China Coal Sector

Hong Kong/ China

Sector

China Coal

Analyst

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Coal rally's embers

- **Negative coal price outlook.** We believe the coal price is unlikely to rise in 2009 amid slowing economic growth globally. Therefore, we are cautious about the coal industry's prospects and advise against building positions in this sector.

- **De-rating likely.** The market projection of a 29.0% average three-year net profit CAGR for Hong Kong-listed coal companies is based on aggressive coal price assumptions. Any coal price drop or outlook change will trigger a de-rating in the sector.

- **Contractual sales offer advantages.** Companies with high contractual sales ratios tend to outperform at times of coal price declines. Production volume growth becomes the major profit growth driver for miners when prices weaken.

- **Ample M&A opportunities.** The Chinese government aims to consolidate the country's highly fragmented coal mining sector by halving the number of projects to 10,000 by end-2010. We expect coal price declines to accelerate the process and create M&A opportunities for miners in strong financial positions.

- **Our picks.** China Coal Energy is our favourite, given its decent production growth, leadership position, asset injection angle and lucrative coking operation. The valuation of China Shenhua Energy is rich, despite its leadership position. Hidili's aggressive expansion plan carries considerable risks. The catalyst-poor and coal price-reliant Yanzhou Coal is our least favourite counter despite its undemanding valuation.

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Investment case

Negative coal price outlook. We are negative on the coal price outlook for 2009, given the current global economic slowdown. We expect net profit growth of coal miners to decelerate from the beginning of FY12/09F.

De-rating likely. The market projection of a 29.0% average three-year net profit CAGR for Hong Kong-listed coal companies is based on aggressive coal price assumptions. The projected three-year net profit CAGR of Hidili is 60.2% and Yanzhou Coal 52.8%. Any coal price drop or outlook change will trigger a de-rating in the sector.

Contractual sales offer advantages. Companies with high contractual sales ratios tend to outperform at times of coal price declines**.** The contractual coal price of thermal coal will be set from 4Q 2008 and we expect it to stabilize in 2009. The spot coal price is likely to drop in 2H 2009 on slower demand growth. Against this backdrop, we prefer coal companies with high contractual sales ratios which can lock in large proportions of their annual sales volumes at higher ASPs. China Coal Energy's and China Shenhua Energy's contractual sales ratio exceed 70.0%.

Production growth - major driver. The recent two-year coal price rally was the major factor behind coal miners' earnings growth. If the coal price weakens, production growth will be the only driver. Thus, we like companies with aggressive production expansion plans, such as China Coal Energy and Hidili.

M&A opportunities. China's coal mining industry is highly fragmented, with 6,224 non-state owned enterprises (annual sales exceeding RMB5.0m each) in 2006, including only 32 with production volume exceeding 10.0m tons per annum. China's top ten largest coal miners with an total production volume of 595.0m tons/annum accounted for 25.0% of the country's total coal output. The Chinese government plans to reduce the number of small coal mining projects to 10,000 by 2010 from 20,000 in 2005 will provide ample acquisition opportunities for mining companies with capital resources. Our selected Hong Kong-listed coal miners are in net cash positions, thanks to the coal price rally.

Table 1: China's top ten coal miners

1 中国神华能源股份有限公司	China Shenhua Energy
2 中国中煤能源集团公司	China Coal Energy
3 山西焦煤集团有限责任公司	Shangxi Coking Coal
4 山西大同煤矿集团有限责任公司	Datong Coal Mine Group
5 黑龙江龙煤矿业集团有限责任公司	Heilongjiang LongMay Mining Group
6 陕西煤业集团有限责任公司	Shaanxi Coal and Chemical Industry
7 山东兖矿集团有限公司	Yanzhou Coal Mining
8 山西阳泉煤业（集团）有限责任公司	Yangquan Coal Industry
9 安徽淮南矿业集团有限责任公司	Huainan Mining Industry
10 山西潞安矿业（集团）有限责任公司	Lu' An Group

Source: China Coal Industry

Caution advised. We advise against building new positions in the sector. China Coal Energy is our favorite pick in the sector, given its high production volume growth rate, potential asset injections by its parent and lucrative coke operation. Hidili's output expansion plans are aggressive but its earnings visibility is low and execution risks considerable. China Shenhua Energy is very vulnerable to coal price fluctuations, given its rich valuation and market leadership. The catalyst-poor and coal price-dependent Yanzhou Coal is our least favourite play.

