9
Revenue contribution – connection fee (%)	29.3%	30.4%	28.1%	22.6%	16.2%
Gas penetration rate for residential households (%)	27.0%	32.4%	31.8%	37.5%	41.5%

PER bands



Source: Company, Daiwa forecasts

Our DCF-based target price is HK$30.0

We value ENN using a DCF

We use a DCF as our primary valuation methodology, given what we see as the company's stable business nature and visibility of future cash flow. Our WACC of 9.2% assumes a cost of equity of 9.3% (a risk-free rate of 3.5%, a market risk premium of 5.8%, and beta of 1.0) and an after-tax cost of debt of 6.5%. Assuming a long-term debt-to-capital ratio of 5% and a terminal growth rate of 3%, we value ENN's existing 88 domestic projects at Rmb27.6bn, and arrive at a six-month target price of HK$30.0.

ENN: DCF valuation

(Rmb m)		FY09	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free rate	3.5%												
Market risk premium	6.0%												
Beta	1.0												
Cost of equity	9.3%												
Cost of debt	6.5%												
% of equity capital	95%												
% of debt capital	5%												
WACC	9.2%												
Growth	3%												
Free cash flow – gas distribution													
EBIT (1-t)	1,164	1,333	1,654	2,037	2,335	2,520	2,857	3,361	3,380	3,485	3,786	4,074	4,510
Plus depreciation	313	391	432	469	513	589	628	662	691	719	746	772	797
Change in working capital	(42)	1,170	151	(236)	178	308	485	367	211	462	273	290	333
Capital expenditure + investments	(1,598)	(1,905)	(1,223)	(1,500)	(1,500)	(1,500)	(1,400)	(1,300)	(1,300)	(1,300)	(1,300)	(1,300)	(1,300)
Free cash flow	(163)	989	1,013	770	1,526	1,917	2,570	3,090	2,982	3,366	3,506	3,836	4,340
Discounted FCF		989	1,013	737	1,338	1,540	1,892	2,084	1,843	1,905	1,818	1,823	1,889
Terminal value	65%												31,634
Firm value	48,503												
Net debt	2,491												
Equity value	46,012												
Less: minority interests	18,405												
Equity value after minority interests	27,607												
No. of shares (m)	1,050												
Six-month target price (HK$)	30.0												

Source: Daiwa forecasts

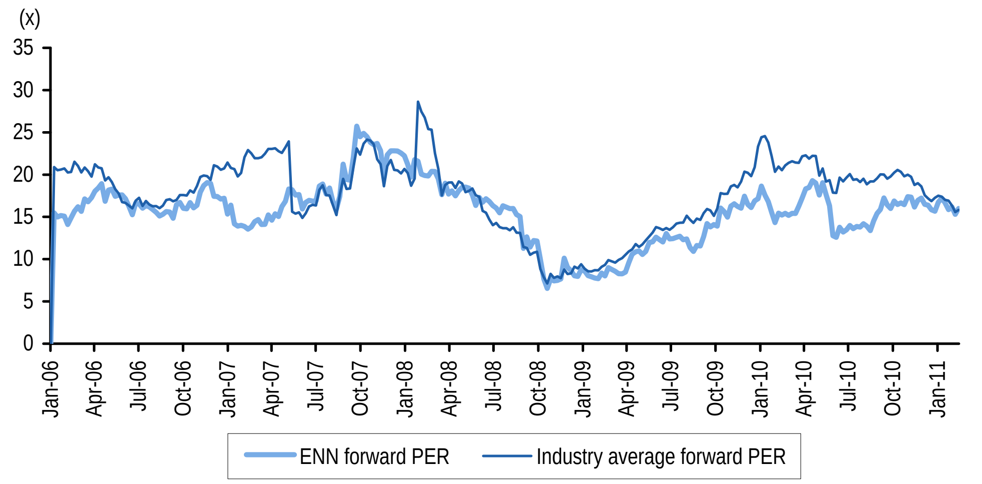
ENN has been trading at a lower valuation than the industry average

ENN has traded at a lower 12-month-forward PER than the industry average for 77% of the past five years

Over the past five years, ENN has traded at a lower 12-month-forward PER than the industry average (CHG, BJE since 2007, CRG since 2009) for 77% of the time. However, a rerating of the city-gas industry, together with an overall market recovery, boosted share-price performances of the industry as well as valuations significantly in 2009. The industry-average forward PER climbed 122% from 9.4x at the beginning of the year to 20.9x by the end of 2009, while that of ENN rose by only 93% to 16.9x over the period. Since the second half of last year, the industry-average 12-month-forward PER has declined from 18x to 16x, due to concerns in the market about the progress with gas cost pass-through, and more recently China Gas's corporate-governance issues. We believe ENN's forward PER (16x currently) is attractive, given what we see as ENN's quality management, ability to deliver strong earnings, and the new earnings-growth driver of energy-saving solution business. Thus, ENN deserves to be re-rated further, in our opinion, and to even trade at a premium to the sector average once again.

ENN deserves to trade at a premium to the industry average, in our view

ENN: 12-month-forward PER versus the industry average



Source: Company, Daiwa forecasts

We see energy-saving solution as a new earnings-growth driver

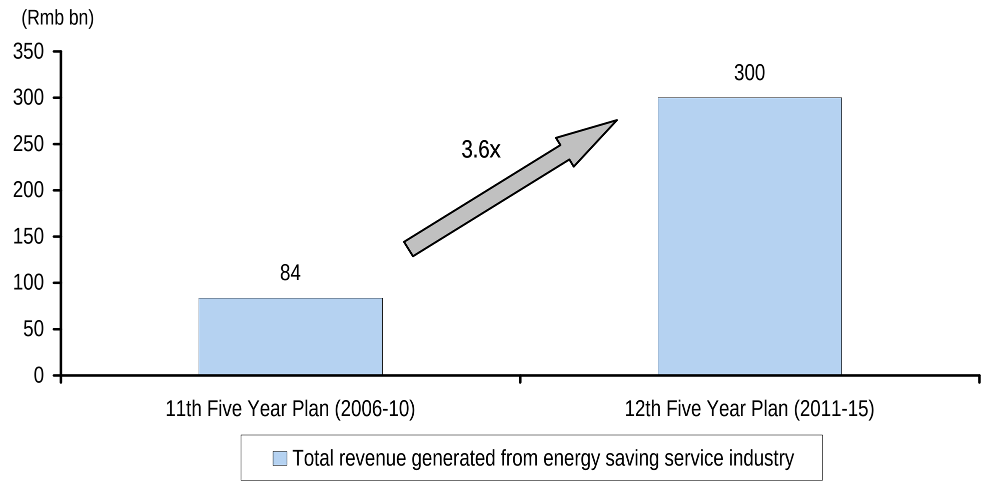
ENN entered the energy-saving solution business in 2009

ENN embarked its clean-energy solution journey in 2009, with the aim of providing a complete set of energy-saving solutions to customers, from diagnosis, design, financing, to construction and operation. The pricing mechanism is to share with customers the economic benefits generated from the energy costs saved. We believe the company breaking into the energy-saving business is likely to benefit from rising investment (with high earnings-growth opportunities) driven by aggressive policy support from the PRC Government during the period covered by the *12th Five Year Plan* (2010-15). Energy-saving and environmental protection is among the seven key industries that China may invest up to Rmb10tn in over the next five years, according to press reports in late 2010.

Energy-saving service industry is likely to be worth Rmb300bn over the next five years

The energy-saving space is made up of three major areas: technology and equipment (rare-earth permanent-magnet power generators, waste-heat collection equipment, and energy-saving monitor systems), products (electric appliances, lighting products, and building materials), and services (eg, contract energy management). During the period covered by the *11th Five Year Plan*, revenue generated from energy-saving services alone totalled Rmb84bn. According to EMCA, the figure is likely to reach Rmb300bn for the period covered by the *12th Five Year Plan*, which would be 3.6 times that during the previous plan period.

Market size of energy-saving service industry in China

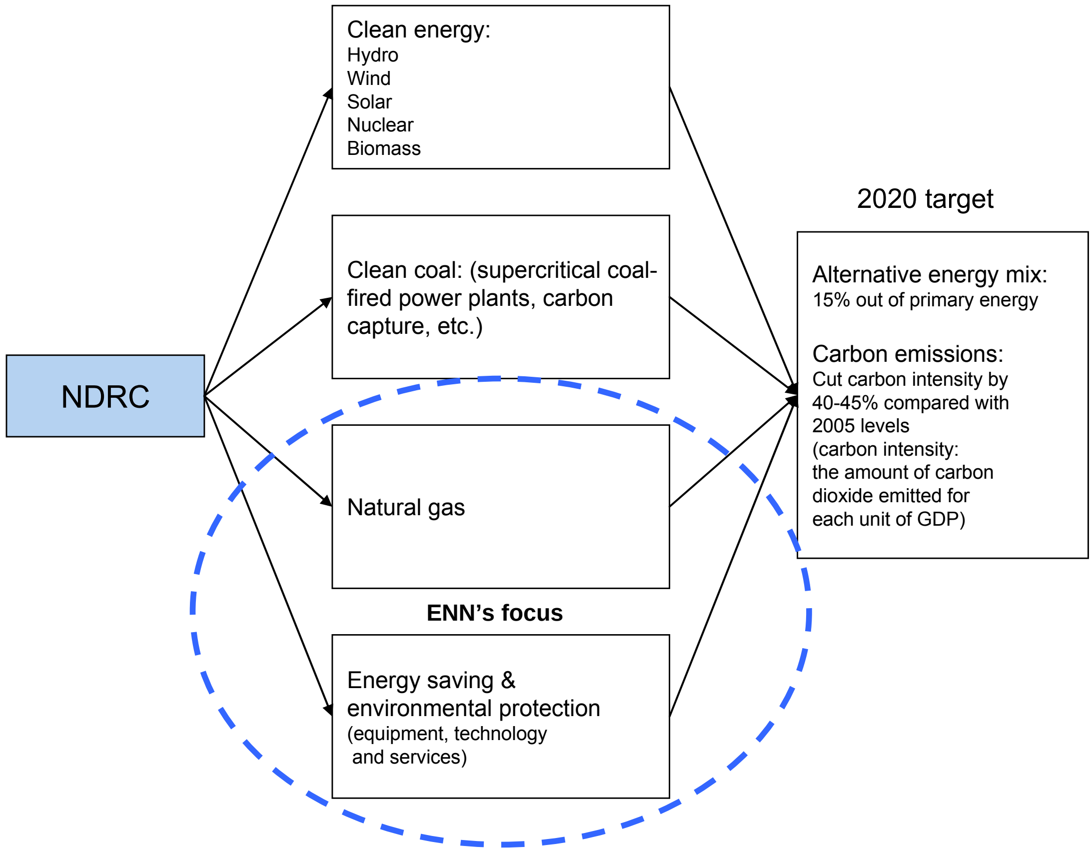


Source: EMCA

We see ENN's business as well positioned to take advantage of China's ambitious 'green' targets

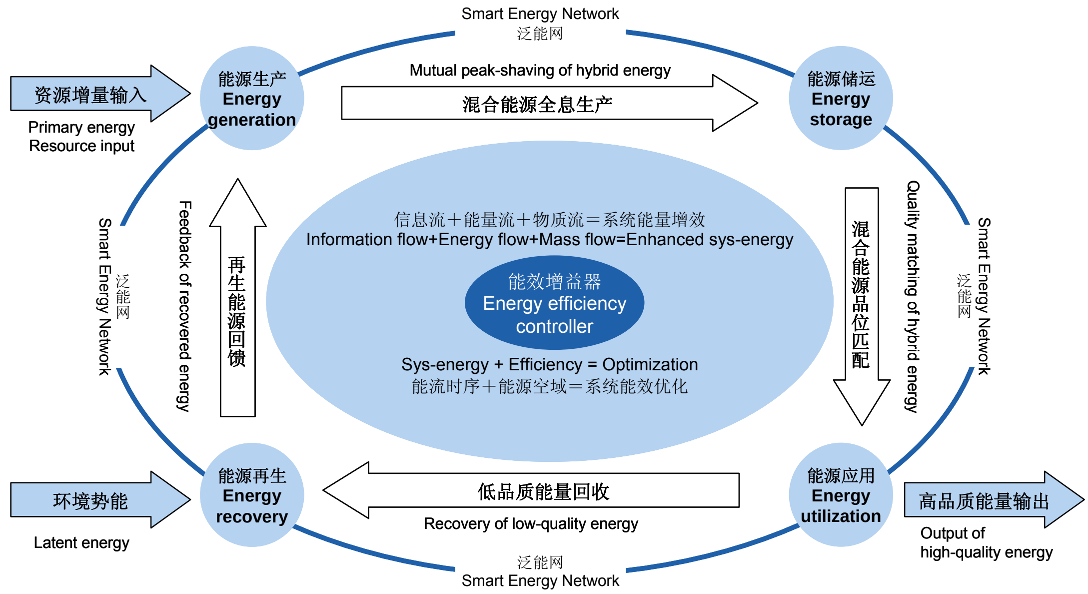
China's aggressively policy goal is to achieve a low-carbon emissions economy, with the carbon intensity (the amount of carbon dioxide emitted for each unit of GDP) reduced by 40-45% in 2020 compared with the 2005 level, and alternative energy sources set to meet 15% of its primary energy consumption requirements by 2020. To achieve these ambitious goals, China plans to develop four major areas: clean energy (hydro-electric, wind, solar, nuclear and biomass), clean coal, natural gas and energy saving & environmental protection. ENN's focus on natural-gas distribution and energy-saving solutions makes it a clear leader in two out of the four government-supported industries, in our view.

ENN: business model positioning in the context of China's energy-efficient targets



Source: Daiwa

ENN: logistics of energy solutions



Source: Company

A proven gas supplier driven by organic growth

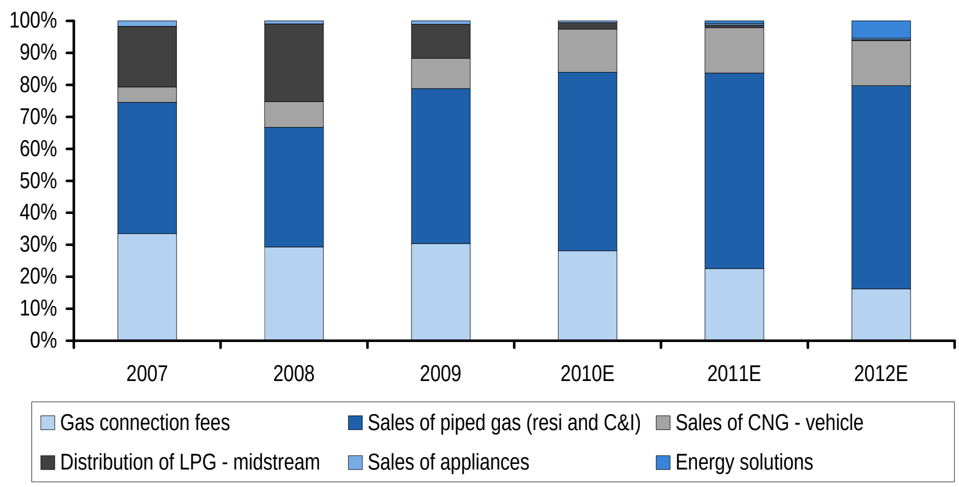
Organic growth will be major earnings driver with small number of project additions

ENN's city-gas portfolio has expanded in size to 88 domestic projects over the past decade, benefiting from the privatisation of the downstream city gas industry in China. As the industry matures and stabilises, we believe the company's earnings in the future will be driven mainly by sustainable organic growth, rather than acquisition-led growth through continued urbanisation, incremental gas supply and higher penetration into different demand groups. However, we still believe that ENN will be able to add a few new projects every year over the next few years.

Piped-gas and CNG sales likely to be the key organic-growth driver

We expect piped-gas and CNG sales to be the key driver of ENN's future organic growth. We forecast these two segments, which accounted for 58% of the company's FY09 revenue, to contribute 78% of the company's overall revenue by 2012. We believe that the revenue contribution from gas-connection fees, on the other hand, is likely to decline over the next three years, given that many of its projects are at the mature stage, with high penetration ratios and few new connections. The revenue contribution from LPG continues to shrink, as ENN has been scaling back its exposure to this business, and plans to exit it completely eventually, according to management.

ENN: revenue mix



Source: Company, Daiwa forecasts

Key assumptions for sales-volume growth and gas pricing

We forecast annual sales volume growth of 25%, 30% and 25% for the residential, C&I, and CNG groups

In line with management's guidance, we forecast the number of household connections to increase on average by 25% annually over the next three years. We have assumed annual increases of 40% for under-penetrated projects (penetration rates below 40%) and 10% for developed projects (penetration rates of 40-80%) and no expansion for mature ones (penetration rates above 80%). We also assume that the number of C&I users increases annually by 30% over the next three years, followed by a slowdown to 20% for the three subsequent years, and finally declining to 10% in five years' time. CNG sales, although not as large as those for the residential and C&I demand groups, are the most profitable, with a gross-profit margin of over 23%. We project the number of CNG stations across the country to reach 290 by the end of 2012.

We have not assumed any further gas-price hikes but ENN's lower exposure to household sales makes it less vulnerable to price hikes than its peers

After incorporating a 15% price increase in June 2010, we have not factored any further price hikes into our forecasts, given the currently high-inflation environment in China. The dollar profit per unit is kept unchanged, given the full cost pass-through scheme in place. We expect the gross-profit margin, however, to decline for 2011 and 2012 due to a higher average-selling-price base. As discussed in the industry section, we believe ENN's lower exposure to household sales makes its business model safer compared with those of CRG and CHG.

ENN: key assumptions

	2009	2010E	2011E	2012E
Residential				
Connectable household growth (organic) %	0.0	0.0	0.0	0.0
Connected household growth (%)				
- fast (penetration<40%)	40.0	40.0	40.0	40.0
- normal (40%≤penetration≤80%)	10.0	10.0	10.0	10.0
- slow (penetration>80%)	0.0	0.0	0.0	0.0
Household penetration ratio (%)	32.4	31.8	37.5	41.5
C&I				
Installed capacity growth (%)	20.0	30.0	30.0	30.0
CNG – vehicle				
No. of CNG stations at year end	162	200	250	290
Tariff				
Citygate price change (%)	0.0	15.0	0.0	0.0
Residential tariff (Rmb/m^3) (before VAT)	2.3	2.4	2.5	2.5
C&I tariff (Rmb/m^3) (before VAT)	2.5	2.6	2.8	2.8
CNG tariff (Rmb/m^3) (before VAT)	2.9	2.7	2.8	2.8
Connection-fee change (%)	0.0	0.0	0.0	(3.0)
Gross-profit margin (%)				
Residential piped gas	16.1	15.2	14.5	14.5
C&I piped gas	23.2	22.0	21.0	21.0
CNG for vehicles	23.0	24.5	23.4	23.4

Source: Company, Daiwa forecasts

Revenue, gross-profit and gross-margin breakdown

	2009	2010E	2011E	2012E
Revenue (Rmb m)				
Gas connection fees	2,554	2,783	2,771	2,393
Sales of piped gas (residential and C&I)	4,078	5,521	7,508	9,369
Sales of CNG	798	1,333	1,739	2,072
Distribution of LPG - midstream	897	198	99	50
Sales of appliances	87	56	62	65
Energy solutions	0	0	100	800
Total	**8,413**	**9,892**	**12,280**	**14,748**
Revenue mix (%)				
Gas connection fees	30.4	28.1	22.6	16.2
Sales of piped gas (residential and C&I)	48.5	55.8	61.1	63.5
Sales of CNG	9.5	13.5	14.2	14.0
Distribution of LPG - midstream	10.7	2.0	0.8	0.3
Sales of appliances	1.0	0.6	0.5	0.4
Energy solutions	0.0	0.0	0.8	5.4
Total	**100.0**	**100.0**	**100.0**	**100.0**
Gross profit (Rmb m)				
Gas connection fees	1,459	1,590	1,584	1,367
Sales of piped gas (residential and C&I)	874	1,134	1,477	1,858
Sales of CNG	183	327	407	485
Distribution of LPG - midstream	4	2	1	0
Sales of appliances	17	11	12	13
Energy solutions	0	0	20	160
Total	**2,538**	**3,065**	**3,501**	**3,884**
Gross margin (%)				
Gas connection fees	57.1	57.1	57.1	57.1
Sales of piped gas (residential and C&I)	21.4	20.5	19.7	19.8
Sales of CNG	23.0	24.5	23.4	23.4
Distribution of LPG - midstream	0.4	1.0	1.0	1.0
Sales of appliances	19.6	20.0	20.0	20.0
Energy solutions	0.0	20.0	20.0	20.0
Total	**30.2**	**31.0**	**28.5**	**26.3**

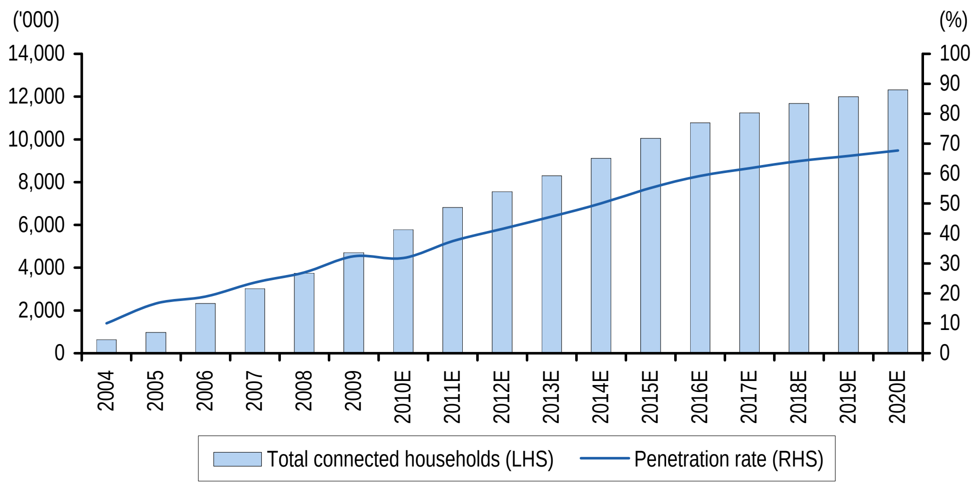
Source: Company, Daiwa forecasts

Piped-gas sales likely to be the key earnings-growth driver

We forecast ENN's total number of households connected to increase from 4.7m in 2009 to 7.6m by the end of 2012. Meanwhile, we forecast its household penetration rate to improve from around the 32% level at the end of 2010 to about 42% by 2012, and eventually to reach a mature level of around 70%. We have included only existing projects (not including those in Vietnam) in our forecasts, but believe the company could acquire 2-3 projects a year in the future.

We forecast the household penetration rate to reach 70% over the next decade

ENN: household connections and penetration rate



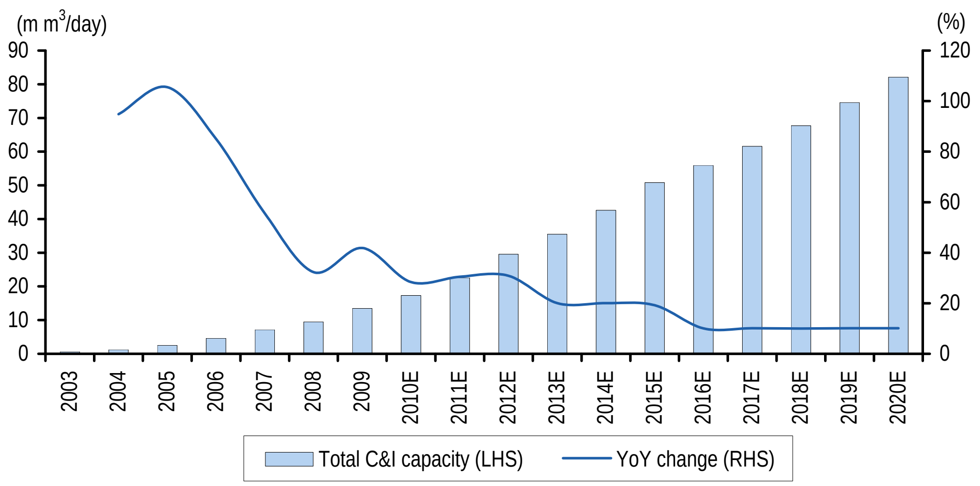
Source: Company, Daiwa forecasts

A higher C&I mix would improve ENN's profitability

ENN's major industrial customers include the building-material, glass-making, and petrochemical industries. We expect the C&I's share of total gas sales volume to rise from 73% in 2009 to 75% by 2012, and further to 84% in another decade. We believe this increase is likely to improve ENN's profitability and reduce the risk of a margin squeeze given this source's higher gross-profit margin and more flexible procedure for cost pass-through compared with residential households, for which a local hearing must be conducted for any price rise, and is often easily delayed in certain provinces.