Valuation

Undemanding valuation. In terms of P/E multiples, valuations of Hong Kong-listed coal miners are slightly higher than those of their Shanghai and Shenzhen-listed counterparts. HKEX-listed miners are trading at FY12/08F P/E of 12.5x and FY12/09F P/E of 10.1x, compared with FY12/08F P/E of 12.0x and FY12/09F P/E of 9.2x for China-listed miners. Valuations on both sides seem undemanding but their aggressive earnings projections are based on high coal price assumptions. Any coal price decline or outlook change will trigger a de-rating in the sector.

China Shenhua Energy - most pricey coal company listed in Hong Kong and China in terms of P/E multiples and EV/ton. Its premium is based on its market leadership in China and globally and its highly-integrated business (coal production and power generation). The company has the lowest projected three-year earnings CAGR among our selected coal miners, probably due to its already substantial operating base.

China Coal Energy – China's second largest coal miner is our favorite. It is trading at a steep discount to Shenhua Energy in terms of EV/ton. Apart from the coal price, the company has a number of earnings and share price catalysts such as its lucrative coke operation, asset injection theme and fast production growth.

Hidili - emerging coke play with aggressive expansion plans in terms of reserves and production. Its valuation is attractive for a growing company but we are cautious about its relatively short operating history, low earnings visibility and high expansion execution risks. With its substantial investment plan, we believe it is likely to gear up.

Yanzhou Coal – least promising. Attractively valued but lacks catalysts other than the coal price. Vulnerable to coal price fluctuations. Mild projected production growth.

Table 2: Valuations of HK-listed coal producers

Company name	Ticker	Price (HK$)	Market Cap (US$m)	P/E (x) 1-yr forward	P/E (x) 2-yr forward	EV/ton (US$m)	Projected 3-yr earnings CAGR%
China Shenhua	1088 HK	25.2	70,107.6	13.1	10.7	6.2	23.6
China Coal	1898 HK	11.6	19,462.9	13.2	9.7	2.8	36.4
Yanzhou Coal	1171 HK	11.7	7,941.7	7.0	6.1	3.5	52.8
Hidili	1393 HK	6.2	1,642.7	9.2	6.0	3.5	60.2
Average				*12.5*	*10.1*	*5.2*	*29.0*

Source: SBI E2-Capital

Table 3: Valuations of China-listed coal producers

Company name	Ticker	Price (RMB)	Market Cap (US$m)	P/E (x) 1-yr forward	P/E (x) 2-yr forward
China Shenhua-A	601088 CH	24.5	70,143.1	16.1	13.1
China Coal-A	601898 CH	10.0	19,472.8	15.3	11.3
Yanzhou Coal-A	600188 CH	11.6	7,945.7	8.9	7.6
Inner Mongolia-A	000780 CH	4.3	633.6	11.9	7.9
Henan Shen Huo-A	000933 CH	20.5	1,496.6	8.0	6.4
Hebei Jinniu-A	000937 CH	20.3	2,340.1	11.6	8.9
Taiyuan Coal Gas	000968 CH	11.0	823.0	9.1	7.3
Shanxi Xishan	000983 CH	22.8	4,033.9	9.5	7.0
Huolinhe Coal-A	002128 CH	11.1	1,374.8	13.5	11.0
Zhengzhou Coal-A	600121 CH	4.3	394.9	9.8	10.5
Shanxi Lanhua-A	600123 CH	15.2	1,269.4	8.4	6.8
Shanxi Guoyang-A	600348 CH	9.8	1,373.6	10.5	8.7
Guizhou Panjia-A	600395 CH	9.4	814.4	17.4	10.0
Shanghai Datun	600508 CH	11.1	1,175.8	9.3	7.6
Anhui Hengyuan	600971 CH	13.9	382.0	8.9	7.6
Kailuan Clean	600997 CH	15.4	1,267.7	6.9	6.3
Datong Coal	601001 CH	14.3	1,753.2	12.0	9.7
Pingdingshan -A	601666 CH	15.9	2,496.8	7.4	5.4
Shanxi Lu'An-A	601699 CH	14.4	2,430.6	8.8	7.6
SDIC Xinji-A	601918 CH	6.0	1,627.0	18.5	13.6
Average				*12.0*	*9.2*