C&I capacity growth likely to slow to 10% per year over the long run

Total C&I capacity and growth rate



Source: Company, Daiwa forecasts

ENN: gas sales

	FY07	FY08	FY09	FY10E	FY11E	FY12E
Volume (m m^3)						
Residential	356	421	520	723	852	945
C&I	1,777	2,151	2,420	3,106	4,054	5,305
CNG	154	317	369	554	690	822
Total	2,287	2,889	3,309	4,384	5,597	7,072
Volume mix (%)						
Residential	15.6	14.6	15.7	16.5	15.2	13.4
C&I	77.7	74.5	73.1	70.9	72.4	75.0
CNG	6.7	11.0	11.1	12.6	12.3	11.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Revenue (Rmb m)						
Residential	502	485	726	1,203	1,507	1,655
C&I	1,957	2,633	3,286	4,318	6,001	7,713
CNG	182	639	863	1,333	1,739	2,072
Total	2,641	3,756	4,875	6,854	9,247	11,440

Source: Company, Daiwa forecasts

Benefitting from incremental gas supply

We see ENN as a key beneficiary of incremental gas supply

We see ENN as one the major beneficiaries of the newly ramped up gas supply coming from *Shaanxi-Beijing III*, the *Sichuan-East* expansion, *West-East II Phase 2*, as well as the three new LNG terminals. We estimate the key provinces and municipal cities benefiting (including Beijing, Hebei, Shanxi, Shaanxi, Shanghai, Jiangsu, Zhejiang, Anhui, Hubei, Jiangxi, Henan, Hunan, Guangdong, Guangxi, Fujian and Liaoning) account for 85% of ENN's total piped-gas sales.

Provinces and players to benefit from incremental gas supply

	Provinces to benefit	ENN	CHG*	CRG	CSG	BJE
Shaanxi-Beijing III	Beijing, Hebei, Shanxi, Shaanxi	Beijing (2%), Hebei (9%)	Hebei (2%)	-	Hebei (100%)	Beijing (~100%)
Sichuan-East	Shanghai, Jiangsu, Zhejiang, Anhui, Hubei, Jiangxi	Jiangsu (13%), Zhejiang (6%), Anhui (7%)	Jiangsu (7%), Zhejiang (1%), Anhui (10%), Hubei (7%)	Jiangsu (18%), Zhejiang (1%), Hubei (4%)	-	-
West-East Pipeline II	Henan, Hubei, Jiangxi, Hunan, Guangdong, Guangxi, Zhejiang, Shanghai, Jiangsu, Anhui	Henan (10%), Hunan (20%), Guangdong (10%), Guangxi (1%), Zhejiang (6%), Jiangsu (13%), Anhui (7%)	Hubei (7%), Hunan (1%), Guangdong (1%), Guangxi (8%), Zhejiang (1%), Jiangsu (7%), Anhui (10%)	Hubei (4%), Zhejiang (1%), Jiangsu (18%)	-	-
Putian LNG	Fujian	Fujian (6%)	Fujian (4%)		-	-
Dalian LNG	Liaoning	Liaoning (1%)	Liaoning (6%)		-	-
Rudong LNG	Jiangsu	Jiangsu (13%)	Jiangsu (7%)	Jiangsu (18%)	-	-
Total exposure		85%	47%	23%	100%	~100%

Source: Daiwa
Note: *CHG's exposure is based on connected households, not gas-sales volume

Another way to illustrate the incremental benefit for companies like ENN is to look at the rise in volume signed under take-or-pay agreements. Over the past few years, ENN has relied on the *W-E No.1 Pipeline*, the *Zhong-wu Pipeline*, two LNG terminals and CNOOC for take-or-pay contracts, but we expect further volume growth with the newly-launched pipelines starting in 2011.

ENN: annual take-or-pay contracts for natural gas (m m^3)

	2007	2008	2009	2010
W-E No. 1 Pipeline	390	420	575	645
Zhong-wu Pipeline	339	505	535	580
LNG terminal	198	206	359	518
CNOOC offshore	60	60	80	104
Total take-or-pay	987	1,191	1,549	1,847

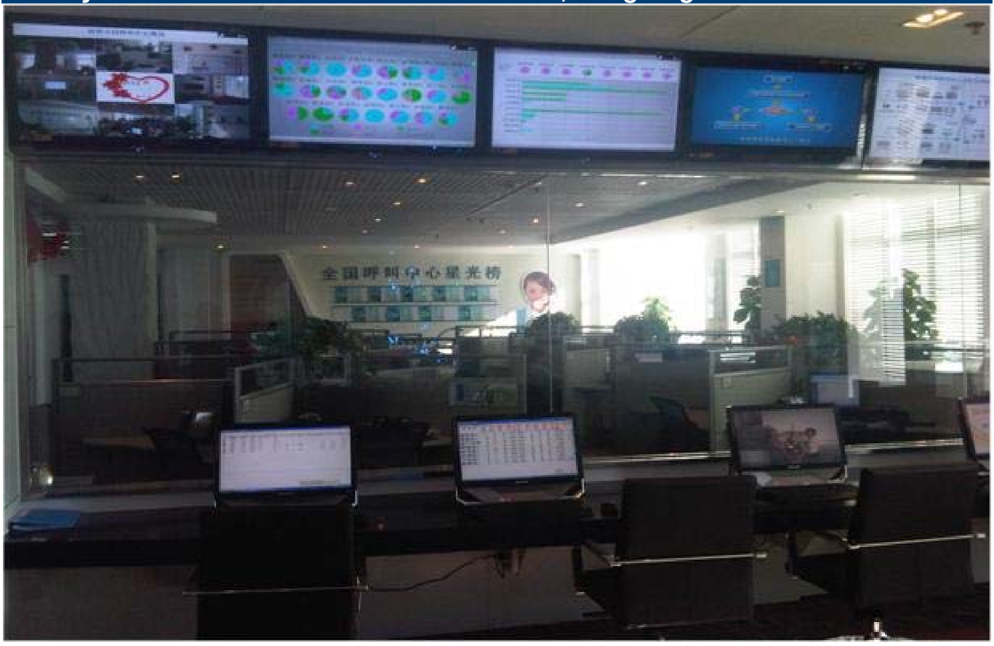
Source: Company

Innovation in services

Customer service centres ensure quality service

We see management quality as the key contributing factor to the high returns that the company has achieved. Management has strived to improve the company's service quality over the years. During our recent visit to the company's headquarters in Langfang, in Hebei Province, in January 2011, we visited its newly-established customer hotline services centre, where over 20 operators work shifts dealing with customer enquiries, with each responsible for 2-3 project cities. The control and operation system, developed jointly with IBM (IBM US, US$161.83, 2), enables operators to generate online customer requirement sheets that can be passed on to dispatch centres for instant repair and maintenance arrangements, followed by the operators' calling back customers for feedback. The system also shows real-time workloads of each project city, and distributes personnel accordingly. ENN has now over 10 such customer-service centres in China, providing quick responses and quality services to customers.

Newly established customer hotline centre, Langfang



Source: Daiwa

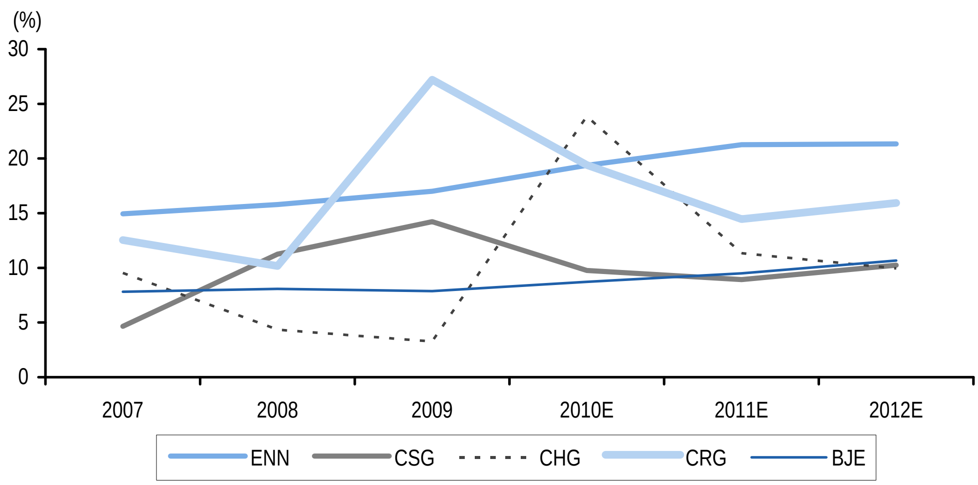
Quality track record and strong financial position

We forecast ENN's ROE to increase further over the next few years

We forecast ENN's ROE to continue to improve from 17% in 2009 to 21.6% by 2012. Our Dupont analysis indicates that ENN's superior ROE to that of its peers is related more to its higher profit margin and asset turnover than the use of leverage.

Only ENN and CRG offer attractive ROEs, in our opinion

ROEs for gas utilities companies



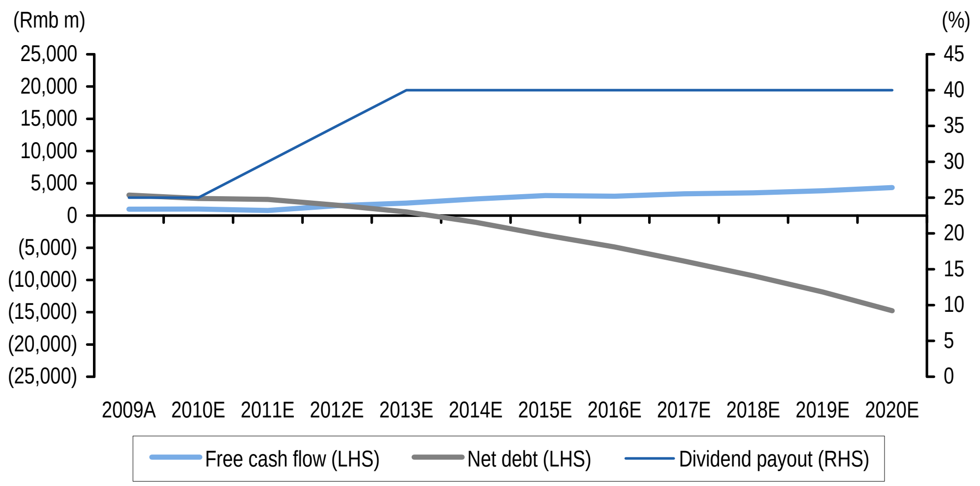
Source: Company, Daiwa forecasts;
Note: CHG has a March year-end, so 2007-12E refers to FY08-13E

The first gas company among its peers to achieve positive free cash flow

The company has been generating positive free cash flow since 1H09 (the first among its peers), and we expect this to increase over the next decade. We expect the net gearing ratio, at around the 61% level in 2009, to decline gradually as the company moves to the mature stage, and less capital is needed for project acquisitions. We forecast the company to be in a net-cash position in 2014. It has been paying out a quarter of its earnings annually to shareholders over the past three years, and we would expect the payout ratio to rise as its free cash flow increases.

We forecast positive free cash flow and dividends to rise; leverage to decline

ENN: free cash flow, net debt and dividend payout ratio



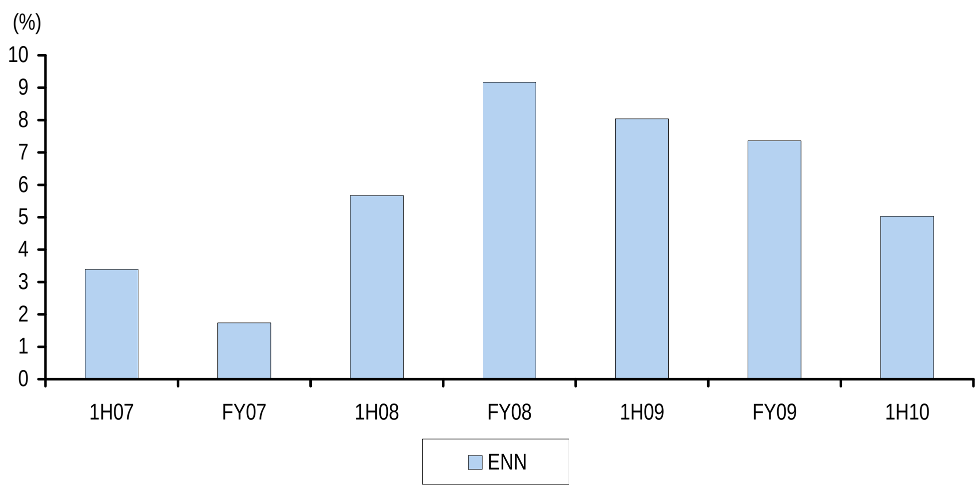
Source: Company, Daiwa forecasts

Only ENN has delivered positive earnings surprises consistently

We have looked at past earnings surprises announced by the four city gas players over the past three years. A positive share-price performance on the day after the results announcement, in our view, implies a positive surprise in terms of either earnings or a revision to guidance. ENN's share price has risen every time immediately after its half-year and full-year results announcements as a result of better-than-expected earnings or upward revisions to its guidance. The other companies, however, have not shown such consistency, as their earnings have come as both positive and negative surprises.

ENN's share price rose every time after its results announcements, over the past three years

ENN: share-price performance on the day after results announcement



Source: Bloomberg, complied by Daiwa

Overseas strategy

ENN is China's first gas distributor going overseas

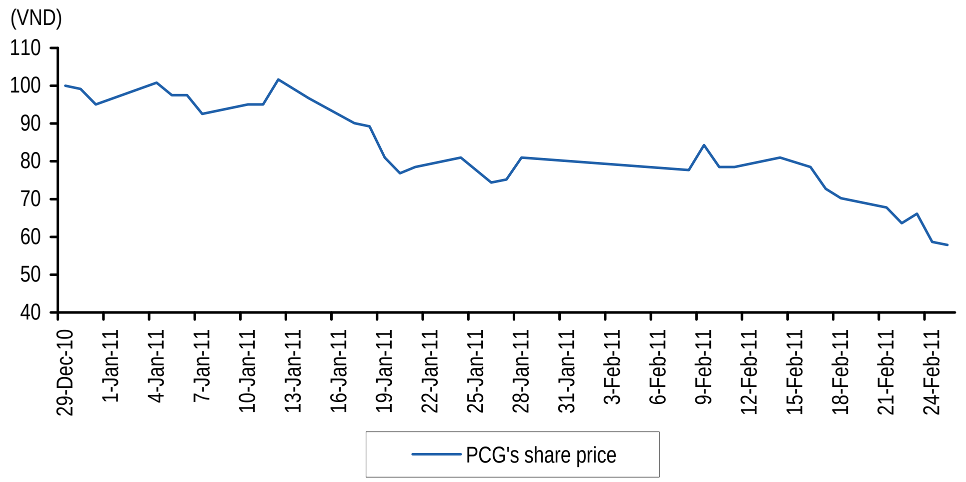
Amid rising domestic penetration rates, ENN was the first China gas distributor to venture overseas in search of new earnings-growth opportunities. Besides the three Vietnam projects ENN has signed MOUs for, the company is also looking at projects in The Philippines, but we have not factored any of these into our forecasts given the uncertainty over timing.

ENN's Vietnam prospect includes three cities with joint-venture partner PetroVietnam

ENN paid Rmb44m for a 44% stake in a joint venture with operating rights in the cities of Ho Chi Minh, Hanoi, and Da Nang in Vietnam, but has not given any guidance on the potential total investment capex yet. The joint venture between ENN (44%) and PetroVietnam (35%) (Not listed) and other investors (21%) was listed in Vietnam Stock Exchange in late 2010. The listed platform is called Petro Vietnam Gas City Investment & Development JSC (PCG) (Not rated), and currently trades currently below its IPO price. We attribute the poor post-listing share-price performance mostly to general market volatility rather than the company's fundamentals, given that the joint venture has not yet committed any capex to the projects. We do not expect this to affect ENN's near-term share-price performance, given the joint venture's tiny market cap (about US$6m).

We attribute the poor share-price performance to market volatility

PCG: share-price performance



Source: Bloomberg

The Vietnam projects may provide additional earning upside once they mature

We do not believe the Vietnam projects will be any exception to ENN's projected project IRR of at least 15%. However, we have not factored this into our forecasts, as clarification over the investment size, project timing, gas-pricing formula and currency-hedging strategies is still pending. Nonetheless, we see these projects as a good investment opportunity, as Vietnam has been viewed as an attractive energy market by experienced players like China Light and Power (Not rated). ENN's joint-venture partner, PetroVietnam, will also guarantee a supply of domestic gas as a state-owned company.

No near-term plan to receive parent assets

ENN is unlikely to receive further assets from its parent

ENN's parent company, ENN Group, runs a portfolio of non-gas businesses that includes solar (modules and systems integration services), energy chemical (coal gasification), smart energy (energy services, R&D and engineering) and culture & group (cultural creations, tourist centres and energy-wide properties). According to management, there are no near-term plans to inject any of these assets into ENN's listed platform, and we see limited potential for business synergies. However, ENN and ENN Group will co-operate over the development of energy-saving services products, and the R&D is likely to be conducted at the parent level, while ENN will focus on the gas-distribution part.

Risks

the downside risks to our target price include: 1) unexpected start delays for some gas pipelines and LNG terminals, resulting in disappointing volume growth, and 2) the prevailing gas cost pass-through policy coming to an end. Apart from the gas business, ENN's move into energy-saving services will depend on factors such as customer commitment, the scale of the services, government subsidies, and the profitability of such products. As there is limited guidance on the size of the business over the next 1-2 years, there could be upside or downside surprises for this business.

China Resources Gas (1193 HK)

6-mth rating: 2

Target price: HK$11.50

Share price: HK$10.02 (3 Mar)

Utilities: China

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Initiation: strong back-up from parent

A state-owned gas giant

- We initiate coverage of CRG with a **2** (*Outperform*) rating and DCF-based six-month target price of HK$11.5. We forecast a 2010-12 EPS CAGR of 33% from the company's sustainable organic growth through existing projects on the back of continuing urbanisation, additional gas supply and rising penetration into different demand groups.

Further expansion through acquisitions

- After acquiring nine projects from its parent in 2H10, CRG now has 42 projects. It plans to expand this further to more than 90 projects by the end of 2013 by acquiring the remaining 27 projects owned by its parent, and a further 20-30 projects from third parties. We believe asset injections by the parent will follow previous patterns, which were at a discount to the industry-average valuation and therefore favourable for CRG.

We see upside potential from future asset injections

- We value CRG's existing projects at HK$19.6bn using a DCF methodology. We also assume HK$3.9bn of value added in the form of asset injections by the parent over the next 12 months, which we assume will be financed partially by new shares, in arriving at our target price of HK$11.5. The stock is trading currently at a 19.5x PER on our 2011 EPS forecast, which we believe undervalues the company's existing projects and doesn't factor in potential asset injections. We see the main investment risks as delays in cost pass-through for residential customers and asset injections by the parent.

Reuters code		1193.HK

Market data

HSI		23,122.42
Market cap	(US$bn)	2.36
EV	(US$bn; 10E)	2.22
3-mth avg daily T/O	(US$m)	2.09
Shares outstanding	(m)	1,831
Free float	(%)	31.9
Major shareholder		Splendid Time Investment Inc (68.1%)
Exchange rate	HK$/US$	7.788

Performance (%)*	1M	3M	6M
Absolute	(4.6)	(8.6)	(10.5)
Relative	(1.3)	(7.7)	(20.8)

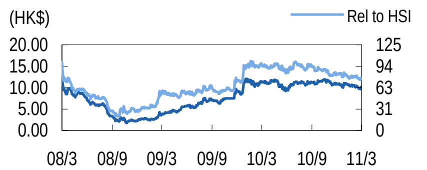
Source: Daiwa
Note: *Relative to HSI

Investment indicators

		2010E	2011E	2012E
PER	(x)	26.7	19.5	15.2
PCFR	(x)	14.6	8.3	7.1
EV/EBITDA	(x)	12.8	9.6	7.3
PBR	(x)	3.0	2.6	2.2
Dividend yield	(%)	0.7	1.1	1.6
ROE	(%)	19.4	14.5	15.9
ROA	(%)	6.5	6.3	6.4
Net debt equity	(%)	net cash	net cash	0.6

Source: Daiwa forecasts

Price and relative performance



Source: Bloomberg, Daiwa

Income summary

Year to 31 Dec	Revenue (HK$m)	(%)	EBITDA (HK$m)	(%)	Net profit (HK$m)	(%)	EPS (HK$)	(%)	CFPS (HK$)	DPS (HK$)
2008	3,367	*(45.4)*	591	*(49.7)*	297	*(25.7)*	0.620	*(56.8)*	(0.001)	0.118
2009	3,747	*11.3*	799	*35.3*	444	*49.4*	0.310	*(50.0)*	0.738	0.045
2010E	6,740	*79.9*	1,351	*69.0*	687	*54.8*	0.375	*21.0*	0.686	0.066
2011E	10,382	*54.0*	1,985	*46.9*	942	*37.2*	0.514	*37.2*	1.204	0.106
2012E	13,317	*28.3*	2,655	*33.8*	1,210	*28.4*	0.661	*28.4*	1.412	0.155

Source: Company, Daiwa forecasts

Company background

China Resources Gas is engaged principally in the city-gas distribution business, including piped natural or petroleum gas, and operating compressed-natural-gas filling stations in the PRC. Its piped natural-gas operations are located strategically in areas of China with rich reserves of natural gas, and areas that are economically more developed and densely populated.

China Resources Gas – financial summary

Profit and loss (HK$m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Sales of gas products	1,903	2,822	4,900	7,795	10,214
Gas connection	623	924	1,840	2,587	3,103
Others	842	0	0	0	0
Total revenue	3,367	3,747	6,740	10,382	13,317
Other income	85	117	211	325	417
COGS	(2,359)	(2,586)	(4,815)	(7,485)	(9,659)
SG&A	(445)	(479)	(785)	(1,237)	(1,419)
Other op. expenses	(227)	(163)	(246)	(411)	(596)
EBIT	420	637	1,105	1,574	2,059
Net-interest inc./(exp.)	(14)	(17)	(67)	(51)	(101)
Assoc/forex/extraord./others	3	7	7	7	7
Pre-tax profit	409	627	1,046	1,530	1,965
Tax	(65)	(87)	(209)	(382)	(491)
Min. int./pref. div./others	(47)	(97)	(150)	(205)	(264)
Net profit (reported)	297	444	687	942	1,210
Net profit (adj.)	297	444	687	942	1,210
EPS (reported) (HK$)	0.620	0.310	0.375	0.514	0.661
EPS (adj.) (HK$)	0.620	0.310	0.375	0.514	0.661
DPS (HK$)	0.118	0.045	0.066	0.106	0.155
EBIT (adj.)	420	637	1,105	1,574	2,059
EBITDA (adj.)	591	799	1,351	1,985	2,655

Balance sheet (HK$m)

As at 31 Dec	2008	2009	2010E	2011E	2012E
Cash & short-term investment	1,347	2,227	3,749	3,909	3,948
Inventory	52	133	247	384	495
Accounts receivable	328	566	1,017	1,567	2,010
Other current assets	236	279	473	709	900
Total current assets	1,962	3,204	5,486	6,569	7,353
Fixed assets	1,642	2,750	4,527	8,139	10,567
Goodwill & intangibles	679	984	960	937	913
Other non-current assets	244	1,635	1,551	1,561	1,571
Total assets	4,527	8,572	12,524	17,206	20,404
Short-term debt	108	1,040	1,040	2,800	3,000
Accounts payable	1,175	1,641	2,111	3,076	3,970
Other current liabilities	449	793	1,420	2,229	2,859
Total current liabilities	1,732	3,474	4,571	8,105	9,829
Long-term debt	39	1,692	1,000	1,000	1,000
Other non-current liabilities	216	1,838	225	225	225
Total liabilities	1,988	7,004	5,795	9,329	11,053
Share capital	141	141	183	183	183
Reserves/R.E./others	2,087	890	5,860	6,801	8,011
Shareholders' equity	2,229	1,031	6,043	6,985	8,195
Minority interests	311	536	686	891	1,155
Total equity & liabilities	4,527	8,572	12,524	17,206	20,404
Net debt/(cash)	(1,199)	505	(1,709)	(109)	52

Cash flow (HK$m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Profit before tax	409	627	1,046	1,530	1,965
Depreciation and amortisation	171	163	246	411	596
Tax paid	(65)	(87)	(209)	(382)	(491)
Change in working capital	(489)	458	322	851	779
Other operational CF items	(26)	(106)	(150)	(205)	(264)
Cash flow from operations	0	1,056	1,255	2,204	2,585
Capex	(623)	(1,567)	(2,000)	(4,000)	(3,000)
Net (acquisitions)/disposal	(2)	(7)	(10)	(10)	(10)
Other investing CF items	4,340	(1,383)	94	0	0
Cash flow from investing	3,715	(2,958)	(1,916)	(4,010)	(3,010)
Change in debt	(2,028)	4,197	(2,292)	1,760	200
Net share issues/(repurchases)	(1,625)	(1,577)	4,445	193	285
Dividends paid	(57)	(64)	(120)	(193)	(285)
Other financing CF items	(435)	226	150	205	264
Cash flow from financing	(4,145)	2,782	2,183	1,966	464
Forex effect/others	0	0	0	0	0
Change in cash	(431)	880	1,522	160	39

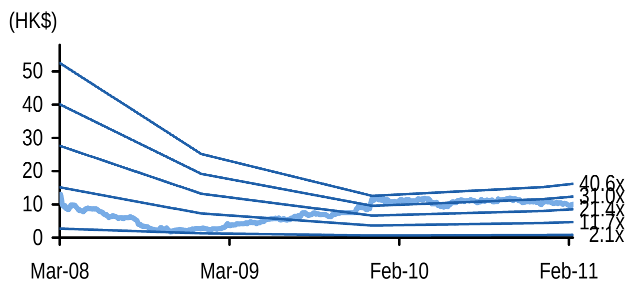
Key ratios

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Sales – YoY %	(45.4)	11.3	79.9	54.0	28.3
EBITDA (adj.) – YoY %	(49.7)	35.3	69.0	46.9	33.8
Net profit (adj.) – YoY %	(25.7)	49.4	54.8	37.2	28.4
EPS (adj.) – YoY %	(56.8)	(50.0)	21.0	37.2	28.4
EBITDA margin % (adj.)	17.6	21.3	20.1	19.1	19.9
EBIT margin % (adj.)	12.5	17.0	16.4	15.2	15.5
Net-profit margin % (adj.)	8.8	11.8	10.2	9.1	9.1
ROAE (%)	10.1	27.2	19.4	14.5	15.9
ROAA (%)	3.9	6.8	6.5	6.3	6.4
ROCE (%)	9.2	18.2	16.9	15.4	16.5
ROIC (%)	5.8	12.7	11.7	9.3	8.8
Net debt to equity (%)	net cash	48.9	net cash	net cash	0.6
Effective tax rate (%)	16.0	13.9	20.0	25.0	25.0
Accounts receivable (days)	86.3	43.5	42.9	45.4	49.0
Payables (days)	177.4	137.2	101.6	91.2	96.6
Net interest cover (x)	30.7	38.4	16.5	30.8	20.4
Net dividend payout (%)	19.1	14.5	17.5	20.5	23.5

Key assumptions

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Gas sales volume (m cm)	1,371.0	2,214.0	3,586.3	5,785.5	7,310.8
Gas ASP - retail (Rmb/cm)	2.7	2.8	3.0	3.1	3.1
Gas ASP - CNG (Rmb/cm)	3.0	3.0	3.3	3.3	3.3
Gas purchase cost (Rmb/cm)	1.7	1.7	2.0	2.0	2.0
Revenue contribution – connection fee (%)	18.5%	24.7%	27.3%	24.9%	23.3%
Gas penetration rate for residential households (%)	31.3%	22.7%	30.3%	35.4%	39.9%

PER bands



Source: Company, Daiwa forecasts

Valuation indicates upside from future asset injections

Our DCF values are HK$19.6bn for existing projects and HK$3.9bn for potential asset injections

We consider the DCF method as an appropriate one to value CRG, given its relatively stable business profile and our forecasts for high future cash flow. We value the company's existing 42 projects using our DCF model at HK$19.6bn, or HK$10.7 per share. We value the potential acquisitions from the parent (27 projects but we assume that a third of these will be injected over the next 12 months) at HK$3.9bn by assuming that CRG will raise 50% of the capital needed through debt and the remainder through equity. After incorporating the dilution effect from new share issuance for equity financing, we obtain our six-month target price of HK$11.5 per share.

CRG: DCF valuation of existing projects

(HK$m)		2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free rate	3.5%											
Market risk premium	6.0%											
Beta	1.0											
Cost of equity	9.5%											
Growth	3.0%											
Free cash flows - gas distribution												
Net profit		687	942	1,210	1,338	1,582	1,783	1,763	1,934	2,083	2,346	2,615
Plus depreciation		246	411	596	740	831	872	911	938	955	971	986
Total working capital		254	734	706	538	577	529	299	410	371	481	507
Capital expenditure		(2,000)	(4,000)	(3,000)	(3,000)	(1,500)	(1,500)	(1,500)	(1,200)	(1,200)	(1,200)	(1,200)
Net changes in debt		(692)	1,760	200	200	(1,700)	(1,500)	(1,000)	0	0	0	0
Free cash flow		(1,505)	(153)	(288)	(183)	(210)	184	473	2,082	2,209	2,598	2,908
Discounted FCF		(1,505)	(146)	(252)	(146)	(153)	122	287	1,154	1,118	1,201	1,228
Terminal value	82%											19,455
Equity value	23,870											
Total equity	23,870											
Less minority interests	4,275											
Equity value	19,595											
No. of shares (m)	1,831											
Target price (HK$)	10.7											

Source: Daiwa forecasts

CRG: DCF valuation of projects at the parent level

(HK$m)		2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Volume (m m^3)		650	780	936	1,123	1,348	1,483	1,631	1,794	1,973	2,171
Ownership assumption		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Tariff (Rmb/m^3)		3	3	3	3	3	3	3	3	3	3
Revenue (HK$m)		1,848	2,148	2,561	3,012	3,457	3,628	3,947	4,269	4,692	5,138
EBIT		296	344	410	482	553	581	632	683	751	822
EBIT(1-t)		228	265	316	371	426	447	486	526	578	633
Depreciation		73	96	122	140	151	158	165	171	176	182
Capex		(706)	(486)	(494)	(300)	(261)	(261)	(261)	(261)	(261)	(261)
FCF		(406)	(125)	(56)	211	317	345	390	436	494	554
Discounted DCF		(390)	(110)	(46)	160	221	222	232	240	251	260
Terminal value	83%										5,048
NPV	6,087										
Investments	(4,436)										
Les: debt financing	(2,218)										
Parent assets attributable to listed company	3,869										

Source: Daiwa forecasts

Our DCF-based target price is HK$11.5

CRG: NAV of combined values

(HK$m)	
Listed company	19,595
Parent assets attributable to listed company	3,869
Number of current shares (m)	1,831
Number of new shares (m)	207
Number of total shares (m)	2,038
Target price (HK$)	**11.5**

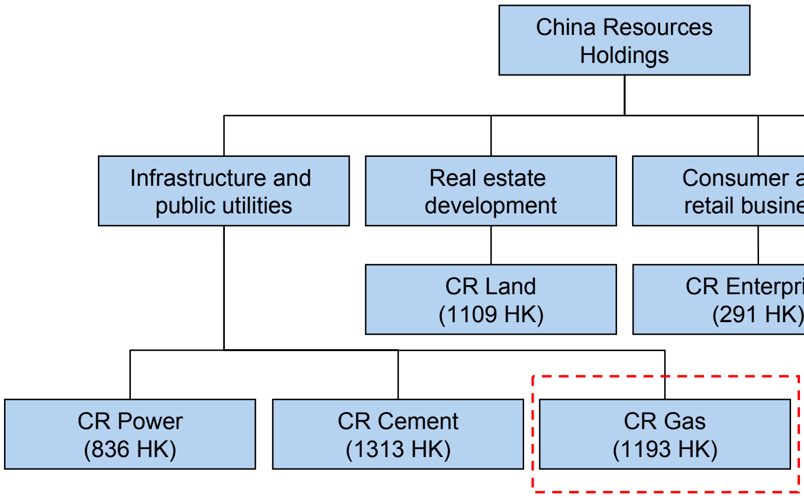
Source: Daiwa forecasts

Asset-injection story looks on track

27 projects controlled by the parent are to be injected over the next three years

As China Resources Holding's (CRH) (Not listed) flagship operator in city-gas distribution, CRG now has 42 projects across the country, of which 23 were acquired from its parent and the other 19 from third parties. CRH still has 27 projects on hand, and plans to inject them into CRG over the next three years.

CRG: group organisation (as the end of 2010)



Source: Company

We expect future asset injections to follow the past-three-year pattern at a discount to market values and be value-accretive to CRG

Looking at the past three years, the first asset injection from CRH took place in August 2008 at a prevailing PER of 15x, well below the industry average PER of 23x. The projects injected included those located in provincial capitals and economically developed cities such as Chengdu, Nanjing, Wuxi, and Suzhou. The later asset injections followed the same pattern at a discount to market value and were EPS-accretive. We believe the future asset injections are likely to follow the previous patterns and be value-accretive for CRG. The minimum project IRR hurdle is likely to remain at 15% as before.

CRG: valuations of past asset injections

Announcement date	Projects	Consideration (HK$m)	Profit guarantee (HK$m)	PER of assets injected at that time	PER of CRG at that time	Industry-average PER at that time
Aug-08	7 gas projects (Chengdu, Wuxi, Suzhou, Nanjing, Fuyang, Huaibei, Linhai)	3,815 (100% by rights issue)	250	15.3	8.2	23.1
Sep-09	7 gas projects (Zhenjiang, Zibo, Xiangfan, Datong, Yangquan, Yicheng, Qianjiang)	1,600 (100% by cash and debt)	124	12.9	22.9	18.2
Sep-10	9 gas projects (Xiamen, Ningbo, Qidong, Gucheng, Tengzhou, Shifang, Kunshan, Jining, Suining)	2,000 (100% by consideration shares)	100	20.0	30.0	24.3

Source: Company, Bloomberg

Note: * CRG was then China Resources Logic and did not own any gas assets in August 2008; the company's PER, which fell as low as 8x, was not relevant

* Industry-average PER for August 2008 includes ENN, BJE, Towngas and Hong Kong & China Gas (we have excluded CHG as its PER of 60x made it an outlier).

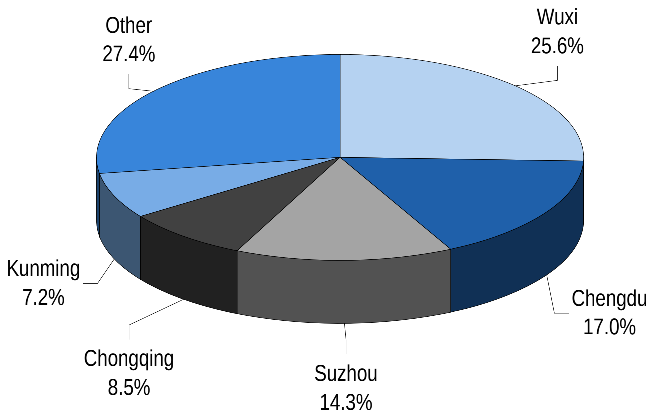
* Industry-average PERs for September 2009 and September 2010 include ENN, BJE, CRG, CHG, Towngas and Hong Kong & China Gas.

Among the 27 projects to be injected, Fuzhou, Nanchang, Jingdezhen and Nantong may be sizeable ones

Of CRG's current projects, the major net-profit contributors for 1H10 were acquired from its parent. These include projects in economically-developed cities such as Wuxi, Chengdu and Suzhou. These three city projects together accounted for 56.9% of the company's 1H10 net profit. Among CRH's 27 projects on hand, we believe the injection of those in provincial capitals and economically-developed cities such as Fuzhou, Nanchang, Jingdezhen and Nantong will be positive for CRG's asset mix given their current low gas penetration levels (Fujian 6%, Jiangxi 3%, Jiangsu 13.3%) and high residential and industrial gas demand.

Wuxi, Chengdu and Suzhou contributed 56.9% of CRG's 1H10 net profit; all three city projects were injected by the parent

CRG's projects: net-profit contributions (1H10)



Source: Company

Projects at the parent level currently

Projects	Province
Fuzhou	**Fujian**
Heyuan	Guangdong
Jiangmen	Guangdong
Huizhou Dayawan	Guangdong
Zhongshan	Guangdong
Anyang	Henan
Linzhou	Henan
Nanzhang	Henan
Chibi	Hubei
Yueyang	Hunan
Chifeng	Inner Mongolia
Gaochun	Jiangsu
Nantong	**Jiangsu**
Jingdezhen	**Jiangxi**
Guixi	Jiangxi
Nanchang	**Jiangxi**
Tonghua	Jilin
Dandong	Liaoning
Liaoyang	Liaoning
Haicheng	Liaoning
Dalian (Huayuankou)	Liaoning
Dalian (Pulandian)	Liaoning
Panjin	Liaoning
Yinchuan	Ningxia
Dongying	Shandong
Fenghua	Zhejiang
Taizhou (Luqiao)	Zhejiang

Source: Company data, various media sources, compiled by Daiwa

CRG: project details

City	Province	Ownership (%)	Population (m)	Connected households in 1H10 ('000s)	Remarks
Chengdu	Sichuan	36	12.9	1,698	Acquired from parent in 2008
Wuxi	Jiangsu	50	6.2	593	
Suzhou	Jiangsu	70	6.3	129	
Nanjing	Jiangsu	80	6.3	0	
Fuyang	Zhejiang	50	0.6	46	
Huaibei	Anhui	57	2.2	134	
Linhai	Zhejiang	100	1.2	26	
Wuhan	Hubei	51	9.1	55	Acquired from third parties in 2009
Kunming	Yunnan	64	6.3	19	
Tongzhou	Jiangsu	70	1.2	10	
Hongdong	Shanxi	51	0.7	5	
Jinan	Shandong	100	6.7	0	
Zaoyang	Hubei	100	1.1	2	
Yingtan	Jiangxi	100	1.1	5	
Luzhou	Sichuan	40	5.0	179	
Hengshui	Hebei	95	4.4	6	
Yutai	Shandong	100	0.5	0	
Huozhou	Shanxi	70	0.3	2	
Yangqu	Shanxi	65	0.1	0	
Yanzhou	Shandong	70	0.6	0	
Zhenjiang	Jiangsu	45	2.7	157	Acquired from parent in 2009
Zibo	Shandong	46	4.2	213	
Xiangfan	Hubei	71	5.9	94	
Datong	Shanxi	75	3.2	217	
Yangquan	Shanxi	75	1.3	1	
Yicheng	Hubei	100	0.6	11	
Qianjiang	Hubei	100	1.0	57	
Chongqing	Chongqing	25	28.6	2,409	Acquired from third parties in 2010
Zhengzhou	Henan	57	7.5	931	
Jiangning	Jiangsu	49	0.3	142	
Yibin	Sichuan	50	5.3	106	
Neijiang	Sichuan	50	4.3	113	
Fengcheng	Liaoning	100	0.6	0	
Xiamen	Fujian	49	1.8	276	Acquired from parent in 2H10
Jining	Shandong	51	8.3	171	
Suining	Sichuan	50	3.9	132	
Tengzhou	Shandong	70	1.7	71	
Shifang	Sichuan	51	0.4	33	
Kunshan	Jiangsu	50	0.7	74	
Qidong	Jiangsu	100	1.1	41	
Gucheng	Hubei	100	0.6	0	
Hangzhouwan	Zhejiang	100	5.7	0	

Source: Company

CRG plans more acquisitions in the future

CRG plans to invest Rmb10bn in M&A and acquire 20-30 projects over the next three years

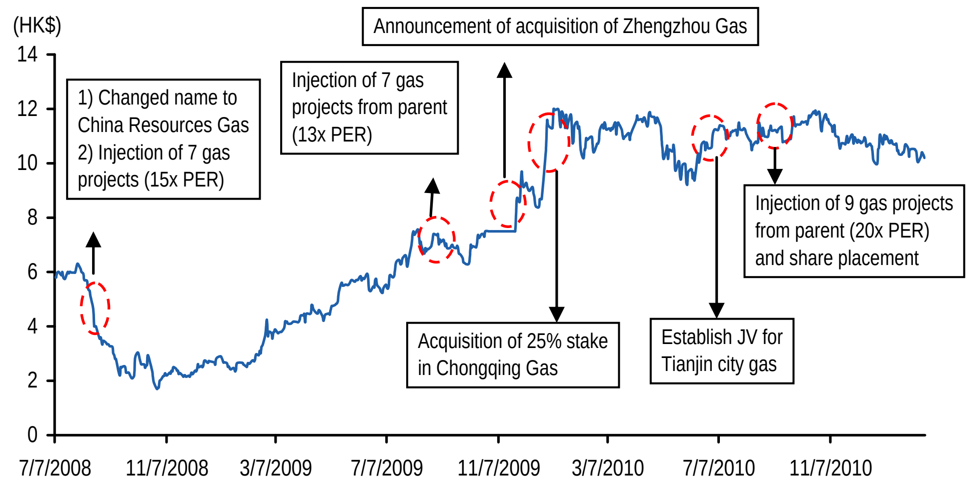
Besides project acquisitions from its parent, CRG also plans to seek value-accretive projects from third parties. The company plans to invest a total of Rmb10bn for M&A purposes (including acquisitions from its parent and third parties) and acquire 20-30 projects from third parties over the next three years. We estimate there are around 70-80 medium-to-large-sized projects currently that are still in the hands of local governments and available for acquisition in China, with the north-eastern provinces accounting for a large slice of the pie. We believe CRG is likely to leverage CRH's brand and the group's business synergy when bidding for new projects. We also believe the company has a substantial competitive edge, given its background as a state-owned entity, along with its visible and good track record. Unlike asset injections from the parent, we believe those from third parties are more likely to be valued in line with market valuations and therefore less favourable for CRG in terms of prices.

CRG is to establish a joint venture with Tianjin Gas and enter Tianjin gas distribution business in 1H11

CRG entered into a co-operation agreement with Tianjin Gas (Not listed) on 28 June 2010 to establish a joint venture to supply natural gas in Tianjin. CRG will have a 49% interest in the joint venture and Tianjin Gas will own the rest. The company expects the total investment to be Rmb4-5bn, of which CRG is to contribute Rmb2-2.5bn. The project is now at the due-diligence stage and is scheduled to be completed in 1H11. We have not included this project in our NAV calculation of the combined values of CRG's projects.

In past years, project acquisitions have boosted CRG's share price

CRG: share-price performance and major events



Source: Company, Bloomberg

Co-operation with energy giant CNPC

Collaboration agreement with CNPC ensures more guaranteed gas supply and non-competition

On June 28, 2010, CRH entered into a strategic collaboration agreement with China National Petroleum Corporation (CNPC). The two parties have reached agreement mainly on three main areas: 1) CNPC will give CRH priority when it comes to gas supplies to downstream city-gas projects, 2) CNPC will facilitate CRH's potential entry into and participation in the mid-stream natural-gas-transmission business, and 3) the two parties have agreed on non-competition terms on city-gas projects. We view this agreement as crucial for CRG, as all major city-gas distributors are striving to build co-operation relationships with CNPC (which controls major gas pipelines in China) in order to ensure gas supplies. The non-competition agreement is also likely to ease investor concerns that CNPC's subsidiary, Kunlun Energy, might invest more aggressively in downstream city-gas projects than it has done in previous years.

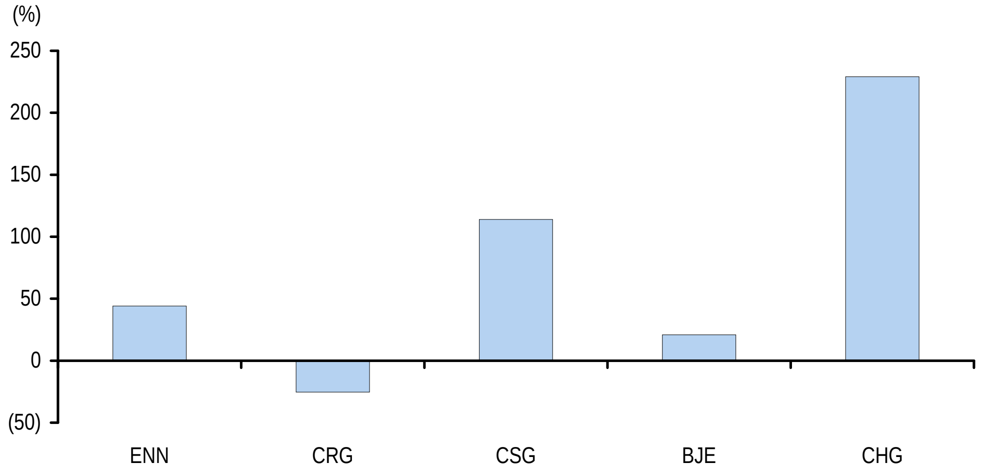
Strong balance sheet should support future capex

CRG's balance sheet is the strongest among its peers

CRG's net gearing level (a net-cash position at the end of 2010 on our forecasts), is the lowest among its peers following the company's share placement in October 2010. The company's strong balance sheet leaves room for it to gear up for future project acquisitions. In addition, its net-cash position looks favourable in China's current monetary-tightening environment and its earnings should not be affected as much as those of its peers by future interest-rate hikes, in our view. We expect CRG to finance future project acquisitions through debt in 2011, then through equity subsequently.

CRG is the only China city-gas company in a net-cash position

Net-gearing levels (end-2010E)



Source: Daiwa forecasts

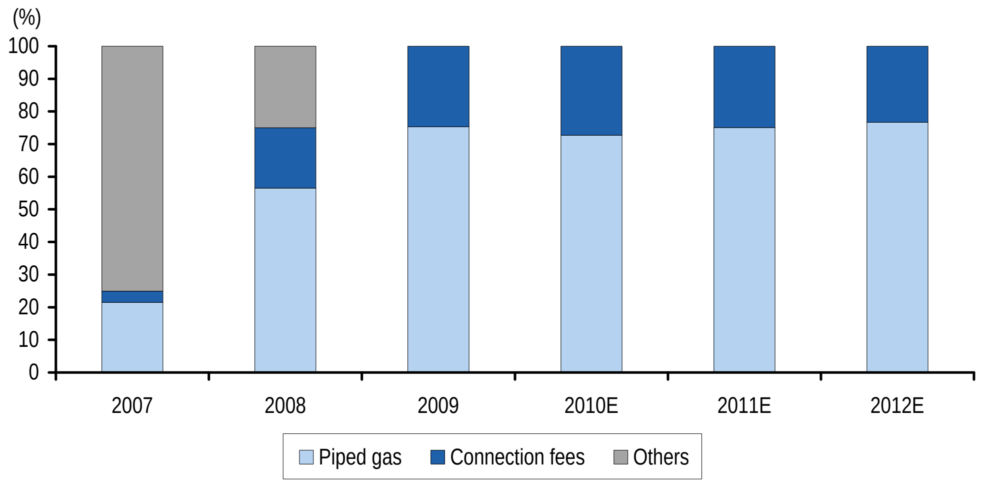
We expect sustainable revenue growth with a stable mix

We expect a stable revenue mix for the next three years

We expect stable revenue contributions from CRG's piped gas and connection fees for the next three years given our expectations of rising penetration through organic growth and acquisitions, as well as China's urbanisation increasing over the next few years. The revenue contribution from connection fees may start to decline in a few years time, as we envisage further tightening policies in China with reduced connection fees, and a decline in new connections given the higher penetration rate to be achieved over the next few years.