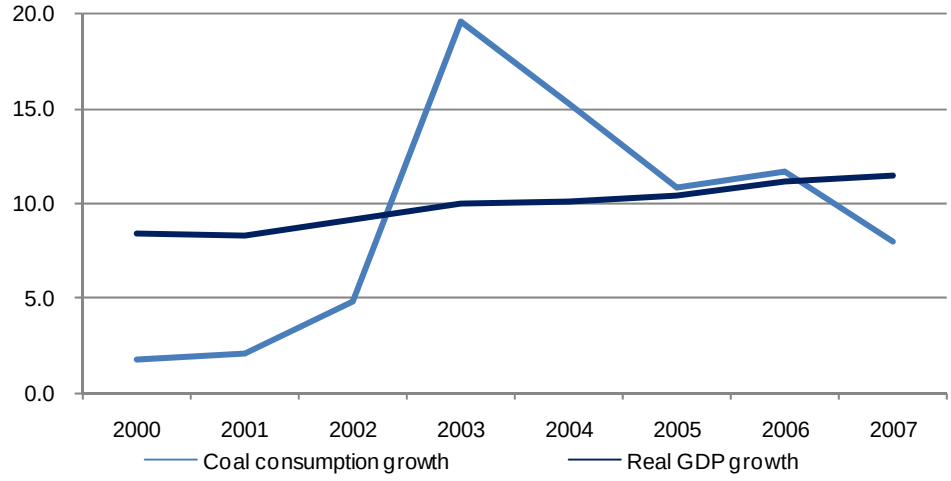
Source: Bloomberg

China's coal demand growth to decelerate in 2009

Consumption rises along with GDP. China's GDP increased at an average annual rate of 9.9% between 2000 and 2007, while the country's coal consumption rose at a CAGR of 10.1%, based on data provided by the Statistical Review of World Energy 2008, BP. China's coal consumption growth rate averaged 9.2% a year in 2000-2007. The data clearly shows that the country's economic expansion fuelled coal consumption in the past seven years.

Demand growth lags behind GDP expansion. China's GDP growth is expected to slow to 10.1% in 2008 and 9.4% in 2009, as the economies of its major trading partners, such as the US, weaken and the effects of the country's own austerity measures begin to emerge. We believe that coal consumption growth will follow suit. In 1H 2008, domestic sales of commercial coal increased 10.7% YoY to 1,201.7m tons. Shenhua Energy estimates that China's coal consumption will increase 6.2% YoY to 2,740.0m tons in 2008, which is 3.9pcp below the seven-year coal consumption CAGR of 10.1%. The average ratio between China's coal consumption and GDP growth is estimated at about 0.9x in 2000-2008, compared with 0.6x forecast for 2008, 0.7x in 2007 and the average of 0.9x in 2000-2007. This suggests that coal consumption growth has been lagging behind GDP growth.

Chart 1: China real GDP growth and China coal consumption growth



Source: Bloomberg

Slower power generation growth. Power and heat generation used 60.0% of China's thermal coal production (754.6m tons) in 1H 2008 and the situation in these sectors will set pace for the country's demand for thermal coal. As economic growth slows, power demand will diminish. In Jan-Jul 2008, China's power generation increased 11.9% YoY to about 2.0m GWh, but its growth rate decelerated 4.6pcp YoY. In 1H 2008, coal-fired power generation increased 11.7% YoY to 1.4m GWh, down 6.6pcp YoY, while power consumption by the secondary industry declined 6.1pcp to 11.1%. Average utilization hours of coal-fired generating units decreased by 52 to 2,555.

Energy efficiency to lower coal consumption. Energy efficiency improvements will lower demand for thermal coal. In its 11th Five-year plan, the Chinese government aims to lower the standard coal consumption per KWh to 355.0g by end-2010 from 370.0g in 2005. In 1H 2008, the standard coal consumption rate of generating units with capacity 6,000.0MW dropped 9.0g /KWh to 346.0/KWh. The closure of small generating units will further erode demand for thermal coal. In 1H 2008, the government shut down generating units with an aggregate capacity of 8.36m MW and another 464.0m MW will phased out by end-2H 2008.

Sector reform - the only solution. The high price of coal, regulated on-grid tariffs and credit-tightening policies have undermined the profitability and financial

well-being of China's IPPs. In 1H 2008, Huaneng Power International reported a loss of RMB543.8m, against a RMB2.9b profit in the year-earlier period, despite 13.4% YoY growth in power generation. Huadian Power International reported a loss of RMB506.3m in 1H, against a RMB710.3m profit in the year–earlier period, despite a 64.6% YoY increment in on-grid power sold. China Resources Power's net profit declined 28.7% YoY to about HK$1.0b. As the government continues to control on-grid tariffs, IPPs cannot pass on coal cost hikes to grid operators and end users. Therefore, many private generators reduce capacity or close down plants to trim losses, undermining coal demand growth. We expect tariff hikes this July and August to provide some relief to IPPs. In the long run however, unless the government liberalizes the power market, China IPPs will remain vulnerable to coal price fluctuations.

Coke price grow faster than steel production. China is the world's major steel producer, accounting for about 34.0% of global output in 2006. In 2004-2007, its pig iron production increased at a three-year CAGR of 23.2% from 250.0m tons to 466.9m tons. In the same period, the domestic price of coking coal used in pig iron production increased at a three-year CAGR of only 1.8% to RMB840.0/ton, according to McCloskey/Xinhua Infolink. The monthly domestic coking coal price was RMB1,218.0/ton in Jul 2008, 45.0% higher than that of the annual average in 2007. In Jan-Jul 2008, China's pig iron output increased 7.6% YoY to 288.9m tons. The growth rate of the coking coal price has far outstripped pig iron output growth. Since demand for steel products is likely to weaken amid the global economic slowdown, we expect coking coal demand and price to come under downward pressure in 2009.

Correlation with crude oil prices. Between Jan 2001 and Jul 2008, the crude oil price (benchmarked as the WTI spot price) surged 332.9% and the coal price (benchmarked as McCloskey Newcastle 6,700.0kc GAD fob Steam Coal Spot price/Australia) 465.6%. Between 2001 and 2007 (excluding 2006), the average ratio between the change in the coal and crude oil price was about 2.4x. Since the relationship between the two types of fuel is positive, crude oil price changes will affect coal price trends. The spot crude oil price has dropped 20.5% from its peak of US$145.3/barrel in Jul 2008 on concerns that global economic woes and high inflation will reduce demand for petroleum products. The same concerns have started overshadowing the coal price outlook. The price of McCloskey Newcastle 6,700.0kc steam coal dropped 5.9% in August from its peak of US$173.0/ton.

Demand projection. Based on China's coal consumption growth rate/GDP growth ratio of 0.6x and the projected 2009 annualized GDP growth rate of 9.4%, the projected coal consumption growth rate is 5.6% for 2009, compared 6.2% for 2008. Given the relatively low demand growth projected for 2009, we believe that the upside of the coal price will be limited next year.

Company Profiles

China Coal Energy

Stoking the fire

Not Rated

Our view

Strong output volume growth. The company aims to increase its production volume by 15.0m tons each year by end-2010. By then, its self-produced coal volume will exceed 100.0m tons per annum.