We forecast a stable revenue contribution from piped-gas sales and connection fees over the 2010-12 period

CRG: revenue mix



Source: Company, Daiwa forecasts

CRG: gas sales						
Volume (m m^3)	**2007**	**2008**	**2009**	**2010E**	**2011E**	**2012E**
Residential	440	480	642	1,130	1,866	2,315
C&I	791	877	1,373	2,127	3,489	4,500
CNG			177	305	404	466
Bottled LPG	25	14	22	24	27	29
Total	1,256	1,371	2,214	3,586	5,786	7,311
Volume mix (%)						
Residential	35.0	35.0	29.0	31.5	32.2	31.7
C&I	63.0	64.0	62.0	59.3	60.3	61.6
CNG	0.0	0.0	8.0	8.5	7.0	6.4
Bottled LPG	2.0	1.0	1.0	0.7	0.5	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Average tariff (Rmb/m^3)						
Residential	2.5	2.5	2.5	2.8	2.8	2.8
C&I	2.9	2.9	2.9	3.2	3.2	3.2
CNG	3.0	3.0	3.0	3.3	3.3	3.3
Bottled LPG	-	-	-	-	-	-
Revenue (Rmb m)						
Residential	n.a.	n.a.	470	899	1,624	2,246
C&I	n.a.	n.a.	1,584	2,449	3,967	5,279
CNG	n.a.	n.a.	421	886	1,175	1,356
Bottled LPG	n.a.	n.a.	0	65	71	78
Total	1,164	1,669	2,476	4,298	6,846	8,957
Gross-profit margin (%)						
Residential	18.1	18.1	18.1	16.3	16.3	16.3
C&I	26.4	26.4	26.4	24.0	24.0	24.0
CNG	28.2	28.2	28.2	25.7	25.7	25.7
Bottled LPG	1.0	1.0	1.0	1.0	1.0	1.0

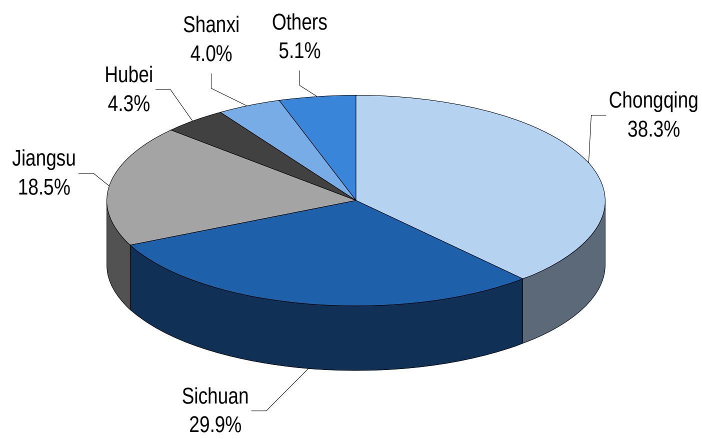
Source: Company, Daiwa forecasts

Not a major beneficiary of additional gas supply in 2011

CRG is unlikely to benefit substantially from incremental gas supply in 2011

As we believe that major incremental gas supply will come from *Shaanxi-Beijing III*, the *Sichuan-East* expansion, *West-East II Phase 2*, as well as the three new LNG terminals, we expect the key beneficiary regions to include Beijing, Hebei, Shanxi, Shaanxi, Shanghai, Jiangsu, Zhejiang, Anhui, Hubei, Jiangxi, Henan, Hunan, Guangdong, Guangxi, Fujian and Liaoning. As 69% of CRG's gas sales volume came from Sichuan and Chongqing for 1H10, where gas shortages were not a major problem, we do not expect CRG to benefit significantly from the newly ramped-up gas pipelines and LNG terminals in 2011.

CRG: provincial allocation by gas sales volume (as at 1H10)



Source: Company

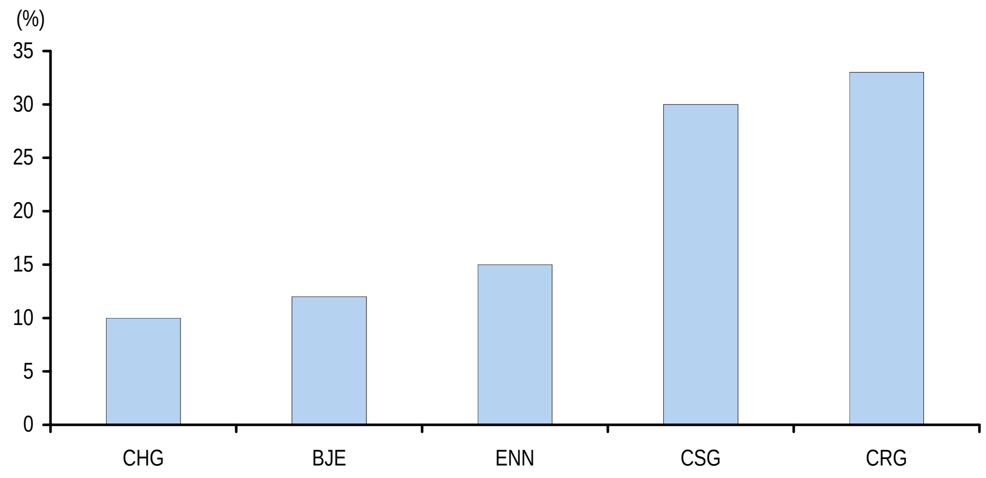
Cost pass-through appears a risk in future

CRG may face increased cost pass-through risk given larger proportion sales to households and more expensive gas sources

In contrast to its prevailing full cost pass-through policies, we believe the NDRC's future policies will be less favourable for city-gas players in order to ward off inflation as penetration increases and natural gas makes up a larger share of the local consumption basket than at present. While we believe all of the listed city-gas companies face future risks of cost pass-through and dollar margin decline, we prefer those with relatively low sales exposure to households, assuming symmetrical risks in all regions. We forecast gas sales to households to account for 32% of CRG's total sales volume/revenue for 2011, and as such the company is likely to face an increased risk of declining earnings when the prevailing full cost pass-through scheme comes to an end. Moreover, CRG's gas projects are clustered mostly in Sichuan, Chongqing and the eastern coastal area, where most gas is from expensive sources such as *Sichuan-East*, *West-East II* and LNG terminals.

CRG has the highest gas sales to households among its peers

Gas-sales-volume proportions to households (2011E)



Source: Daiwa forecasts

Risks

We see the following as downside risks to our target price. Despite the good visibility on the supply ramp-up in 2011, unexpected commencement delays for some pipelines or LNG terminals could lead to the market being disappointed on volume growth. On the cost side, if incremental costs are no longer allowed to be passed on to residential users on a national basis, the company's earnings could see downside risks. Also, slower-than-expected asset injections from the parent (we expect nine projects to be injected over the next 12 months) may lead to downside risk to our valuation.

China Suntien Green Energy (956 HK)

Utilities: China

6-mth rating: 3
Target price: HK$2.20
Share price: HK$2.00 (3 Mar)

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Initiation: we see more risks for wind than the gas business

A regional clean-energy leader

- We initiate coverage of CSG with a **3** *(Hold)* rating and DCF-based six-month target price of HK$2.2. CSG is the largest natural-gas operator and wind-farm developer in Hebei Province in terms of connected capacity. We believe the company's dual-growth model fits well with China's aggressive ambition to control carbon emissions, and we forecast net-profit CAGRs for 2010-12 of 21% and 47% for CSG's gas and wind businesses, respectively.

Wind has a higher risk profile than gas

- We like CSG's mid-stream gas-pipeline business with stable transmission charges, which should enable it to generate a 20% gas-sales-volume CAGR for 2010-12. However, given rising competition for Hebei's wind resources, we envisage increasing risks for CSG's wind business in terms of new connections. We forecast new capacity additions of 450MW for 2011 compared with the company's guidance of 500MW, and following a 50MW guidance miss for 2010.

Coverage initiated with a *Hold* rating

- If we apply the sector's average 2011 PER of 15x to CSG's gas business, we believe the current share price implies a 2011 PER of 12x for its wind business based on our forecasts, which we do not consider attractive given the potential risks we see associated with new capacity connections. Our **3** (*Hold*) rating reflects limited share-price upside potential to our target price and downside risks to our forecasts depending on CSG's wind-capacity connections.

Reuters code		0956.HK

Market data

HSI		23,122.42
Market cap	(US$m)	831.66
EV	(US$bn; 10E)	1.64
3-mth avg daily T/O	(US$m)	2.51
Shares outstanding	(m)	3,238
Free float	(%)	38.0
Major shareholder		Hebei Construction & Investment Group Co., Ltd. (58.0%)
Exchange rate	Rmb/US$	6.572
	HK$/US$	7.788

Performance (%)*	1M	3M	6M
Absolute	(1.0)	(15.3)	
Relative	2.3	(14.4)	

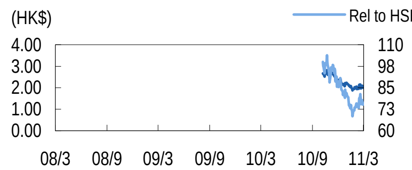
Source: Daiwa
Note: *Relative to HSI

Investment indicators

		2010E	2011E	2012E
PER	(x)	14.0	13.1	10.4
PCFR	(x)	7.8	4.3	3.3
EV/EBITDA	(x)	13.7	10.3	8.6
PBR	(x)	1.3	1.2	1.1
Dividend yield	(%)	0.7	0.8	1.0
ROE	(%)	9.8	8.9	10.2
ROA	(%)	3.2	2.9	2.9
Net debt equity	(%)	114.0	168.9	200.6

Source: Daiwa forecasts

Price and relative performance



Source: Bloomberg, Daiwa

Income summary

Year to 31 Dec	Revenue (Rmb m)	(%)	EBITDA (Rmb m)	(%)	Net profit (Rmb m)	(%)	EPS (Rmb)	(%)	*EPS (HK$)*	CFPS (Rmb)	DPS (Rmb)	*DPS (HK$)*
2008	1,019	*62.0*	266	*120.6*	87	*240.9*	0.043	*240.9*	*0.051*	0.085	0.000	*0.000*
2009	1,517	*48.9*	506	*90.4*	166	*91.5*	0.083	*91.5*	*0.099*	0.333	0.085	*0.100*
2010E	2,219	*46.2*	789	*55.8*	274	*64.8*	0.121	*45.2*	*0.143*	0.217	0.012	*0.014*
2011E	3,301	*48.8*	1,354	*71.7*	397	*44.8*	0.129	*6.8*	*0.153*	0.390	0.013	*0.015*
2012E	4,503	*36.4*	1,923	*42.0*	497	*25.3*	0.162	*25.3*	*0.192*	0.509	0.016	*0.019*

Source: Company, Daiwa forecasts

Company background

China Suntien Green Energy is a clean-energy enterprise controlled by the Hebei Construction & Investment Group Co. Its main businesses include the investment, construction and operation of wind farms, transmission and sales pipelines of clean energy such as natural gas, liquefied natural gas (LNG) and compressed natural gas (CNG).

China Suntien Green Energy – financial summary

Profit and loss (Rmb m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Natural gas	932	1,253	1,722	2,306	2,995
Wind power	87	265	497	995	1,508
Others	0	0	0	0	0
Total revenue	1,019	1,517	2,219	3,301	4,503
Other income	0	0	0	0	0
COGS	(768)	(1,091)	(1,579)	(2,304)	(3,121)
SG&A	(55)	(70)	(83)	(131)	(181)
Other op. expenses	0	0	0	0	0
EBIT	196	357	557	865	1,200
Net-interest inc./(exp.)	(51)	(102)	(180)	(335)	(529)
Assoc/forex/extraord./others	16	51	117	166	164
Pre-tax profit	161	306	494	697	836
Tax	(10)	(19)	(54)	(72)	(87)
Min. int./pref. div./others	(64)	(121)	(166)	(228)	(251)
Net profit (reported)	87	166	274	397	497
Net profit (adj.)	87	166	274	397	497
EPS (reported) (Rmb)	0.043	0.083	0.121	0.129	0.162
EPS (adj.) (Rmb)	0.043	0.083	0.121	0.129	0.162
DPS (Rmb)	0.000	0.085	0.012	0.013	0.016
EBIT (adj.)	196	357	557	865	1,200
EBITDA (adj.)	266	506	789	1,354	1,923

Balance sheet (Rmb m)

As at 31 Dec	2008	2009	2010E	2011E	2012E
Cash & short-term investment	233	330	857	1,110	1,444
Inventory	19	22	65	95	128
Accounts receivable	42	85	122	181	247
Other current assets	186	106	101	99	101
Total current assets	480	542	1,145	1,485	1,920
Fixed assets	3,232	4,358	8,958	12,577	15,737
Goodwill & intangibles	1	3	3	3	3
Other non-current assets	352	881	1,372	1,372	1,372
Total assets	4,066	5,783	11,479	15,438	19,032
Short-term debt	377	879	1,079	1,279	1,479
Accounts payable	36	440	344	502	680
Other current liabilities	375	410	406	424	439
Total current liabilities	789	1,728	1,830	2,205	2,599
Long-term debt	1,829	2,146	4,646	7,646	10,146
Other non-current liabilities	57	32	32	32	32
Total liabilities	2,674	3,906	6,507	9,883	12,776
Share capital	0	0	0	0	0
Reserves/R.E./others	995	1,344	4,270	4,627	5,074
Shareholders' equity	995	1,344	4,270	4,627	5,074
Minority interests	396	534	700	928	1,179
Total equity & liabilities	4,066	5,783	11,477	15,438	19,030
Net debt/(cash)	1,973	2,695	4,868	7,814	10,181

Cash flow (Rmb m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Profit before tax	161	306	494	697	836
Depreciation and amortisation	70	149	232	489	723
Tax paid	(3)	(12)	(54)	(72)	(87)
Change in working capital	79	975	27	287	294
Other operational CF items	(136)	(752)	(206)	(200)	(200)
Cash flow from operations	171	666	493	1,201	1,565
Capex	(1,792)	(1,275)	(4,833)	(4,108)	(3,883)
Net (acquisitions)/disposal	0	(12)	(25)	0	0
Other investing CF items	(27)	(398)	(467)	0	0
Cash flow from investing	(1,819)	(1,685)	(5,324)	(4,108)	(3,883)
Change in debt	1,312	819	2,700	3,200	2,700
Net share issues/(repurchases)	0	0	2,680	0	0
Dividends paid	0	(138)	(27)	(40)	(50)
Other financing CF items	488	436	0	0	0
Cash flow from financing	1,800	1,116	5,352	3,160	2,650
Forex effect/others	0	0	0	0	0
Change in cash	151	97	521	254	333

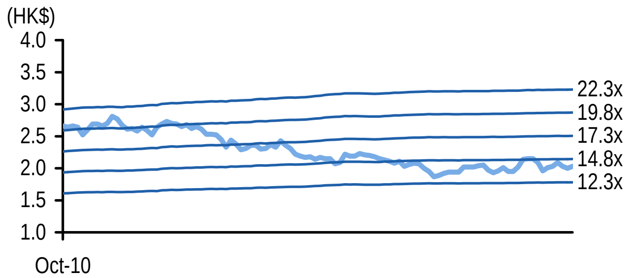
Key ratios

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Sales – YoY %	62.0	48.9	46.2	48.8	36.4
EBITDA (adj.) – YoY %	120.6	90.4	55.8	71.7	42.0
Net profit (adj.) – YoY %	240.9	91.5	64.8	44.8	25.3
EPS (adj.) – YoY %	240.9	91.5	45.2	6.8	25.3
EBITDA margin % (adj.)	26.1	33.4	35.6	41.0	42.7
EBIT margin % (adj.)	19.3	23.5	25.1	26.2	26.7
Net-profit margin % (adj.)	8.5	11.0	12.4	12.0	11.0
ROAE (%)	11.3	14.2	9.8	8.9	10.2
ROAA (%)	2.9	3.4	3.2	2.9	2.9
ROCE (%)	7.5	8.4	7.1	6.9	7.4
ROIC (%)	7.5	8.4	6.9	6.7	7.2
Net debt to equity (%)	198.3	200.5	114.0	168.9	200.6
Effective tax rate (%)	6.2	6.1	10.9	10.3	10.4
Accounts receivable (days)	12.5	15.3	17.0	16.7	17.3
Payables (days)	10.3	57.2	64.5	46.8	47.9
Net interest cover (x)	3.9	3.5	3.1	2.6	2.3
Net dividend payout (%)	0.0	101.6	10.0	10.0	10.0

Key assumptions

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Attributable capacity – wind power (MW)	0.0	270.5	583.5	988.5	1,416.0
Gas sales volume (m cm)	562.7	730.2	940.1	1,123.0	1,342.0

PER bands



Source: Company, Daiwa forecasts

Our DCF-based target price is HK$2.2

CSG has a dual-growth model of wind power and gas distribution

CSG has a distinctive business model featuring a combination of natural-gas and wind-power assets in Hebei Province, one of the largest regional markets for both gas and wind-power development in China. We forecast net-profit CAGRs for 2010-12 of 21% and 47% for the company's wind and gas businesses, respectively, and thus a 35% CAGR for its consolidated net profit. We project wind and gas to account for 59% and 41%, respectively, of CSG's net profit for 2012.

Implied valuation does not look attractive

We apply a PER of 15x (the gas sector's current average PER based on the Bloomberg-consensus 2011 EPS forecasts) to our 2011 net-profit forecast for CSG's gas business. The implicit equity value for CSG's wind business then implies a 12x 2011E PER based on our 2011 net-profit forecast for CSG's wind business, which we believe is reasonable given the potential risks we see for the company's new capacity additions.

CSG: calculation of implied PER for gas business

	Net profit CAGR 2010-12E (%)	PER (x)	Equity value HK$m
Current equity value	34.7		6,154
Wind (implied by current share price)	46.7	12	3,032
Natural gas	21.4	15	3,122

Source: Bloomberg (for sector-average natural-gas PER), Daiwa forecasts

We value CSG using a DCF valuation

Given the relatively higher visibility of future free cash flow from CSG's wind and gas business, we believe that a DCF method is appropriate to value these businesses. Our six-month target price of HK$2.2 is based on our DCF valuation, with assumptions of a 8.5% WACC, a 3% terminal-growth rate and continuous wind-capacity additions.

CSG: DCF valuation

(Rmb$m)		2009	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Risk free interest	3.5%																						
Risk premium	6.0%																						
Beta	1.0																						
Cost of equity	9.5%																						
Cost of debt	6.5%																						
Equity ratio	65%																						
Debt ratio	35%																						
WACC	8.5%																						
Growth rate	3.0%																						
EBIT (1-t)		385	601	925	1,222	1,322	1,546	1,797	2,053	2,235	2,449	2,663	2,880	3,099	3,318	3,540	3,764	3,989	4,217	4,447	4,678	4,912	5,148
Add: depreciation		149	232	489	723	874	1,058	1,242	1,424	1,575	1,753	1,931	2,109	2,286	2,463	2,640	2,816	2,993	3,169	3,345	3,520	3,696	3,871
Add: change in WC		975	27	287	294	314	312	306	315	260	273	269	286	293	285	305	314	316	334	343	361	367	381
Less: capex		(1,275)	(4,833)	(4,108)	(3,883)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)	(3,633)
FCF		234	(3,973)	(2,407)	(1,643)	(1,122)	(716)	(288)	160	437	842	1,230	1,642	2,045	2,433	2,852	3,261	3,665	4,087	4,502	4,927	5,343	5,767
Discounted FCF			(3,973)	(2,311)	(1,455)	(916)	(539)	(200)	103	258	458	617	760	873	957	1,035	1,091	1,130	1,162	1,181	1,191	1,191	1,186
Terminal value	37.2%																						4,607
Firm value	12,378																						
Less: net debt	4,867																						
Equity value	7,511																						
Minority interests	1,577																						
Net equity value	5,934																						
No. of shares	3,077																						
Target price (HK$)	2.20																						

Source: Company, Daiwa forecasts

Wind business looks riskier than the gas business

CSG is a government-backed clean-energy group

Listed in October 2010, CSG is a subsidiary of Hebei Construction & Investment Group (HECIC) (Not listed), Hebei Province's government-owned investment group. CSG was established in February 2010 and inherited all the related businesses that were carried out previously by HECIC. CSG controls the highest-quality wind and gas assets in the province, and together with HECIC the company has over nine years of experience in natural gas and seven years in wind-power generation.

CSG: revenue and profit breakdown of gas and wind business

	Rmb m					YoY change (%)				
Revenue	2008	2009	2010E	2011E	2012E	2008	2009	2010E	2011E	2012E
Natural gas	932	1,253	1,722	2,306	2,995	57.8	34.4	37.4	33.9	29.9
Wind	87	265	497	995	1,508	127.5	205.9	87.9	100.2	51.6
Total	1,019	1,517	2,219	3,301	4,503	62.0	48.9	46.2	48.8	36.4
Gross profit										
Natural gas	202	280	345	407	489	139.2	38.8	23.3	17.9	19.9
Wind	49	146	294	589	893	178.8	197.8	101.7	100.2	51.6
Total	251	426	640	997	1,382	146.1	69.9	50.1	55.8	38.6
EBIT (excluding corporate expense)										
Natural gas	167	237	320	379	457	187.6	41.4	34.9	18.5	20.7
Wind	27	120	248	497	753	194.0	349.0	106.4	100.6	51.7
Total	194	357	557	865	1,200	188.5	83.8	56.2	55.3	38.7
Net profit (excluding corporate expense)										
Natural gas	78	122	150	183	220	191.8	56.2	23.1	22.0	20.8
Wind	9	45	132	222	284	-16.0	393.9	194.6	68.1	28.1
Total	87	166	274	397	497	240.9	91.5	64.8	44.8	25.3

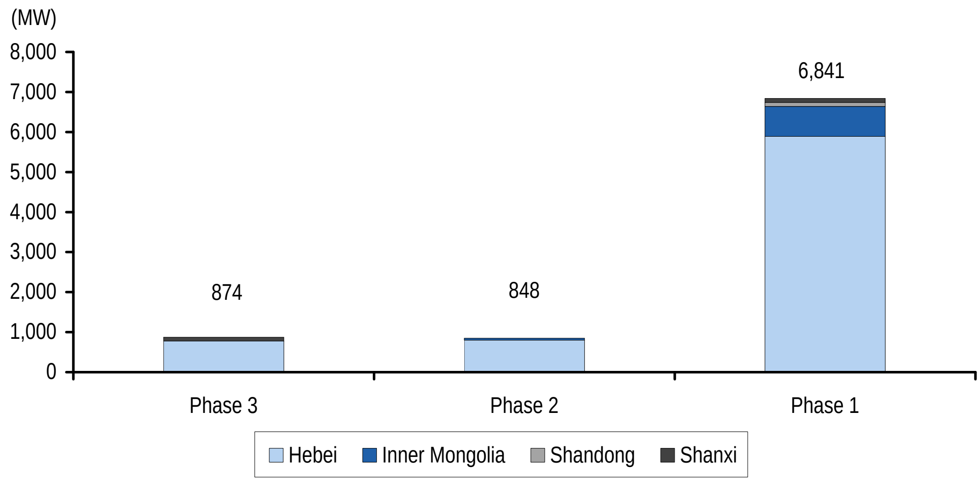
Source: Company, Daiwa forecasts

Constraints as a regional wind player

Hebei should remain dominant in CSG's pipeline but Inner Mongolia should stand out in second place

At the end of June 2010, CSG had a project pipeline of 8,563MW with 874MW at Phase 3 (near completion). Based on the company's disclosure, 89% of its Phase 3 projects are located in Hebei and the rest are in Shanxi. Including Phase 3, 2 and 1 projects, projects in Hebei accounted for 87% of its total pipeline, followed by Inner Mongolia (9%).