Coke to drive profitability. We like the company's coking operation given the high coke ASP. With its annual production volume exceeding 3.0m tons, the company's coke operation is sizable.

Asset injection from parent. The company completed the acquisition of 100.0% of Shanxi China Coal Dongpo Coal Co from parent China Coal Group. The move will boost its coal reserves by 158.0m tons and raw coal production capacity by 1.5m tons per annum. We expect the parent to inject its remaining mining assets into the listco after their restructuring and licensing.

Foray in coal bed gas. With China United Coalbed Methane Corp (CUCM) becoming a wholly-owned subsidiary of China Coal Group in the near future, China Coal Energy may acquire some coal bed gas assets from CUCM.

Our pick. Market estimates put China Coal Energy's three-year net profit CAGR at 36.4%, compared with Shenhua Energy's 23.6%. We prefer China Coal Energy because of its higher production growth rate, coke operation, asset injection theme, stronger bottom-line growth momentum and undemanding valuation in terms of EV/ton.

Corporate profile. Listed on the Hong Kong Stock Exchange in Dec 2006 and the Shanghai Stock Exchange in Feb 2008, China Coal Energy is China's second largest coal producer, after Shenhua Energy. At end-FY12/07A, the company's coal reserves stood at 6.2b tons and coal resources at 10.2b tons, according to Chinese standards. Under the JORC (Australian Code of Reporting of Mineral Resources and Ore Reserves, effective Dec 2004) standard, the company's proved and probable coal reserves amounted to 3.4b tons.

Lines of business. The company produces and sells thermal coal and coke, and provides mining equipment and mine design services. In 1H FY12/08A, its coal division contributed 70.0% of total revenue, coke division 17.0%, equipment division 7.8% and mine design 5.3%. In 1H FY12/08A, the coal division generated about 93.1% of the company's operating profit.

Track record. Thanks to the coal price rally and steady production volume growth, the company the company's revenue increased at a three-year CAGR 18.0%, from RMB22,163.8m to RMB36,428.2m between FY12/04A and FY12/07A. Its EBITDA increased at a three-year CAGR of 25.4%, from RMB4,566.7m to RMB9,006.3m and net profit at 38.9% from RMB2,248.2m to RMB6,019.8m.

Growth in raw coal production. The company's self-produced raw coal volume increased at a three-year CAGR of 35.8%. In FY12/07A, its self-produced raw coal increased 25.2% YoY to 83.3m tons and in 1H FY12/08A 18.7% YoY to 46.3m tons. The company aims to increase its production volume by 15.0m tons a year until the end of 2010. By then, its self-produced coal volume should exceed 100.0m tons per annum.

Defensive sales mix. In FY12/07A, the company's overall coal product (coal and coke) sales volume dropped 3.7% YoY to about 85.2m tons. Its thermal coal sales volume increased 25.7% YoY to 67.7m tons. Domestic

China Energy

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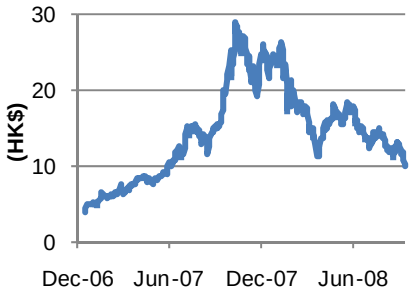
Stock data

Price	**HK$11.38**
Target price	na
12 mth range	HK$11.12-29.50
Market cap.	US$19,396.8m
Daily t/o, 3 mth	US$47.4m
Free float %	42.4%
Ticker	1898.HK/ 601898 CH