CSG's wind-farm pipeline (end-June 2010)



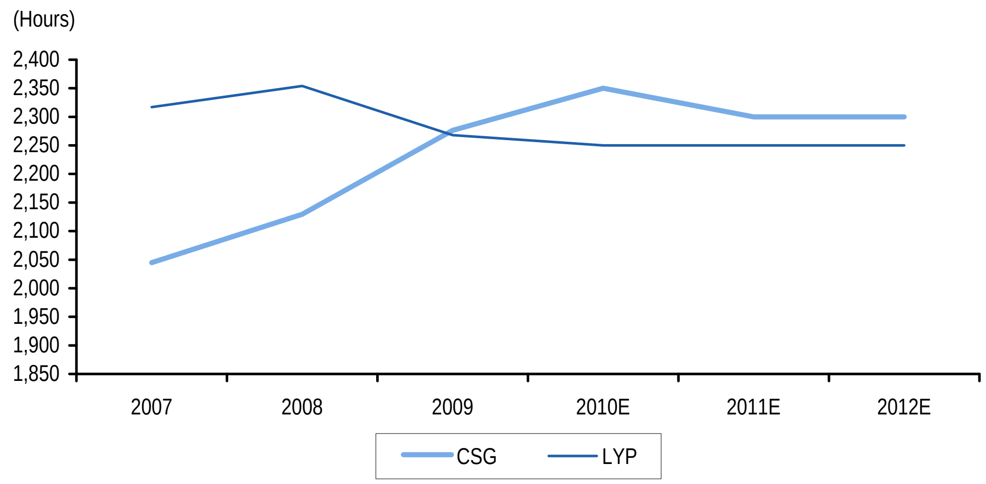
Source: Company

Hebei has a strong grid to support wind power

Hebei is one of the best provinces in which to install wind power, in our view. Hebei has some of China's richest wind resources and is home to the only 10GW wind base in the affluent coastal part of China. It is also close to the power-demand centres, Beijing and Tianjin. We believe Hebei should face far fewer power-grid connection issues than congested regions such as western Inner Mongolia, Jilin, and Gansu, in the future. In terms of utilisation hours, CSG's wind-power operation lagged that of the market leader, China Longyuan Power (LYP) (916 HK, HK$7.1, 1), in 2007 and 2008, but caught up quickly in 2009.

CSG's wind-power utilisation has caught up with that of the industry leader, LYP

Wind-power utilisation hours



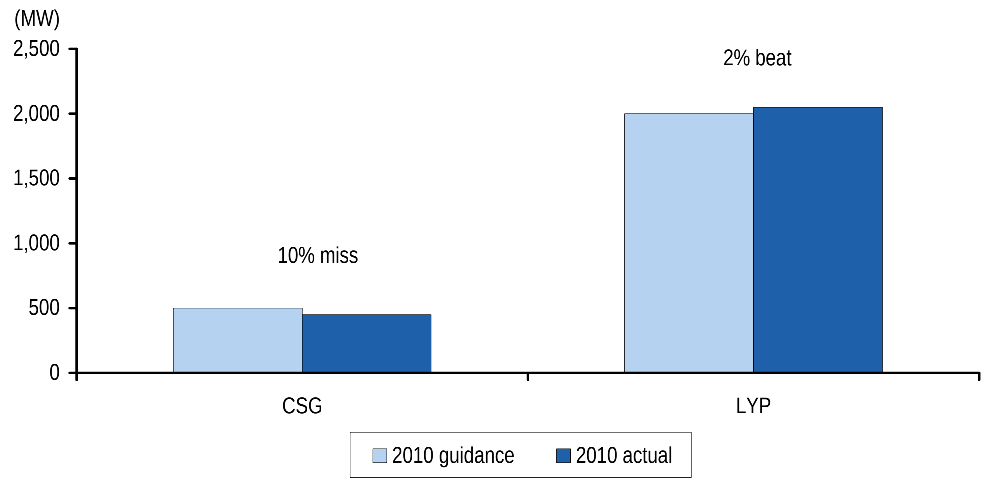
Source: Company, Daiwa forecasts

CSG has a limited track record outside Hebei

According to our recent conversation with management, CSG added a net 450MW of wind-power capacity in 2010, lower than its guidance of 500MW. The 50MW miss came from a project in Shanxi, which faced grid connection delays. Based on the Phase 3 pipeline, there is a total of 99MW of wind projects in Shanxi, implying persistent risks for connection in 2011. Given that CSG has focused on the Hebei markets with limited experience and grid track record elsewhere, it is reasonable to assume the growth risks for CSG outside Hebei are higher than those for national players like LYP.

CSG missed its 2010 target for capacity additions while peers like LYP beat expectations

Capacity additions vs. previous management guidance (2010)



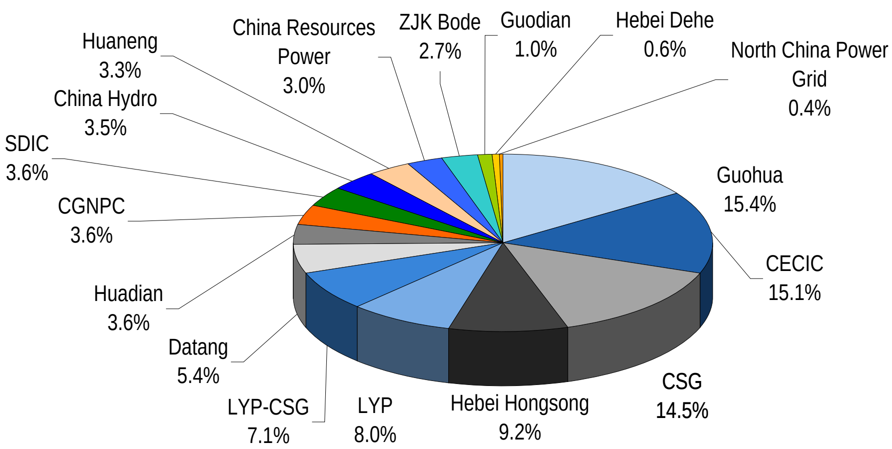
Source: Company

Rising competition from state-owned energy groups

Another concern we have is that despite CSG's leading market position based on connected capacity in Hebei (a 25% market share for 2009), we expect to see rising competition from large state-owned power groups such as Guohua Group (Guohua) (Not listed), China Energy Conservation Investment Corp. (CECIC) (Not listed), LYP, etc. According to our calculations of total installed capacity (including capacity to be connected), CSG ranked only third in 2009, behind Guohua and CECIC.

CSG ranked third based on installed capacity and first in terms of connected capacity for 2009

Market shares based on total installed capacity (2009)



Source: HydroChina

CSG: key assumptions for wind business

	2008	2009	2010E	2011E	2012E
Attributable capacity (year-end) (MW)	160	381	786	1,191	1,641
Attributable capacity (average) (MW)	-	271	584	989	1,416
Net output (m KWh)	167	555	1,059	2,168	3,347
Utilisation hours	2,130	2,276	2,350	2,300	2,300
Average on-grid tariff including VAT (Rmb/KWh)	0.58	0.56	0.55	0.54	0.53

Source: Company, Daiwa forecasts

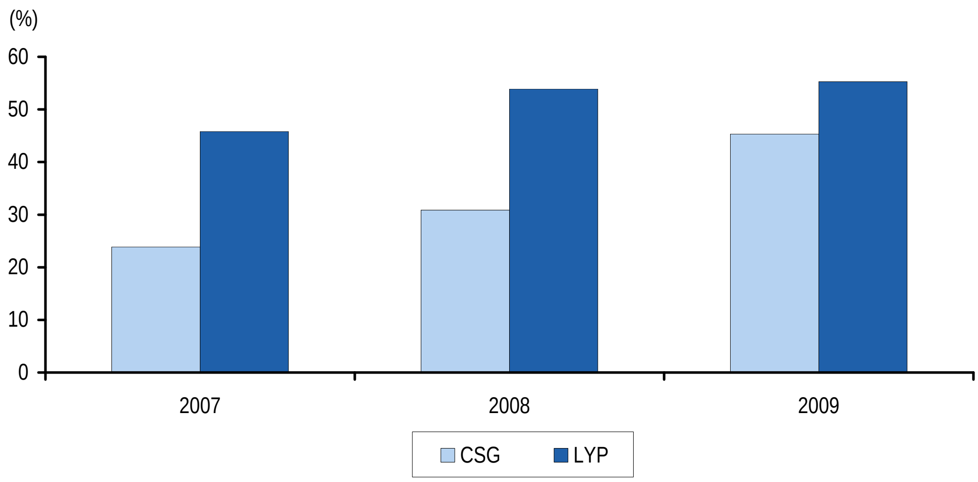
CSG's wind profitability is lower than that of the industry leader

CSG's O&M costs are higher than LYP

CSG's wind business is less profitable than those of industry leaders like LYP. The two companies' EBIT margins have diverged considerably for the past three years and we believe the reasons are related to higher operation and management (O&M) expenses, which a long-established player like LYP has managed well, due most probably to the benefit of its fully integrated in-house wind-farm design-maintenance team. On the other hand, CSG has been outsourcing the design part, which may explain its higher costs compared with LYP's, in our opinion.

CSG's EBIT margin is lower than LYP's

EBIT margins for the wind business: CSG vs. LYP



Source: Companies

We see limited unit-gross-profit risks for the gas business

Majority of CSG's gas business is in midstream transmission

CSG's gas businesses are operated through its 55%-owned subsidiary, Hebei Natural Gas (Not listed) (the remainder is owned by Hong Kong & China Gas [Not rated]). The subsidiary controls 100% of the Zhuozhou-Handan long-distance transmission pipeline, and various city-gas pipelines (100% of Shijiazhuang Development Zone, 100% of Shahe City Phase I, 70% of Handan Development Zone, 100% of Chengde City Phase I and 17% of Baoding Development Zone), as well as 100% of a CNG fuelling station in Shijiazhuang. We forecast the volume split between the midstream and downstream gas businesses to be roughly 97% and 3%, respectively, for 2010.

CSG's natural-gas business comes mainly from the long-distance transmission line

The Zhuozhou-Handan long-distance transmission pipeline is a 361km high-pressure gas pipeline covering the whole of Central-Southern Hebei, including four branch pipelines and distribution stations. The gas source of the Zhuozhou-Handan long-distance pipelines is contracted from PetroChina's *Beijing-Shaanxi Pipeline Phase I* and *II* and distributes to cities including Shijiazhuang, Baoding, Xingtai and Handan, which together account for 45% of Hebei's annual gas demand. This pipeline's capacity-utilisation rate was only 61% for 2009 based on a designed capacity of 1.5bn m^3.

CSG's gas-transmission fees are lower compared with other pipelines

The pipeline charges transmission tariff fees (the difference between gas costs and city gas price) that are regulated by the NDRC. The average charge of Rmb0.25/m^3 is not high compared with those of other major gas pipelines, such as *Shaanxi-Beijing* and *West-East II*. Therefore, we do not expect this to change for the foreseeable future, which should help to ensure the unit gross profit to be earned by CSG's gas business.

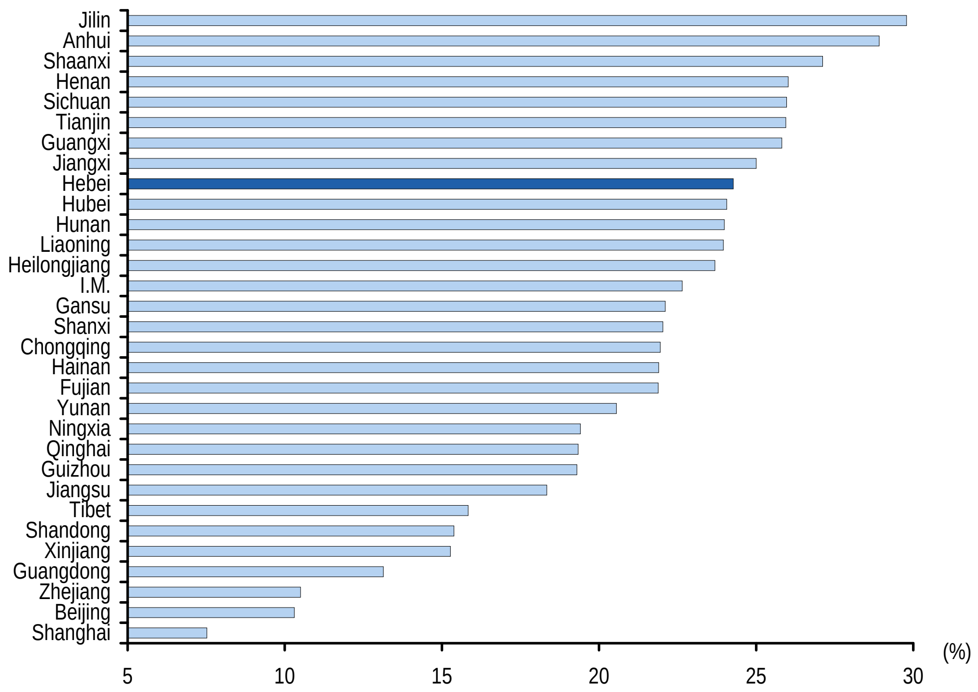
Hebei's gas demand will remain strong

The majority of CSG's gas supply is sold to C&I users

A large portion of CSG's natural-gas supply is sold to C&I users, driven by Hebei's strong fixed-asset-investment (FAI) growth. Hebei's FAI CAGR for 2005-09 was the ninth-highest in the country.

Hebei's FAI growth ranked among the highest in China for 2005-09

FAI CAGRs in Hebei (2005-09)



Source: CEIC

The only risk is the gas supply priority

However, as we have highlighted in the main section of this report, C&I gas users have lower priority than residential users, and this matters particularly in severe weather conditions, when there are temporary gas-supply bottlenecks. Therefore, we believe that CSG's gas business is not entirely risk-free from this perspective.

We forecast a 20% gas-sales-volume CAGR for 2010-12

We forecast CSG to record a 20% gas-sales-volume CAGR for 2010-12

We forecast CSG's total gas volume to reach 940 m^3 for 2010 and rise to 1,123 m^3 and 1,342 m^3 for 2011 and 2012, respectively, representing a 20% CAGR for 2010-12. We believe our CAGR forecast should be supported by: 1) the start of the *Shaanxi-Beijing Pipeline Phase III* (designed capacity of 15bn m^3), which should help divert demand pressure for *Phase I* and *II*, 2) Hebei's still under-penetrated industrial and residential demand, and 3) new pipeline projects under construction which started construction at the end of 2010.

CSG: natural-gas sales-volume forecasts

Cubic metres m	2008	2009	2010E	2011E	2012E
Wholesale	380	491	638	766	919
Retail	140	193	251	301	362
CNG	43	46	51	56	61
Total	**563**	**730**	**940**	**1,123**	**1,342**
Mix (%)					
Wholesale	67.4	67.2	67.9	68.2	68.5
Retail	24.9	26.5	26.7	26.8	26.9
CNG	7.7	6.3	5.4	5.0	4.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Company, Daiwa forecasts

Strong government background ensures project pipelines

Investment in a LNG terminal and CBM-based pipelines are on the way

As a provincially-owned company, CSG has strong ties with CNPC in Hebei. Besides CSG's gas pipelines connected to the Shannxi-Beijing lines (70%-owned by CNPC), the two groups also invested jointly in the Tangshan (located in Hebei) LNG terminal in 2010. Also, CSG has signed an MOU with the Shanxi Government regarding joint construction of two province-to-province pipelines to transport coal-bed methane (CBM). Once completed, these new pipelines will help supply additional gas to CSG's industrial customers in Hebei.

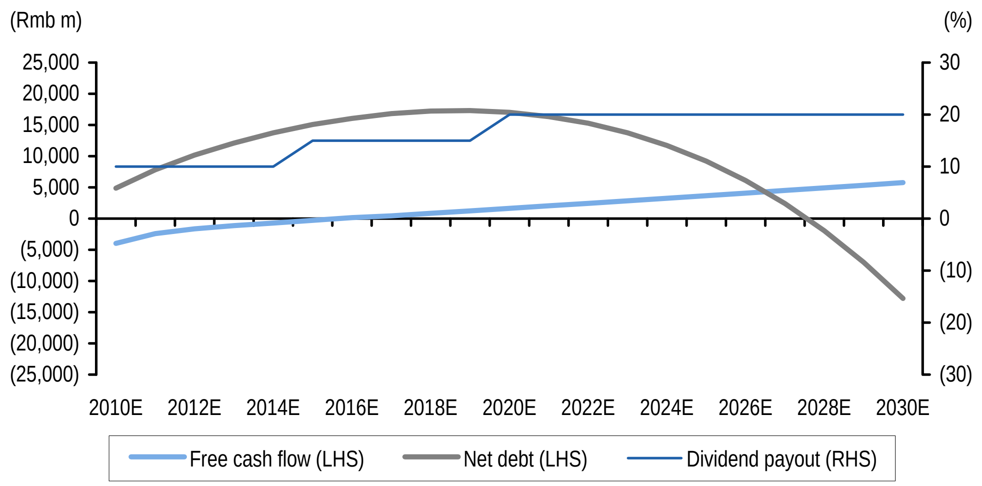
Further funding requirements likely for capex

Wind business expansion is capital-intensive

We assume that CSG will add 450MW of new wind-power capacity per year from 2011 onward. As such, the company's continuing capex requirements are likely to keep its free cash flow in negative territory until 2017, based on our forecasts. We forecast its net gearing to hit 200% by 2012, which increases the probability of equity-raising subsequently, in our view. We forecast only a 10% dividend-payout ratio for the foreseeable future until free cash flow improves.

We do not expect CSG to generate positive free cash flow until 2017, as a result of rising capex requirements for its wind business

CSG: free cash flow, net debt and dividend-payout ratio



Source: Daiwa forecasts

Risks

We see the following as downside risks to our target price. Despite the good visibility on the supply ramp-up in 2011, unexpected commencement delays for some pipelines or LNG terminals could lead to the market being disappointed on volume growth. On the cost side, if incremental costs are no longer allowed to be passed on to residential users on a national basis, the company's earnings could see downside risks. We are also concerned about the capacity additions at CSG's wind-power business, which may see downside from management's capacity guidance.

Beijing Enterprises (392 HK)

Capital goods: China

6-mth rating: 3

Target price: HK$46.00

Share price: HK$44.20 (3 Mar)

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Initiation: visible earnings growth but low return

Transformed into a state-owned utilities conglomerate

- We initiate coverage of BJE with a **3** *(Hold)* rating and NAV-based six-month target price of HK$46. Since the incorporation of Beijing Gas (Not listed) in 2007, BJE has transformed into a utilities conglomerate, with its gas, water, beer, and other businesses accounting for 68%, 16%, 14%, and 2%, respectively, of our 2011 NAV forecast. We forecast a group EPS CAGR of 21% for 2010-12, with the gas and water businesses outperforming the beer and toll-road businesses.

Business diversification caps earnings-growth rate

- We forecast the gas business to generate a net-profit CAGR of 16% from 2010-12, due to the company being the main gas supplier in Beijing and the capacity expansion of Huayou's pipelines. Although we forecast a large EPS CAGR for the water business (38%) over the period, followed by the beer business (5%), we expect the toll-road business (a compound annual decline of 1%) to be a drag on the overall earnings growth rate.

Hold rating on the back of lacklustre ROE

- We have applied a 20% discount to our end-2011 gross NAV forecast, as our DCF methodology is backend-loaded, which implies a target 2011E PER of 16x. Compared with other pure-gas players such as ENN, BJE's conglomerate model does not generate a high ROE. We see the key risks to our investment case as either higher-than-expected or lower-than-expected gas and water sales-volume growth and a fluctuating gross margin for the brewery business.

Reuters code		0392.HK

Market data

HSI		23,122.42
Market cap	(US$bn)	6.45
EV	(US$bn; 10E)	7.51
3-mth avg daily T/O	(US$m)	14.80
Shares outstanding	(m)	1,137
Free float	(%)	49.4
Major shareholder		Beijing Enterprises Group (36.2%)
Exchange rate	HK$/US$	7.788

Performance (%)*	1M	3M	6M
Absolute	(2.1)	(13.8)	(18.2)
Relative	1.2	(12.9)	(28.4)

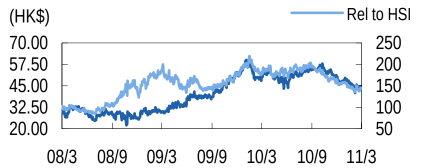
Source: Daiwa
Note: *Relative to HSI

Investment indicators

		2010E	2011E	2012E
PER	(x)	18.4	15.2	12.5
PCFR	(x)	36.4	9.8	6.1
EV/EBITDA	(x)	10.8	9.5	8.0
PBR	(x)	1.5	1.4	1.3
Dividend yield	(%)	1.7	2.0	2.5
ROE	(%)	8.4	9.5	10.7
ROA	(%)	4.2	4.5	5.1
Net debt equity	(%)	21.0	23.9	19.1

Source: Daiwa forecasts

Price and relative performance



Source: Bloomberg, Daiwa

Income summary

Year to 31 Dec	Revenue (HK$m)	(%)	EBITDA (HK$m)	(%)	Net profit (HK$m)	(%)	EPS (HK$)	(%)	CFPS (HK$)	DPS (HK$)
2008	19,704	*79.5*	4,019	*45.9*	2,282	*63.3*	2.010	*23.3*	2.275	0.651
2009	24,208	*22.9*	4,300	*7.0*	2,399	*5.1*	2.110	*5.0*	4.978	0.650
2010E	32,606	*34.7*	5,436	*26.4*	2,733	*13.9*	2.404	*13.9*	1.213	0.741
2011E	40,704	*24.8*	6,238	*14.8*	3,308	*21.0*	2.909	*21.0*	4.516	0.896
2012E	45,723	*12.3*	7,176	*15.0*	4,009	*21.2*	3.526	*21.2*	7.255	1.087

Source: Company, Daiwa forecasts

Company background

Founded in 1997, Beijing Enterprises Holdings Limited (BJE) is involved mainly in the following activities: 1) the distribution and sale of piped natural gas, 2) the production, distribution, and sale of beer in Beijing and other Mainland provinces, 3) the construction of sewage and water-treatment plants, sewage treatment and water supply in the Mainland, and 4) investment in transportation infrastructure.

Beijing Enterprises – financial summary

Profit and loss (HK$m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Piped gas	10,152	11,943	14,930	18,308	20,797
Brewery	8,473	9,758	11,149	12,612	14,014
Others	1,079	2,508	6,527	9,784	10,912
Total revenue	19,704	24,208	32,606	40,704	45,723
Other income	986	546	663	979	1,152
COGS	(15,199)	(18,390)	(25,223)	(31,969)	(35,672)
SG&A	(2,601)	(3,154)	(4,249)	(5,304)	(5,958)
Other op. expenses	(193)	(325)	0	0	0
EBIT	2,697	2,885	3,798	4,410	5,245
Net-interest inc./(exp.)	(407)	(364)	(663)	(883)	(910)
Assoc/forex/extraord./others	766	1,084	1,264	1,707	2,076
Pre-tax profit	3,056	3,605	4,398	5,234	6,411
Tax	(359)	(559)	(660)	(811)	(994)
Min. int./pref. div./others	(414)	(648)	(1,005)	(1,115)	(1,408)
Net profit (reported)	2,282	2,399	2,733	3,308	4,009
Net profit (adj.)	2,282	2,399	2,733	3,308	4,009
EPS (reported) (HK$)	2.010	2.110	2.404	2.909	3.526
EPS (adj.) (HK$)	2.010	2.110	2.404	2.909	3.526
DPS (HK$)	0.651	0.650	0.741	0.896	1.087
EBIT (adj.)	2,697	2,885	3,798	4,410	5,245
EBITDA (adj.)	4,019	4,300	5,436	6,238	7,176

Balance sheet (HK$m)

As at 31 Dec	2008	2009	2010E	2011E	2012E
Cash & short-term investment	6,667	9,486	8,761	7,687	9,344
Inventory	3,067	2,995	3,915	4,843	4,930
Accounts receivable	1,056	1,098	1,582	1,763	1,995
Other current assets	2,166	2,598	5,740	5,740	5,740
Total current assets	12,956	16,177	19,999	20,033	22,009
Fixed assets	17,988	19,045	24,422	26,608	28,456
Goodwill & intangibles	10,366	10,373	10,266	10,150	10,034
Other non-current assets	10,386	13,509	16,654	18,361	20,437
Total assets	51,697	59,105	71,340	75,151	80,936
Short-term debt	3,173	3,038	6,038	6,538	7,038
Accounts payable	1,190	1,408	2,803	2,534	3,421
Other current liabilities	5,617	6,439	7,048	7,048	7,048
Total current liabilities	9,979	10,885	15,889	16,120	17,507
Long-term debt	3,895	5,264	9,764	9,764	9,764
Other non-current liabilities	1,511	3,939	3,444	3,444	3,444
Total liabilities	15,386	20,088	29,096	29,328	30,715
Share capital	114	114	114	114	114
Reserves/R.E./others	29,518	31,191	33,413	35,878	38,867
Shareholders' equity	29,632	31,305	33,526	35,992	38,981
Minority interests	6,679	7,712	8,717	9,832	11,240
Total equity & liabilities	51,697	59,105	71,340	75,151	80,936
Net debt/(cash)	401	(1,184)	7,041	8,615	7,458

Cash flow (HK$m)

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Profit before tax	3,056	3,605	4,398	5,234	6,411
Depreciation and amortisation	1,322	1,415	1,638	1,828	1,931
Tax paid	(359)	(559)	(660)	(811)	(994)
Change in working capital	698	(504)	(457)	877	(1,069)
Other operational CF items	(2,134)	1,702	(3,541)	(1,993)	1,969
Cash flow from operations	2,583	5,659	1,379	5,135	8,248
Capex	(3,383)	(2,363)	(7,014)	(4,014)	(3,779)
Net (acquisitions)/disposal	(1,146)	(967)	(1,720)	(1,707)	(2,076)
Other investing CF items	136	(6)	4	0	0
Cash flow from investing	(4,393)	(3,335)	(8,731)	(5,721)	(5,855)
Change in debt	1,144	1,234	7,500	500	500
Net share issues/(repurchases)	0	0	0	0	0
Dividends paid	(739)	(739)	(842)	(1,019)	(1,235)
Other financing CF items	0	0	0	0	0
Cash flow from financing	405	495	6,658	(519)	(735)
Forex effect/others	0	0	0	0	0
Change in cash	(1,406)	2,819	(694)	(1,105)	1,657

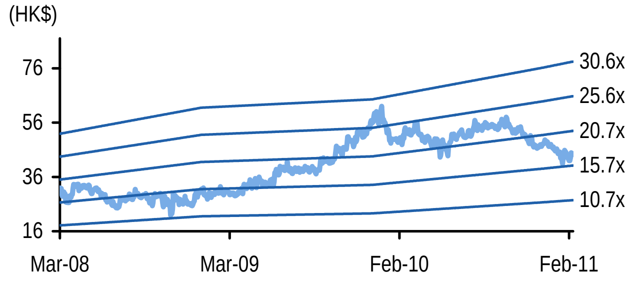
Key ratios

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Sales – YoY %	79.5	22.9	34.7	24.8	12.3
EBITDA (adj.) – YoY %	45.9	7.0	26.4	14.8	15.0
Net profit (adj.) – YoY %	63.3	5.1	13.9	21.0	21.2
EPS (adj.) – YoY %	23.3	5.0	13.9	21.0	21.2
EBITDA margin % (adj.)	20.4	17.8	16.7	15.3	15.7
EBIT margin % (adj.)	13.7	11.9	11.6	10.8	11.5
Net-profit margin % (adj.)	11.6	9.9	8.4	8.1	8.8
ROAE (%)	8.1	7.9	8.4	9.5	10.7
ROAA (%)	4.7	4.3	4.2	4.5	5.1
ROCE (%)	6.7	6.4	7.2	7.3	8.1
ROIC (%)	7.2	6.5	7.4	7.2	7.9
Net debt to equity (%)	1.4	net cash	21.0	23.9	19.1
Effective tax rate (%)	11.8	15.5	15.0	15.5	15.5
Accounts receivable (days)	17.4	16.2	15.0	15.0	15.0
Payables (days)	27.1	19.6	23.6	23.9	23.8
Net interest cover (x)	6.6	7.9	5.7	5.0	5.8
Net dividend payout (%)	32.4	30.8	30.8	30.8	30.8

Key assumptions

Year to 31 Dec	2008	2009	2010E	2011E	2012E
Gas sales volume (m cm)	4,890.0	5,690.0	6,567.3	7,557.0	8,637.3
Gas ASP - retail (Rmb/cm)	1.8	1.8	1.9	2.1	2.1
Gas purchase cost (Rmb/cm)	1.4	1.4	1.6	1.7	1.7
Transmission capacity (mmcfpd)	15,300.0	15,300.0	22,950.0	35,600.0	35,600.0
Transmission sales vol (mmcfpd)	12,190.0	14,390.0	16,155.0	21,952.0	24,820.0
Transmission utilization rate (%)	0.8	0.9	0.7	0.6	0.7
Volume of beer sales (mil hl)	42.2	46.7	50.9	55.5	59.9
ASP (local curr./hl)	184	193	201	209	215
Capacity – sewage treatment (kt/day)	1,100	1,615	3,500	4,200	5,800

PER bands



Source: Company, Daiwa forecasts

Our NAV-based target price is HK$46

We value BJE using a NAV-based methodology

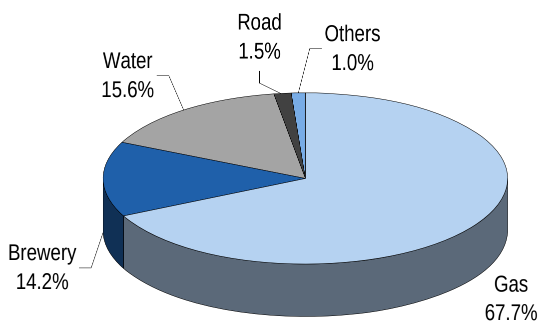
Given BJE's conglomerate-like business model, we believe an SOTP valuation is the best way to capture its intrinsic value. We have used different valuation methodologies for the group's different businesses and, as such, our net end-2011E NAV forecast is HK$67,264m. As we have used a DCF methodology to calculate a large proportion of our NAV forecast, we believe it is reasonable to apply a conglomerate-business discount to arrive at a fair value for the stock. Our six-month target price, which assumes a 20% discount to our net end-2011 NAV forecast, is HK$46. We believe that such a discount is reasonable over the near term, as much of the company's business-growth potential should only become apparent from 2012.

BJE: NAV calculation

Business	Valuation method	Equity value (HK$m)	%
Beijing city gas	DCF, 9.5% COE, 3% terminal growth	19,361	28.8
Huayou	DCF, 9.5% COE, 3% terminal growth	23,930	35.6
Coal gas	DCF, 8.5% WACC, growth is over lifetime	1,092	1.6
Brewery	23x 2011 PER (same as peer)	9,292	16.4
No.9 water distribution	DCF, 9.5% COE, 0% terminal growth	2,982	4.4
No.10 water distribution	DCF, 9.5% COE, 0% terminal growth	43	0.1
Water through BEW	DCF, 9.5% COE, 4% terminal growth	7,183	10.7
Road	DCF, 9.5% COE, 0% terminal growth	1,008	1.5
Others	Current market value	660	1.0
Beijing Development (0154.HK) (Not rated)	Current market value	425	0.6
Biosino Bio-Tech (8247.HK) (Not rated)	Current market value	176	0.3
BMEI Co. (Not listed)	Current market value	59	0.1
Total net NAV		65,552	100.0
Target fair value		57.7	
NAV discount		20%	
Target price (HK$/share)		**46.0**	

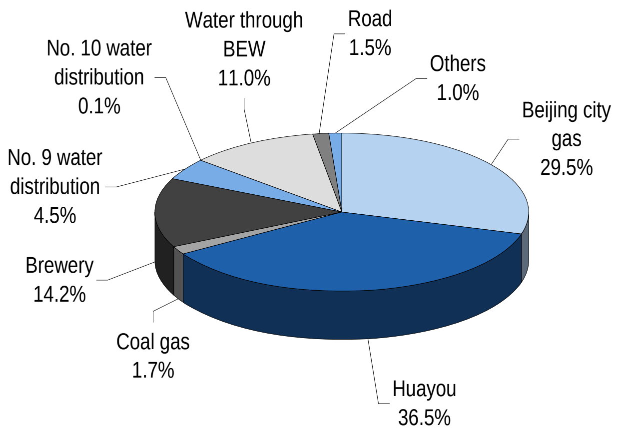
Source: Daiwa forecasts

BJE: gross estimated NAV breakdown (end-2011)



Source: Daiwa forecasts

Gross estimated NAV breakdown (detailed) (end-2011)



Source: Daiwa forecasts

Gas business: valuation rationale

We value BJE's gas business using a DCF methodology, and believe that the recent transaction between PetroChina and Kunlun Energy has undervalued the midstream business

Given that we see relatively high visibility for future FCF, we believe a DCF methodology is appropriate to estimate the value of the company's gas businesses. BJE is exposed to both the midstream gas-transmission-pipeline and downstream distribution businesses. The midstream business is conducted though a 40% interest in Huayou China, the key operator of the *Shaanxi-Beijing* gas pipelines. PetroChina (857 HK, HK$10.78, 2) recently transferred the other 60% interest in Huayou China to its subsidiary, Kunlun Energy.

We believe the transaction price for the 60% interest in Huayou of Rmb18,871m was undervalued, and our 2011-end NAV forecast for Huayuo is a 67% premium to the transaction price. BJE is the sole city-gas supplier for Beijing's CBD. It also has major interests in the surrounding counties, as well as minority interests in a few, much smaller, city projects. Our equity values for the downstream and midstream gas businesses are HK$19,361m and HK$23,930m, respectively.

Beijing city-gas business: DCF valuation

Beijing Gas (Rmb m)		2009	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free interest rate	3.0%												
Equity-risk premium	6.5%												
Beta	1.0												
Cost-of-equity	9.5%												
Cost-of-debt	6.0%												
Perpetual growth	3.0%												
EBIT		884	981	903	997	1,151	1,251	1,456	1,655	1,764	1,993	2,244	2,521
Plus deprecation		479	560	573	585	597	608	619	626	630	634	638	641
Less: finance cost		(38)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)
Less: Tax		(91)	(114)	(105)	(122)	(237)	(336)	(359)	(394)	(414)	(453)	(496)	(541)
Total working capital		(146)	(241)	(293)	(216)	(235)	(211)	(190)	(171)	(154)	(139)	(125)	(112)
Capital expenditure		(999)	(800)	(800)	(800)	(800)	(800)	(800)	(700)	(700)	(700)	(700)	(700)
FCF		88	354	247	413	445	481	695	985	1,095	1,304	1,530	1,778
Discounted FCF				236	361	355	350	462	598	607	660	708	751
Terminal value	11,895												11,895
Terminal value	70.0%												
Equity value (Rmb m)	16,983												
Equity value (HK$m)	19,361												

Source: Company, Daiwa forecasts

Huayou: DCF valuation

Huayou (Rmb m)		2009	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free interest rate	3.0%												
Equity-risk premium	6.5%												
Beta	1.0												
Cost-of-equity	9.5%												
Cost-of-debt	6.0%												
Perpetual growth	2.0%												
Net profit		2,406	2,727	3,702	4,309	4,399	4,904	5,959	6,403	6,403	6,595	6,888	6,888
Plus deprecation		862	1,306	1,674	1,966	2,013	2,027	2,010	1,980	1,951	1,924	1,898	1,874
Total working capital		(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Change in debt		5,625	3,750	3,000	0	(500)	(500)	(500)	(1,000)	(1,000)	(1,000)	(2,000)	(2,000)
Capital expenditure		(9,375)	(6,250)	(5,000)	(3,000)	(2,500)	(2,000)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)
FCF		(1,482)	533	2,376	2,275	2,412	3,431	4,970	4,883	4,854	5,019	4,287	4,263
Discounted FCF				2,270	1,985	1,922	2,497	3,303	2,964	2,691	2,541	1,982	1,800
Terminal value	28,523												28,523
Terminal value	54.4%												
Equity value (Rmb m)	52,479												
Equity value (HK$m)	59,826												
Ownership	40%												
Equity value to BJE (HK$m)	23,930												

Source: Company, Daiwa forecasts

Brewery business: valuation rationale

We value BJE's brewery business at a 2011 PER of 23x, based on our forecasts

BJE owns a 45% stake in Yanjing Brewery (Not rated), an A-share beer maker. We believe Yanjing Brewery is in a business-growth phase that is similar to the phase Tsingtao Brewery (168 HK, HK$37.4, 4) is going through – both share the top-three spot in terms of market share. As such, we have assigned an implied PER of 23x for BJE's brewery (the same as the target PER Daiwa assigns to Tsingtao Brewery [168 HK, HK$37.4, 4]), based on our 2011 EPS forecast, which gives us a target fair value of HK$9,292m, 23% below Yanjing Brewery's current A-share market cap, adjusted for equity interests.

BJE brewery business: PER valuation	
Brewery	
2010-12 net-profit CAGR (%)	5
2010-12 EPS CAGR (%)	5
2011 net profit to BJE (HK$m)	404
Target PER (x)	23
Fair value (HK$m)	9,292

Source: Daiwa forecasts

Water business: valuation rationale

We value BJE's water business using a DCF methodology

Similar to the gas business, we have used a DCF methodology to value BJE's water business as we see relatively high visibility for future FCF. The water business comprises sewage treatment, water supply, reclaimed water, and seawater desalination in 14 provinces across China through Beijing Enterprises Water Group (BEW) (Not rated), the *Beijing No.9* water-treatment plant concession, and the *Beijing No.10* water-treatment plant concession (currently under construction). We have an equity value for BJE's water business through BEW of HK$7,1830m, which represents a 15% discount to BJE's current market cap. The *Beijing No.9* water-treatment plant operates under a guaranteed return structure and we value it at HK$2,982m, based on our DCF valuation. The company plans to start operations at the *Beijing No.10* water-treatment plant in 2011, and we have an equity value for it of HK$43m. Combining the three together, we arrive at a total equity value of HK$10,208m for the company's water assets.

BEW assets: DCF valuation

BEW (HK$m)		2009	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free interest rate	3.0%												
Equity-risk premium	6.5%												
Beta	1.0												
Cost-of-equity	9.5%												
Perpetual growth	4.0%												
Net profit		193	528	585	769	921	1,105	1,326	1,478	1,502	1,527	1,388	1,424
Plus deprecation		14	123	275	353	404	426	439	446	453	460	466	472
Total working capital		(939)	(945)	(412)	(58)	(78)	919	917	972	991	990	990	1,988
Change in debt		1,412	5,000	3,000	0	0	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(2,000)
Capital expenditure		(233)	(5,000)	(2,000)	(1,000)	(1,000)	(800)	(600)	(600)	(600)	(600)	(600)	(600)
FCF		447	(294)	1,447	64	247	650	1,082	1,296	1,347	1,377	1,243	1,284
Discounted FCF				1,383	56	197	473	719	787	747	697	575	542
Terminal value	10,254												10,254
Terminal value	62.4%												
Firm value (HK$m)	16,430												
Equity value (HK$m)	16,430												
Ownership	44%												
Equity value to BJE	7,183												

Source: Company, Daiwa forecasts

***Beijing No.9* plant: DCF valuation**

Beijing Water Supply No.9 Plant (HK$m)		2009	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free interest rate	3.0%												
Equity-risk premium	6.5%												
Beta	1.0												
Cost-of-equity	9.5%												
Cost-of-debt	6.0%												
Perpetual growth	0.0%												
FCF (Rmb m)		180	210	210	210	210	210	210	210	210	210	210	210
FCF (HK$m)		204	242	253	266	273	273	273	273	273	273	273	273
Discounted FCF				242	232	218	199	181	166	151	138	126	115
Terminal value													1,213
Firm value (HK$m)	2,982												
Equity value (HK$m)	2,982												

Source: Company, Daiwa forecasts

Beijing No.10 plant: DCF valuation

Beijing Water Supply No.10 Plant (HK$m)		2009A	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free interest rate	3.0%												
Equity-risk premium	6.5%												
Beta	1.0												
Cost-of-equity	9.5%												
Cost-of-debt	6.0%												
Perpetual growth	0.0%												
FCF (Rmb m)				40	40	40	40	40	40	40	40	40	40
FCF (HK$m)				25	25	25	25	25	25	24	24	24	24
Discounted FCF				24	22	20	18	16	15	13	12	11	10
Terminal value	106			(225)									106
Firm value (HK$m)	43												
Equity value (HK$m)	43												

Source: Company, Daiwa forecasts

Other assets: valuation rationale

We value BJE's other assets using a DCF methodology

We have used a DCF methodology to value BJE's toll-road business as we see relatively high visibility for future FCF. The company's toll-road assets include the *Capital Airport Expressway* and *Shenzhen Shiguan Road*, for which we have a combined equity value of HK$1,008m. As for the company's other assets, including Beijing Development (Not rated) and Biosino Bio-Tech (Not rated), which are under BJE's technology arm, we believe the current market values are fair.

BJE toll-road assets: DCF valuation

Toll-road (HK$m)		2009	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Risk-free interest rate	3.0%												
Equity-risk premium	6.5%												
Beta	1.0												
Cost-of-equity	9.5%												
Cost-of-debt	6.0%												
Perpetual growth	0.0%												
Net profit		104	64	61	63	65	67	68	69	70	71	72	73
Plus deprecation		86	56	54	52	50	48	46	44	43	41	40	38
Total working capital		0	0	0	0	0	0	0	0	0	0	0	0
Change in debt		(44)	(38)	(38)	(38)	0	0	0	0	0	0	0	0
Capital expenditure		(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)	(15)
FCF		132	67	62	62	100	100	99	98	98	97	97	96
Discounted FCF				59	54	80	73	66	60	54	49	45	41
Terminal value	428												428
Terminal value	42.5%												
Firm value (HK$m)	1,008												
Equity value (HK$m)	1,008												

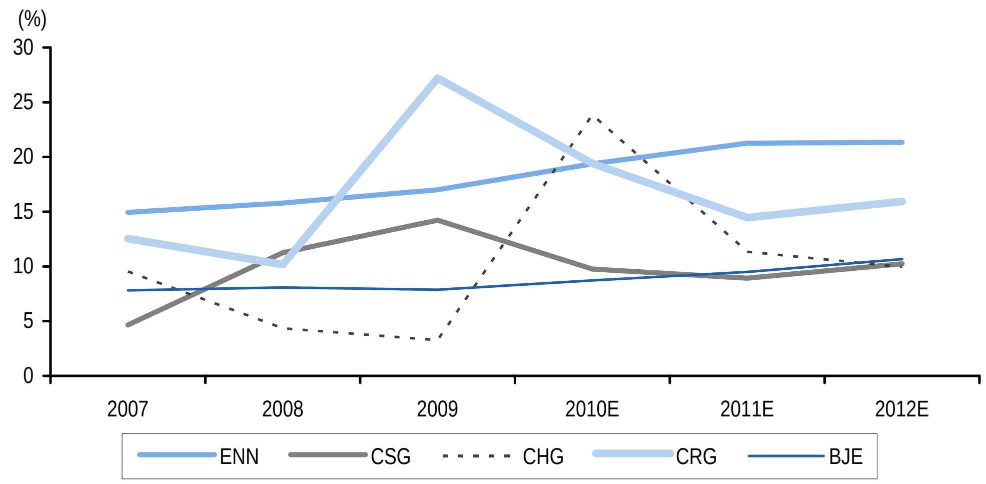
Source: Company, Daiwa forecasts

Diversification = lacklustre ROE

BJE's ROE is among the lowest among its peers

As a result of having a diversified business, BJE's ROE has been depressed by business segments that offer low returns, such as the brewery and toll-road divisions, despite the fact that the gas and water businesses have performed well over the past few years. Unless the company decides to dispose of its brewery and/or toll-road assets, we do not expect BJE to improve its ROE any time soon.

China City Gas Sector: ROE



Source: Companies, Daiwa forecasts; Note: CHG has a March year-end, so 2007-12E refers to FY08-13E

Business diversification in detail

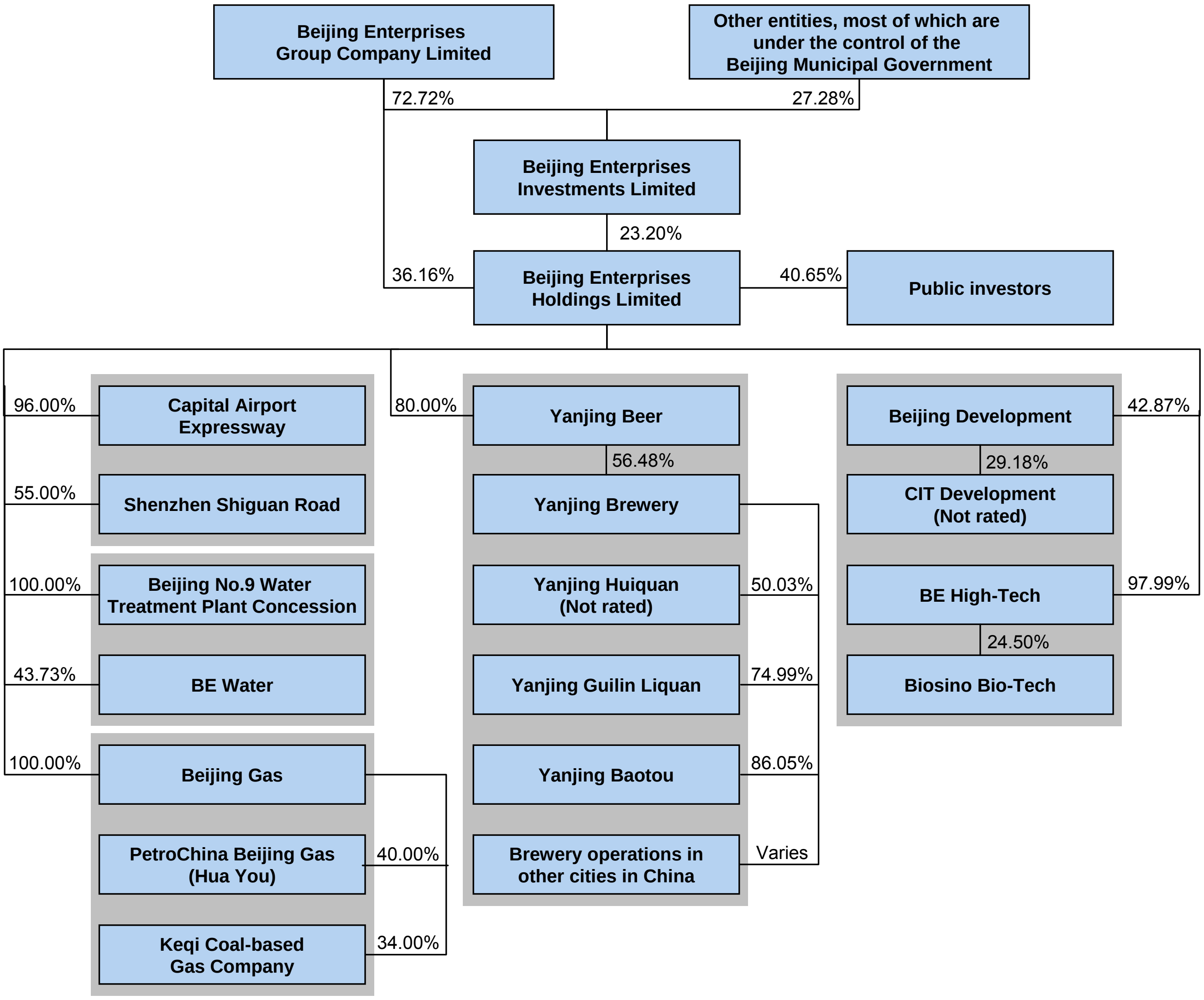
A long history of business growth and a re-organisation in 2007

Founded and listed in Hong Kong in 1997, BJE began as a huge, diversified, state-owned conglomerate, with assets in the areas of: food-processing and retail, breweries, hotel management, department stores, toll roads, tourism, and technology. The company was set up with the aim of leveraging on Hong Kong's capital market during the early stages of Beijing's economic development in the 1990s. The market's response to BJE's IPO was overwhelming, and the company's share price tripled on the first day of its listing in 1997. However, as the company experienced many years of stagnant business growth, it was forced to reposition itself, and undertook a series of restructuring measures, divestments and asset injections from 2003-07. In June 2007, the group acquired Beijing Gas Group, and it restructured its water businesses by forming BEW and acquiring Z.K.C. Environmental Group (Not listed). BJE is now a much more focused conglomerate than it once was, with four core divisions: gas, brewery, water, and toll roads.