Financial summary

Year to Dec	06A	07A	08F	09F	10F
T/O (RMBm)	30,226	36,428	55,163	68,450	77,163
NP (RMBm)	3,172	6,019	9,964	13,526	15,264
EPS (RMB)	0.390	0.510	0.758	1.030	1.172
EPS △%	-	30.8	48.6	35.9	13.8
P/E (x)	25.6	19.6	13.2	9.7	8.5
P/B (x)	5.44	5.06	2.18	1.87	1.59
EV/EBITDA (x)	18.7	12.9	7.1	5.3	4.7
Yield (%)	1.1	1.5	2.1	2.8	3.3
ROE (%)	14.7	26.0	23.4	21.0	20.1
ROCE (%)	18.7	25.0	na	na	na
N. Gear. (%)	cash	cash	na	na	na

Price Chart



thermal coal sales accounted for 88.0% of the total thermal coal sales volume. Out of the total domestic thermal coal sales volume of 59.8m tons, about 88.0% was sold under long-term contracts. Domestic long-term contract sales accounted for 77.8% of the company's total thermal coal sales. In 1H FY12/08A, domestic contractual sales volume accounted for 73.6% of the company's total thermal coal sales volume and 80.6% of its domestic thermal coal sales volume. Though coal sold under domestic long-term contracts commands lower ASPs than in the spot market, the high contractual sale ratio offers some downside protection when the coal price peaks.

Lucrative coke operation. In 1H FY12/08A, the company's coke sales rose 7.9% YoY to about 2.0m tons and sales of self-produced coke 23.7% YoY to about 1.7m tons. The division's revenue increased 110.9% YoY to about RMB4.5b, and operating profit (including inter-segment sales) surged close to seven-fold to RMB624.7m, thanks to a 6.0pcp enhancement in the gross margin to 16.2% due to a 97.4% YoY jump in the ASP to RMB2,102.0/ton. We believe the coking coal operation is scalable, with its annual sales volume of about 3.6m tons in FY12/07A and 2.0m tons in 1H FY12/08A, compared with other coal plays such as Hidili (1H FY12/08A coke production volume of 0.29m tons). Also, coking coal commands higher ASPs than thermal coal. In 1H FY12/08A, the ASP of coke sold by the company domestically was RMB1,889.0/ton, compared with RMB407.0/ton for thermal coal. Though the gross profit margin of the company's coke operation was lower than that of the thermal coal operation (in 1H FY12/08A: 36.7%), in absolute terms, the profitability of the coke operation is still high in our view, thanks to the higher ASP.

M&As - external growth driver. The company is acquiring 100.0% in Shanxi China Coal Dongpo Coal Co (Dongpo Coal) for about RMB1.3b from its parent China Coal Group. The move will boost the company's coal reserves by 158.0tons and raw coal production capacity by 1.5m tons per annum. We expect the parent to inject its remaining mining assets into the listco after their restructuring and licensing.

Foray in coal bed gas. China United Coalbed Methane Corporation (CUCM) is a 50:50 JV between China Coal Group and PetroChina. It has the largest coal gas resources in China with good mining conditions and advanced technology. PetroChina has commenced the transfer of its shareholdings in CUCM to China Coal Group. Once CUCM becomes a wholly-owned subsidiary of China Coal Group, China Coal Energy will have an option to acquire CUCM's assets, allowing it to tap into China's fast expanding coal bed gas segment.

Cost pressure. The cost of sales of the company's coal operation increased 41.3% YoY to RMB11.9b in 1H FY12/08A due to higher government levies and unit sale costs of self-produced commercial coal (up 18.8% YoY to RMB277.0/ton). The Coal Sustainable Development Fund levied by Shanxi's provincial government since Mar 2007 has driven the company's unit cost of sales of self-produced commercial coal up by RMB4.03/ton. The government levies and other costs accounted for 18.9% of the company's unit sale cost of self-produced commercial coal. Material and transportation costs represented 31.8% and 32.0% of the unit cost, respectively. In 1H FY12/08A, material costs increased 28.1% YoY and transportation costs 7.1%. Since inflation in China remains high and railway bottlenecks acute, unit material and transportation costs are rising.