Risks

We see the following as downside risks to our target price. Despite the good visibility on the supply ramp-up in 2011, unexpected commencement delays for some pipelines or LNG terminals could lead to the market being disappointed on volume growth. On the cost side, if incremental costs are no longer allowed to be passed on to residential users on a national basis, the company's earnings could see downside risks. Apart from its gas business, BJE's fast-expanding water business may face construction delays or lower-than-expected returns, while its brewery business may see upside or downside risks to our gross-margin forecasts as commodity prices remain volatile.

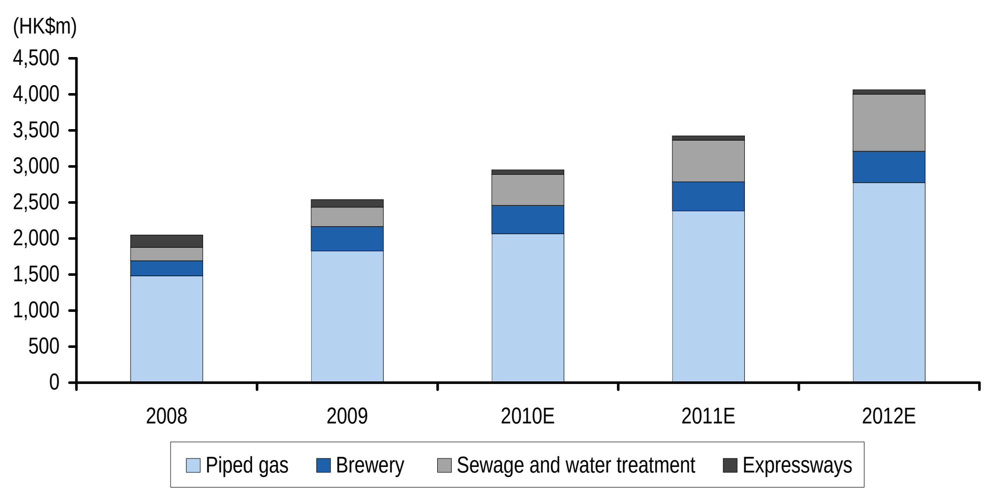
BJE: group structure (as at end-2010)



Source: Company

We forecast the gas business to account for 69% of 2012 net profit

BJE: net-profit breakdown by division



Source: Company, Daiwa forecasts

Gas business: 2010-12 net-profit CAGR of 16%

We forecast a 2010-12 city-gas net-profit CAGR of 16%

Backed by the Beijing Municipal Government, BJE operates China's single largest city-gas utility in Beijing's CBD, through Beijing Gas, BJE's 100%-owned subsidiary. Of all the demands made on the utility, those for heating and cooling are the greatest, and we forecast such demand to account for 42% of the business' total sales volume by 2012. Next is demand from gas-fired power plants, accounting for 34% of our 2012 sales-volume forecast, followed by 11% from households (other than heating and cooling), 10% from commercial and industrials (other than heating and cooling), and 3% from other uses. We expect to see the strongest demand growth over the 2010-12 period from the gas-fired power segment, given Beijing's aim of implementing more environmentally-friendly measures. As a result, we forecast gas sales volume to improve by a CAGR of 15% from 2010-12, to 8.6bn cm from 6.6bn cm.

Beijing city gas: sales volume

m m^3	2008	2009	2010E	2011E	2012E
Residential	740	794	833	875	919
Commercial	372	440	506	582	669
Industrial	248	153	168	182	196
Heating and cooling	2,338	2,712	2,983	3,282	3,610
Gas-fired power plants	1,010	1,352	1,826	2,374	2,967
Others	182	238	250	263	276
Total gas sales volume	**4,890**	**5,690**	**6,567**	**7,557**	**8,637**
Breakdown (%)					
Residential	15.1	13.9	12.7	11.6	10.6
Commercial	7.6	7.7	7.7	7.7	7.7
Industrial	5.1	2.7	2.6	2.4	2.3
Heating and cooling	47.8	47.7	45.4	43.4	41.8
Gas-fired power plants	20.7	23.8	27.8	31.4	34.4
Others	3.7	4.2	3.8	3.5	3.2
Total gas sales volume	740	794	833	875	919

Source: Company, Daiwa forecasts

We see limited gross-margin risks associated with BJE's gas model

We believe the Beijing city-gas gross-profit margin is largely protected by a favourable pass-through mechanism implemented by the Beijing Municipal Government in the past. Gas tariffs for non-residential users are designed to be passed on automatically once gas costs are increased. For residential users, the procedure is not as simple, as requests for price hikes have to be approved following a public hearing in Beijing. In June 2010, following an increase in the wellhead gas tariff, BJE's Beijing city-gas utility was unable to pass on additional costs immediately because of fears it would exacerbate local inflation. However, compared with other gas players, such as ENN and CHG, BJE's gas utility is much less exposed to residential demand, which accounts for only 11% of our 2012 sales-volume forecast.

We expect a fixed tariff for Huayou's midstream assets

The business model for the midstream business (Huayou) is much simpler in that it is based on transmission charges. Huayou's key assets are the *Shaanxi-Beijing Pipelines 1, 2,* and *3.* We forecast total transmission capacity to expand to 17,950m^3 for 2010 and 20,600 m^3 for 2011, from 15,300 m^3 for 2009. Our revenue forecasts are based on a fixed transportation tariff of Rmb0.5/m^3. We forecast the gross-profit margin for the gas business to decline from 2010-12, due to a high base effect in terms of the fixed-dollar gross-profit formula.

BJE gas business: key assumptions

	2008	2009	2010E	2011E	2012E
Assumptions for Beijing city gas					
Average gas tariff (Rmb/cm)	1.8	1.8	1.9	2.1	2.1
Average gas cost (Rmb/cm)	1.4	1.4	1.6	1.7	1.7
Unit gross profit (Rmb/cm)	0.4	0.4	0.4	0.3	0.3
Total sales volume (m cm)	4,890	5,690	6,567	7,557	8,637
Assumptions for Huayou					
Maximum capacity (m cm)	15,300	15,300	17,950	20,600	20,600
Volume of gas transported (m cm)	12,190	14,390	16,155	18,952	19,570
Transportation tariff (Rmb/cm)	0.4	0.4	0.4	0.4	0.4
Total revenue (Rmb m)	10,152	11,943	14,930	18,308	20,797
Total gross profit (Rmb m)	1,444	1,799	2,124	2,259	2,512
EBIT (Rmb m)	794	1,003	1,132	1,042	1,151
Net profit (Rmb m)	1,481	1,826	2,062	2,377	2,770
Gross-profit margin (%)	14.2	15.1	14.2	12.3	12.1
EBIT margin (%)	7.8	8.4	7.6	5.7	5.5
Net-profit margin (%)	14.6	15.3	13.8	13.0	13.3

Source: Company, Daiwa forecasts

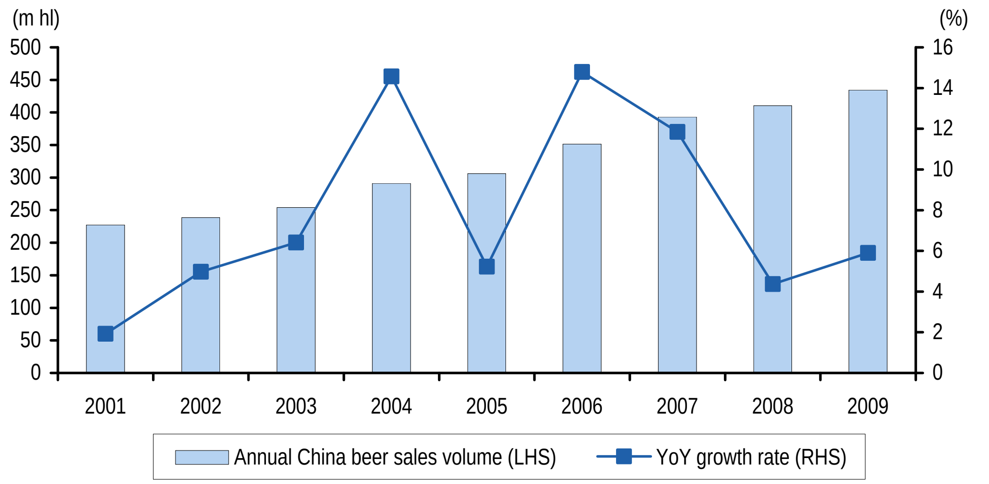
Brewery business: we forecast a net-profit CAGR of 5% for 2010-12

China's beer market is in a period of slow ASP growth

Daiwa forecasts the revenue for China's beer industry to increase by 5-8% YoY over the next few years, which is in line with the industry's average annual rate of increase over the past eight years. The industry has become more concentrated over the years. As at the end of 2008, the top-three players (China Resources Enterprises' [Not rated] Snow Brewery (Not listed), Tsingtao Brewery, and Yanjing Brewery) had a combined market share of 41%, which was much higher than the 25% for 2001. A more concentrated market has also enabled the industry ASP to recover; we have observed that the ASP improved by 27% from 2001-08. In our 2010-12 earnings forecasts, we assume that Yanjing Brewery's ASP will rise by 4% a year over the next few years, which is in line with the 2001-08 ASP CAGR growth.

China's brewery market saw average sales growth of 8% from 2001-09

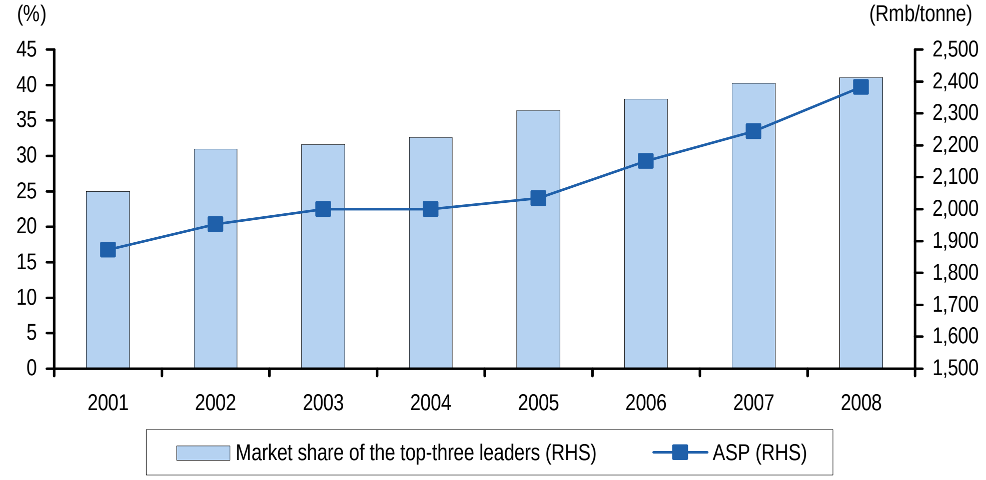
China: beer sales growth



Source: Euromonitor

Market consolidation has resulted in an increase in prices

Top-three brewery players: market share and market ASP



Source: Euromonitor

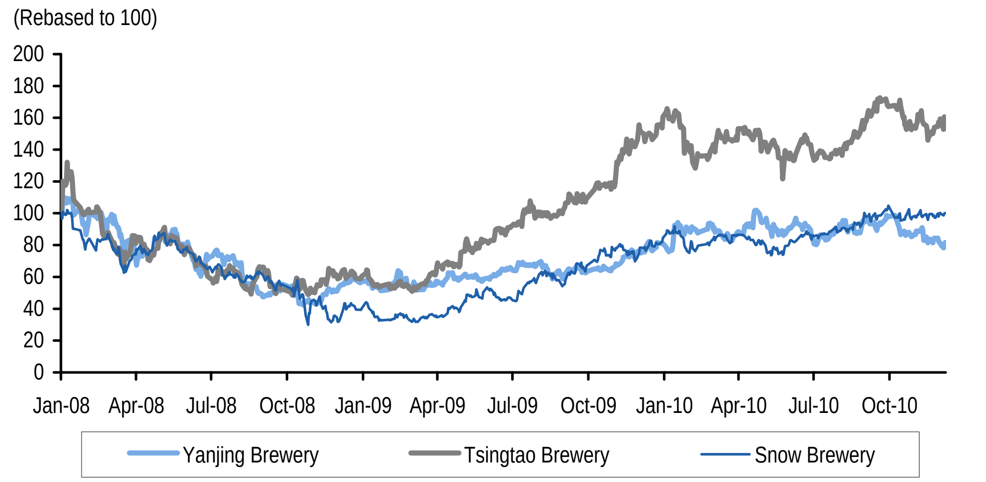
BJE beer business: key assumptions

	2008	2009	2010E	2011E	2012E
Sales volume (m '000l)	4.2	4.7	5.1	5.5	6.0
ASP (Rmb/000l)	1.8	1.9	2.0	2.1	2.2
Total revenue (HK$m)	8,473	9,758	11,149	12,612	14,014
Total gross profit (HK$m)	2,394	3,100	3,419	3,762	4,119
EBIT (HK$m)	901	1,139	1,377	1,434	1,533
Net profit (HK$m)	210	341	393	404	435
Gross margin (%)	28.3	31.8	30.7	29.8	29.4
EBIT margin (%)	10.6	11.7	12.4	11.4	10.9
Net margin (%)	2.5	3.5	3.5	3.2	3.1

Source: Company, Daiwa forecasts

Tsingtao Brewery's share price has outperformed those of its peers since April 2009

Top-three brewery players: share-price performance



Source: Bloomberg

Water business: 2010-12E net-profit CAGR of 38%

BJE's water assets had a daily total designed capacity of 5.62m tonnes as at 30 June 2010

BJE's water assets include BEW, the *Beijing No.9* water plant, the *Beijing No.10* water plant, the *Haikou* plant, and the *Weifang* plant. BEW has 57 sewage-treatment plants, seven water-supply plants, three reclaimed-water plants, and one seawater desalination plant, with a total daily designed capacity of 5,619,500 tonnes, as at 30 June 2010.

BJE: water assets

Assets	Operation type	Location	Capacity as at 30 Jun 2010 ('000 tonnes)
BEW	Sewage treatment, water supply, reclaimed water, seawater desalination	14 provinces	5,620
Beijing No.9 water plant	Water supply	Beijing	500
Beijing No.10 Water plant	Water supply	Beijing	500
Haikou plant	Sewage treatment	Hainan	250
Weifang plant	Sewage treatment	Shandong	30
Total			6,900

Source: Company

BEW: project summary ('000 tonnes)

	Sewage treatment	Water supply	Reclaimed water	Seawater desalination	Total
Projects started in 2008	1,480	50	-	-	1,530
Projects started in 2009	1,663	100	212	-	1,975
Projects started in 2010	995	1,070	-	50	2,115
Total	**4,138**	**1,220**	**212**	**50**	**5,620**
In operation	1,805	150	-	-	1,955
Operations not yet started	2,333	1,070	212	50	3,665
Total	**4,138**	**1,220**	**212**	**50**	**5,620**

Source: Company

The expansion of BJE's water business is being driven mainly by BEW's aggressive ramp-up in capacity

We forecast a net-profit CAGR of 38% for BJE's water business from 2010-12, driven mainly by BEW's aggressive increase in capacity since 2009. Management guides that BEW plans to add a daily designed capacity of 200m tonnes (for all of its water businesses) annually over the next five years. We believe the sewage-treatment business and construction-service business will be the main net-profit growth drivers, as built-operate-transfer and build-transfer projects ramp up. As sewage-treatment contracts with local governments usually include terms to protect the net-profit margin, whereby the price paid to BEW will be adjusted to reflect any rise in costs, we do not see any risk of net-profit-margin erosion for BEW's sewage-treatment business.

BJE: key assumptions

	2008	2009	2010E	2011E	2012E
BEW – capacity ('000 tonnes/day)	1,150	1,765	4,000	5,400	7,300
BEW – processed volume ('000 tonnes/day)	551	613	667	720	771
BEW – total revenue (HK$m)	338	1,730	5,952	9,220	10,347
No.9 water plant '000 tonnes total revenue (HK$m)	233	240	287	287	287
Total revenue (HK$m)	571	1,970	6,239	9,507	10,635
Total gross profit (HK$m)	395	752	1,645	2,525	3,230
EBIT (HK$m)	320	577	1,163	1,811	2,436
Net profit (HK$m)	186	268	402	585	769
Gross-profit margin (%)	69.2	38.2	26.4	26.6	30.4
EBIT margin (%)	56.0	29.3	18.6	19.0	22.9
Net-profit margin (%)	32.6	13.6	6.4	6.1	7.2

Source: Company, Daiwa forecasts

BEW: revenue and gross-profit mix

Revenue mix (%)	2008	2009	2010E	2011E	2012E
Sewage treatment and construction services	79.8	87.0	92.5	87.2	83.1
Construction services	n.a.	61.6	78.0	73.8	65.7
Sewage-treatment services	n.a.	25.4	14.5	13.4	17.3
Water-supply services	1.8	3.5	3.7	6.1	7.0
Sewage-technical services	15.1	4.0	1.4	4.3	6.8
Sales of sewage-treatment facilities	-	5.5	2.4	2.3	2.7
Reclaimed water and water desalination	-	-	-	-	0.4
Corporate and others	3.2	-	-	-	-
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Gross-profit mix (%)					
Sewage treatment and construction services	39.9	78.5	84.9	71.4	66.2
Construction services	7.1	24.8	43.0	36.5	27.8
Sewage-treatment services	32.8	53.7	41.9	34.9	38.5
Water-supply services	1.3	4.5	6.4	9.7	9.5
Sewage-technical services	18.8	12.3	5.8	16.5	21.9
Sales of sewage-treatment facilities	-	4.7	2.9	2.4	2.4
Reclaimed water and water desalination	-	-	-	-	0.6
Corporate and others	0.0	-	-	-	-
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Gross-profit margin (%)					
Sewage treatment and construction services	38.1	26.9	20.0	19.9	22.6
Construction services	14.0	12.0	12.0	12.0	12.0
Sewage-treatment services	61.0	63.0	63.0	63.0	63.0
Water-supply services	56.0	38.2	38.2	38.2	38.2
Sewage-technical services	95.0	91.9	91.9	91.9	91.9
Sales of sewage-treatment facilities	n.a	25.4	25.4	25.4	25.4
Reclaimed water and water desalination	-	-	-	-	40.0
Corporate and others	1.0	-	-	-	-
Total	**45.8**	**29.8**	**21.8**	**24.2**	**28.4**

Source: Company, Daiwa forecasts

BEW's future earnings growth should be driven by reclaimed water and desalination

We see BEW's reclaimed-water and seawater-desalination businesses as the future revenue drivers for BJE's water business, and expect profit for these businesses to take off from 2012. Seawater-desalination technology could be the answer to northern China's long-unresolved water shortage, given the advances made with respect to membrane technology. According to Desaldata, as at the end of January 2011, China had desalination capacity under construction of 805,000 m^3/day, and a further 178,000 m^3/day at the planning stage.

China seawater-desalination project pipeline (as at the end of Jan 2011)

Project	Province/municipality	Technology	Status	Capacity (m^3/day)
Zhanjiang project: Baoshan Iron & Steel Co	Shanghai	n.a.	Planned	150,000
Weiqiao Power Plant V, Phase I	Shandong	RO	Planned	28,000
Fujian Coal Group	Fujian	n.a.	Planned	n.a
Tianjin SDIC	Tianjin	MED	Construction	200,000
Qingdao seawater desalination plant	Shandong	RO	Construction	100,000
Xiangshan seawater desalination plant, Ningbo	Zhejiang	HYB	Construction	100,000
Zhoushan seawater desalination plant	Zhejiang	RO	Construction	100,000
Liuheng seawater desalination plant	Zhejiang	RO	Construction	60,000
Caofeidian desalination plant	Hebei	RO	Construction	50,000
Tianjin Dagang newspring expansion	Tianjin	RO	Construction	50,000
Shougang extension	Hebei	MED	Construction	25,000
Sichuan Petro	Sichuan	RO	Construction	23,520
Jinan Yuxing Chemical	Shandong	RO	Construction	22,200
Weihai co-generation seawater desalination plant	Shandong	RO	Construction	20,000
Hongyanhe nuclear-power plant	Liaoning	RO	Construction	17,000
Guangdong Pinghai power plant	Guangdong	Other	Construction	16,691
Lingyuan Steel	Liaoning	RO	Construction	15,120
Baosteel Engineering	Shanghai	RO	Construction	3,600
Shuangxi Tire	Shanxi	RO	Construction	1,200
Tian-EGL	Tianjin	RO	Construction	336
Total				982,667

Source: Desaldata.com, compiled by Daiwa
Note: RO: reverse osmosis; MED: multi-effect distillation; HYB: hybrid

China Gas (384 HK)

6-mth rating: 4
Target price: HK$2.50
Share price: HK$2.79 (3 Mar)

Utilities: China

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Initiation: LPG margin expansion yet to be seen

Reputation damaged, but it's business as usual

- We initiate coverage of CHG with a **4** *(Underperform)* rating and DCF-derived six-month target price of HK$2.50. We believe the sell-off over the past three months was due to the arrest of key management in December 2010. However, while the overhang on the company's reputation could persist, we do not believe it will have a substantially negative impact on current projects, and expect the new management to take a prudent approach to such projects. However, we are concerned about the LPG business, which could be a swing factor in future earnings visibility. Upside surprises would be better-than-expected LPG margins.

LPG: a volatile business

- We forecast the LPG business to account for 44% of revenue by FY13, as the company gains further access to the retail market. However, there is low visibility on the profitability of this business and we forecast an FY12 LPG gross margin of 4%, compared with the management's target of 15%. Missing our forecast by 100bps would lead to a 6% reduction in our FY12 EPS forecast.

Initiate coverage with a 4 (*Underperform*) rating

- In our DCF valuation, we have assigned a higher market-risk premium (compared with those of its peers) to calculate our WACC to reflect the recent company events. As our target price suggests downside from current levels, we initiate coverage with a **4** (*Underperform*) rating. The stock is trading below the sector average PER, but we see limited near-term catalysts for a rerating unless LPG margins surprise on the upside and vice versa.

Reuters code		0384.HK

Market data

HSI		23,122.42
Market cap	(US$bn)	1.38
EV	(US$bn; 11E)	2.32
3-mth avg daily T/O	(US$m)	9.70
Shares outstanding	(m)	3,863
Free float	(%)	55.0
Major shareholder		LIU Minghui (8.1%)
Exchange rate	HK$/US$	7.788

Performance (%)*	1M	3M	6M
Absolute	(6.7)	(27.7)	(31.3)
Relative	(3.4)	(26.9)	(41.5)

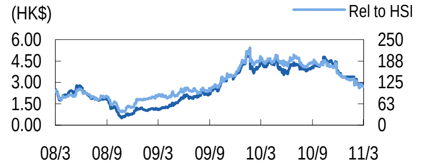
Source: Daiwa
Note: *Relative to HSI

Investment indicators

		2011E	2012E	2013E
PER	(x)	14.7	13.3	11.1
PCFR	(x)	27.3	7.6	6.6
EV/EBITDA	(x)	9.3	8.6	7.5
PBR	(x)	1.2	1.3	1.1
Dividend yield	(%)	0.7	0.8	0.9
ROE	(%)	11.3	9.9	10.9
ROA	(%)	3.0	3.3	3.8
Net debt equity	(%)	80.1	77.2	66.5

Source: Daiwa forecasts

Price and relative performance



Source: Bloomberg, Daiwa

Income summary

Year to 31 Mar	Revenue (HK$m)	(%)	EBITDA (HK$m)	(%)	Net profit (HK$m)	(%)	EPS (HK$)	(%)	CFPS (HK$)	DPS (HK$)
2009	6,324	*147.8*	971	*71.2*	104	*(13.1)*	0.031	*(29.2)*	0.085	0.014
2010	10,212	*61.5*	1,819	*87.3*	876	*744.6*	0.262	*742.1*	0.693	0.017
2011E	14,760	*44.5*	1,938	*6.6*	735	*(16.1)*	0.190	*(27.3)*	0.102	0.019
2012E	18,243	*23.6*	2,322	*19.8*	920	*25.2*	0.210	*10.3*	0.366	0.021
2013E	20,414	*11.9*	2,633	*13.4*	1,104	*20.0*	0.252	*20.0*	0.422	0.025

Source: Company, Daiwa forecasts

Company background

China Gas Holdings Limited is a natural gas services operator which is mainly engaged in the investment, operation and management of city gas pipeline infrastructure, distribution of natural gas to residential, commercial and industrial users, construction and operation of gas stations, and development and application of natural gas related technologies in China.

China Gas – financial summary

Profit and loss (HK$m)

Year to 31 Mar	2009	2010	2011E	2012E	2013E
Sales of piped gas	2,678	3,832	6,558	8,387	10,564
Gas connection	1,127	1,462	1,853	1,964	1,925
Others	2,518	4,919	6,349	7,892	7,924
Total revenue	6,324	10,212	14,760	18,243	20,414
Other income	166	236	157	171	171
COGS	(4,894)	(8,096)	(11,880)	(14,796)	(16,536)
SG&A	(799)	(1,052)	(1,711)	(1,981)	(2,171)
Other op. expenses	0	0	0	0	0
EBIT	797	1,301	1,326	1,637	1,878
Net-interest inc./(exp.)	(351)	(485)	(471)	(462)	(445)
Assoc/forex/extraord./others	(241)	358	148	143	189
Pre-tax profit	205	1,174	1,003	1,317	1,621
Tax	(71)	(158)	(150)	(250)	(340)
Min. int./pref. div./others	(30)	(140)	(117)	(147)	(176)
Net profit (reported)	104	876	735	920	1,104
Net profit (adj.)	104	876	735	920	1,104
EPS (reported) (HK$)	0.031	0.262	0.190	0.210	0.252
EPS (adj.) (HK$)	0.031	0.262	0.190	0.210	0.252
DPS (HK$)	0.014	0.017	0.019	0.021	0.025
EBIT (adj.)	797	1,301	1,326	1,637	1,878
EBITDA (adj.)	971	1,819	1,938	2,322	2,633

Balance sheet (HK$m)

As at 31 Mar	2009	2010	2011E	2012E	2013E
Cash & short-term investment	2,049	3,872	3,562	2,894	2,799
Inventory	541	564	828	1,031	1,152
Accounts receivable	1,286	1,871	4,044	4,998	5,593
Other current assets	1,340	777	822	858	880
Total current assets	5,215	7,084	9,256	9,781	10,424
Fixed assets	9,240	11,064	12,496	13,853	14,641
Goodwill & intangibles	954	2,155	2,112	2,069	2,025
Other non-current assets	2,678	2,694	2,744	2,744	2,744
Total assets	18,087	22,998	26,608	28,447	29,834
Short-term debt	3,104	5,295	944	1,134	1,234
Accounts payable	2,603	3,182	4,669	5,816	6,500
Other current liabilities	174	409	385	385	385
Total current liabilities	5,881	8,886	5,999	7,335	8,119
Long-term debt	7,194	8,021	9,690	9,218	8,651
Other non-current liabilities	994	860	860	860	860
Total liabilities	14,069	17,767	16,549	17,413	17,630
Share capital	33	33	1,083	1,083	1,083
Reserves/R.E./others	3,190	4,089	7,751	8,579	9,573
Shareholders' equity	3,223	4,123	8,834	9,662	10,656
Minority interests	794	1,107	1,225	1,372	1,548
Total equity & liabilities	18,087	22,997	26,608	28,447	29,834
Net debt/(cash)	8,249	9,444	7,072	7,458	7,086

Cash flow (HK$m)

Year to 31 Mar	2009	2010	2011E	2012E	2013E
Profit before tax	205	1,174	1,003	1,317	1,621
Depreciation and amortisation	174	518	612	686	755
Tax paid	(71)	(158)	(150)	(250)	(340)
Change in working capital	5	931	(995)	(47)	(54)
Other operational CF items	(30)	(149)	(74)	(104)	(133)
Cash flow from operations	283	2,316	395	1,602	1,849
Capex	(4,054)	(3,544)	(2,043)	(2,043)	(1,543)
Net (acquisitions)/disposal	(792)	49	(50)	0	0
Other investing CF items	0	0	0	0	0
Cash flow from investing	(4,846)	(3,496)	(2,093)	(2,043)	(1,543)
Change in debt	4,873	2,681	(2,706)	(282)	(467)
Net share issues/(repurchases)	26	81	4,050	0	0
Dividends paid	(47)	(57)	(74)	(92)	(110)
Other financing CF items	249	298	117	147	176
Cash flow from financing	5,101	3,003	1,388	(227)	(401)
Forex effect/others	0	0	0	0	0
Change in cash	539	1,824	(310)	(668)	(95)

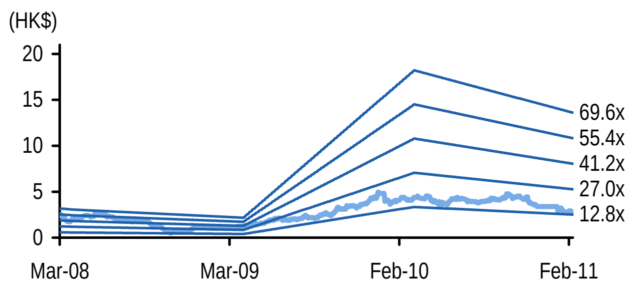
Key ratios

Year to 31 Mar	2009	2010	2011E	2012E	2013E
Sales – YoY %	147.8	61.5	44.5	23.6	11.9
EBITDA (adj.) – YoY %	71.2	87.3	6.6	19.8	13.4
Net profit (adj.) – YoY %	(13.1)	744.6	(16.1)	25.2	20.0
EPS (adj.) – YoY %	(29.2)	742.1	(27.3)	10.3	20.0
EBITDA margin % (adj.)	15.4	17.8	13.1	12.7	12.9
EBIT margin % (adj.)	12.6	12.7	9.0	9.0	9.2
Net-profit margin % (adj.)	1.6	8.6	5.0	5.0	5.4
ROAE (%)	3.3	23.8	11.3	9.9	10.9
ROAA (%)	0.7	4.3	3.0	3.3	3.8
ROCE (%)	6.7	7.9	6.8	7.8	8.6
ROIC (%)	3.8	5.4	4.8	5.4	5.6
Net debt to equity (%)	255.9	229.1	80.1	77.2	66.5
Effective tax rate (%)	34.8	13.5	15.0	19.0	21.0
Accounts receivable (days)	64.1	56.4	73.1	90.5	94.7
Payables (days)	114.1	103.4	97.1	104.9	110.1
Net interest cover (x)	2.3	2.7	2.8	3.5	4.2
Net dividend payout (%)	45.0	6.5	10.0	10.0	10.0

Key assumptions

Year to 31 Mar	2009	2010	2011E	2012E	2013E
Gas sales volume (m cm)	2,130.3	3,380.0	4,595.4	5,894.4	7,503.0
Gas ASP - retail (Rmb/cm)	2.0	2.1	2.3	2.4	2.4
Gas ASP - CNG (Rmb/cm)	2.1	2.2	2.4	2.4	2.4
Gas purchase cost (Rmb/cm)	1.4	1.5	1.6	1.7	1.7
Revenue contribution – connection fee (%)	17.8%	14.3%	12.6%	10.8%	9.4%
Gas penetration rate for residential households (%)	24.7%	30.3%	30.5%	37.0%	41.1%

PER bands



Source: Company, Daiwa forecasts

Our DCF-derived target price is HK$2.50

We value CHG using a DCF methodology

By valuing CHG's projects (currently more than 140) using a DCF methodology, we arrive at a six-month target price of HK$2.50. Given the recent arrests of key management members and the transition to a new management team, we expect the share-price overhang to diminish only gradually. As such, we have applied a higher market-risk premium than for its peers to calculate our WACC, which is 11.5%.

CHG: DCF valuation (HK$m)

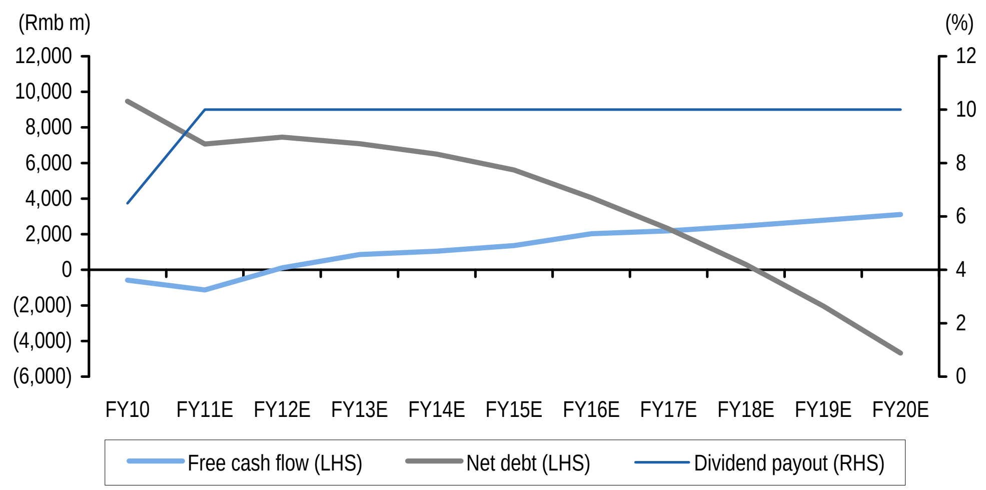
		FY09	FY10	FY11E	FY12E	FY13E	FY14E	FY15E	FY16E	FY17E	FY18E	FY19E	FY20E
Risk-free rate	3.0%												
Market risk premium	11%												
Beta	1.1												
Cost-of-equity	14.2%												
Cost-of -debt	6.5%												
As a % of equity capital	65%												
As a % of debt capital	35%												
WACC	11.5%												
Terminal growth	3%												
Free cash flow													
EBIT (1-t)			1,468	1,344	1,512	1,699	1,830	2,147	2,452	2,531	2,889	3,144	3,470
Plus depreciation			518	612	686	755	796	834	871	890	908	925	942
Total working capital			931	(995)	(47)	(54)	(37)	(73)	(53)	13	(84)	(39)	(58)
Capital expenditure			(3,496)	(2,093)	(2,043)	(1,543)	(1,543)	(1,543)	(1,243)	(1,243)	(1,243)	(1,243)	(1,243)
Free cash flow			(578)	(1,132)	107	857	1,045	1,365	2,027	2,191	2,470	2,787	3,111
Discounted FCF			-578	-1,072	91	653	714	836	1,113	1,079	1,090	1,103	1,104
Terminal	67%												13,354
Firm value	20,065												
Net debt	7,458												
Total equity value	12,607												
Total minority	1,736												
Equity value	10870												
No. of shares	4,383												
Target price (HK$/share)	2.5												

Source: Company, Daiwa forecasts

Unlike ENN, which has a positive FCF, we do not expect CHG to reach its FCF inflection point until 2012, given its capex plans. We forecast a dividend-payout ratio of 10% from FY11, pending further management guidance.

We do not expect CHG's FCF to turn positive until 2012

CHG: FCF, net debt, and dividend-payout ratio



Source: Company, Daiwa forecasts; Note: CHG has a March year-end

Dual business model does not appear to be justified, yet

CHG is expanding its piped-gas and LPG businesses

After transforming into a piped-gas platform a few years ago, CHG has ramped up the expansion of its bottled-LPG, logistics and distribution business. After acquiring all of Zhongyou Huadian (Not listed) (previously owned by PetroChina and several government entities) in 2008 and 2009, the company now has full control of the largest LPG logistics company in China. Despite accounting for only a 5% share of the market, the ownership of Zhongyou Huadian effectively makes CHG the largest midstream LPG operator in the country.

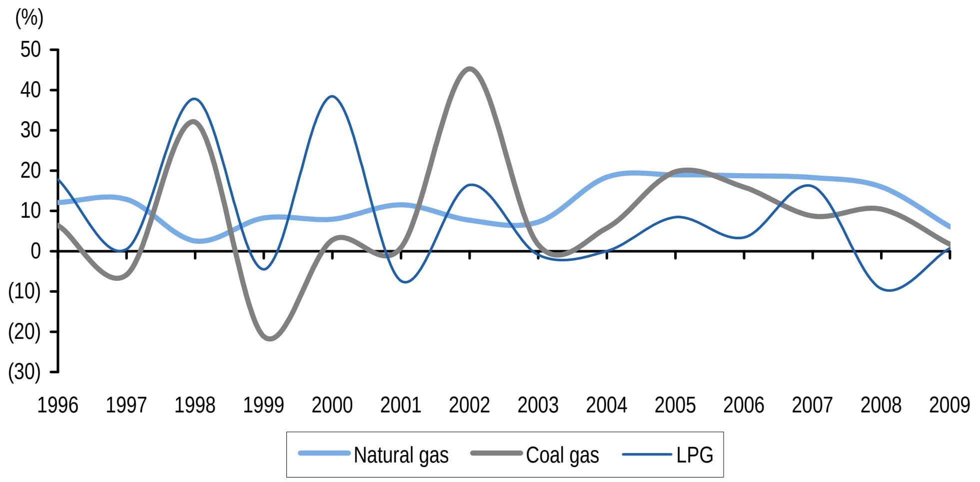
We forecast the LPG gross margin to reach only 4% for FY13

Zhoungyou Huadian has 11 LPG receiving terminals, 275,000m^3 of storage capacity, and fleets of LPG vessels and trucks, as well as logistic operations in Guangdong, Guangxi, Fujian, Zhejiang, and Jiangsu. It sources directly from PetroChina's 28 refineries (total capacity of 6m tonnes), as well as importing from the Middle East. CHG recently sold 45% of its LPG business to Oman Oil (Not listed), one of CHG's shareholders.

As we have highlighted in the main section of this report, we believe natural gas will gradually replace manufactured gas, such as coal gas and LPG. Also, as the following chart shows, demand growth for LPG has been volatile over the past decade, possibly driven by changes in the price of crude oil, which would explain why companies such as ENN have exited from this business.

Demand growth for LPG has been volatile

Demand growth rate for different types of gas



Source: CEIC, calculated by Daiwa

1H FY11 margin disappointment was due to a mismatch between the ASP for LPG and the cost of buying it

However, the benefit of vertical integration is yet to be seen and we forecast the LPG gross margin to reach 4% for FY12, following a decline for 1H FY11 (when the net LPG margin fell by 3.7%, compared with a drop of 0.1% for 1H FY10). We attribute this recent decline to a mismatch between the price of domestic retail LPG price and the cost of imported LPG. Management's strategy is to create a scalable platform with favourable LPG purchase terms, driven partially by what it hopes will be a favourable procurement terms with Oman Oil. However, given the volatile track record of gross margins so far, we have not observed much benefit and, as such, we forecast an FY12 LPG gross margin of only 4%, compared with management's target of 15%.

CHG: LPG business

	FY11E	FY12E	FY13E
Midstream distribution (Zhongyou Huadian)			
Volume (m tonnes)	1.0	1.2	1.2
Wholesale LPG price (Rmb/tonne)	4,558	4,469	4,469
Total revenue (Rmb m)	3,872	4,746	4,746
Gross margin (%)	7.0	7.0	7.0
Total gross profit	271	332	332
Downstream distribution			
Total volume (tonnes)	1.2	1.5	1.5
Volume from Zhongyou Huadian (tonnes)	1.0	1.2	1.2
Volume from 3rd party (tonnes)	0.2	0.3	0.3
Avg LPG price (Rmb/tonnes)	5,000	5,000	5,000
Avg LPG cost from Zhongyou (Rmb/tonne)	4,558	4,469	4,469
Avg LPG cost from 3rd party (Rmb/tonne)	4,558	4,469	4,469
Total revenue from Zhongyou (Rmb m)	4,248	5,310	5,310
Total revenue from third party (Rmb m)	1,062	1,327	1,327
Gross margin from Zhongyou (%)	(3)	(1)	(1)
Gross margin from 3rd party (%)	(3)	(1)	(1)
Total gross profit from Zhongyou (Rmb m)	(127)	(53)	(53)
Total gross profit from third party (Rmb m)	(32)	(13)	(13)
Total revenue (Rmb m)	5,310	6,637	6,637
Total gross profit (Rmb m)	(159)	(66)	(66)
Gross margin (%)	(3.0)	(1.0)	(1.0)
Total LPG			
Total revenue (Rmb m)	5,310	6,637	6,637
Total gross profit (Rmb m)	112	266	266
Gross margin (%)	2.1	4.0	4.0

Source: Daiwa forecasts

CHG: revenue, gross profit, and gross-margin (HK$m)

Revenue breakdown	FY09	FY10	FY11E	FY12E	FY13E
Sales of piped gas	2,678	3,832	6,558	8,387	10,564
Gas connection	1,127	1,462	1,853	1,964	1,925
Bottled LPG	2,272	4,638	6,053	7,566	7,566
Sales of gas appliances	244	280	296	325	358
Total	6,324	10,212	14,760	18,243	20,414
Gross-profit breakdown					
Sales of piped gas	511	861	1,411	1,720	2,173
Gas connection	846	1,023	1,297	1,375	1,348
Bottled LPG	136	404	127	303	303
Sales of gas appliances	37	40	44	49	54
Total	1,429	2,328	2,880	3,447	3,878
Gross margin (%)					
Sales of piped gas	19.1	22.5	21.5	20.5	20.5
Gas connection	75.0	75.0	70.0	70.0	70.0
Bottled LPG	6.0	8.7	2.1	4.0	4.0
Sales of gas appliances	15.0	15.0	15.0	15.0	15.0
Total	22.6	22.8	19.5	18.9	19.0

Source: Company, Daiwa forecasts

New management says it will take a more prudent approach

The arrests of senior members of management may have been related to projects in Hubei

The company confirmed on 28 January 2011 that Mr. Liu Minghui, CHG's managing and executive director, and executive president Mr. Huang Yong had been arrested by Shenzhen police on 17 December 2010. According to CHG, the arrests may have been related to the company's acquisition of Clever Decision Enterprises Ltd (Not listed), a holding company that runs four city-gas projects and a long-distance pipeline project in Hubei Province. The company estimates that it would have to book a write-off cost of HK$177.8m if the projects are taken back by the government, while we estimate that the forgone net profit would be the equivalent of about 4-5% of FY10 net profit.

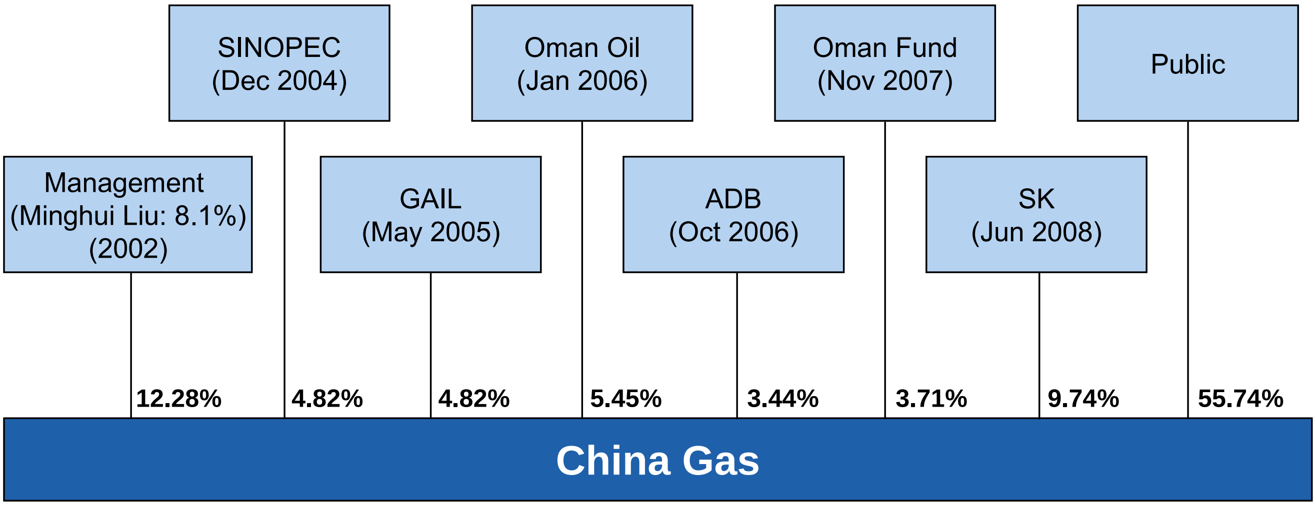
Following the dismissal of Mr. Liu and Mr. Huang, Mr. Eric Leung (previously the CFO), and Mr. Pang Ying were appointed as CHG's joint managing directors. We have spoken to the new management, who said there were unlikely to be any changes to the organic growth of CHG's existing business, but that the company might reconsider the pace of new project additions, which implies to us that future earnings growth could be slower than the market expects, especially for those who have been expecting new project additions.

Shareholding structure remains complicated

Complicated shareholding structure and no guarantee that strategic stakeholders will not sell up

Following a share placement in 2H10, SK Group (Not listed) now holds 9.7% of CHG, followed by Mr. Liu Minghui (8.1%), Oman Oil (5.5%), Sinopec (4.8%) (386 HK, HK$7.76, 2), GAIL India (4.8%) (GAIL IN, Rs455, 2), Oman Fund (3.7%) (Not listed), ADB (3.4%) (Not listed), etc. Other senior management members of CHG hold about 4.2%. Although CHG's management has recently reiterated its view that none of its strategic shareholders plan to sell their takes over the near term, we cannot rule out such a possibility given that many of the shareholders have been investors in CHG for many years. For example, GAIL has been a shareholder since May 2005, and Sinopec since December 2004.

CHG: shareholding structure (as of February 2011)



Source: Company

Risks

LPG and management are the two major uncertainties

We see the following as upside risks to our target price. Although there is no track record yet of gross-margin expansion for CHG's LPG business, there are various risks to our earnings forecasts (eg, movements in the crude-oil price and international and domestic LPG prices). Also, favourable terms with international and domestic raw LPG suppliers may lead to a more stable gross margin for CHG's integrated LPG business than we expect.

Another uncertainty we see relates to the new management team. Given that the company's project acquisitions were based mostly on Mr. Liu's relationships with local governments, there is the possibility that CHG may not see many new project additions. However, as we expect the new management to adopt a prudent and shareholder-driven approach, there may be an improvement in earnings visibility and predictability.

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