Table 4: P&L

Year to Dec (RMBm)	06A	07A	08F	09F	10F
Revenue	30,226.5	36,428.2	55,163.4	68,450.2	77,163.6
Cost of sales:					
Materials	(12,589.1)	(12,927.9)			
Staff costs	(1,401.7)	(1,905.2)			
D&A	(1,003.8)	(1,242.1)			
Repairs and maintance	(425.2)	(445.1)			
Transportation cost	(5,447.9)	(6,544.9)			
Sale tax and surcharges	(420.9)	(656.7)			
Others	(2,392.3)	(3,408.5)			
Cost of sales:	(23,681.0)	(27,130.5)			
Gross profit	6,545.5	9,297.7			
Selling and administrative expenses	(1,810.7)	(2,291.0)			
Gain from fair value changes of other financial assets	0.0	1,367.2			
Other income	228.8	550.6			
Other gains, net	209.3	176.2			
Profit from operations	5,172.9	9,100.7	14,106.8	18,642.5	20,829.8
Finance costs, net	(480.8)	(757.4)			
Share of profits of associates	32.6	12.1			
Profit before income tax	4,724.8	8,355.4	14,281.8	19,522.8	21,794.6
Income tax expenses	(1,340.9)	(1,949.2)			
Minority interests	(211.7)	(386.4)			
Net profit	3,172.1	6,019.8	9,964.5	13,526.4	15,264.9

Source: Company data, Bloomberg Estimates

China Shenhua Energy

All depends on coal price

Not Rated

Our view:

Coal price – profitability determinant. With slow coal production growth (our estimate: 8.3% YoY), Shenhua's profitability will depend on the price of coal. However, we expect the coal price to stay flat or even decline in 2009.

Highly integrated model. We like the company's coal production and power generation model, which allows it to take advantage of the coal price direction.

Defensive sales structure. With more than 70.0% of sales locked in long-term sales contracts, Shenhua's sales growth may be slower than that of peers, who have higher spot sales ratios (the contractual price tends to be lower in the up cycle). However, when the coal price peaks, the high contractual sales ratio should offer the company some downside protection.

Company background. China Shenhua Energy is a leading integrated coal-based energy company. It three business lines: coal production, power generation and coal transportation. It was listed on the HKEX in Jun 2005 and in Sep 2007 floated 1.8b A-shares at RMB36.99 each on the Shanghai Stock exchange, raising about RMB66.0b. At end-Jun 2008, the company's outstanding share capital was 19,890.0m, including 17.1% or 3,399.0m H-shares and the rest were A-shares.

Coal division. The company is China's largest coal producer and the world's second largest listed coal company in terms of reserves and annual production. At end-Jun 2008, its recoverable reserves were 11.4b tons and resources 17.9b tons, according to China's national standard. Under the JORC Standard, the company's marketable reserves amounted to 7.2b tons and resources to 17.9b tons. Between FY12/05A and FY12/07A, its commercial coal production increased at a two-year CAGR of 14.1% from 121.4m tons to 158.0m tons. In FY12/07A, its raw coal production and commercial coal production accounted for 6.6% and 8.1%, respectively, of China's national coal production and consumption. In 1H FY12/08A, Shenhua's commercial coal production increased 17.5% to 90.0m tons and sales 17.7% to 115.1m tons.

Power generation division. Between FY12/04A and FY12/07A, the company's gross and equity installed capacity increased at a three-year CAGR of 36.3% and 44.5%, respectively. At end-1H FY12/08A, its gross and attributable installed capacity reached 17,591.0MW and 10,569.0MW, respectively. Thanks expansion in its installed capacity, the company's power generation increased at a three-year CAGR of 28.0% between FY12/04A and FY12/07A. In 1H FY12/08A, its gross generation increased 24.5% YoY to 47,310.0GWh.

China Energy

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Stock data

Price	**HK$24.85**
Target price	na
12 mth range	HK$22.95-57.95
Market cap.	US$69,889.3m
Daily t/o, 3 mth	US$92.4m
Free float %	26.1%
Ticker	1088.HK/ 601088 CH

Financial summary

Year to Dec	06A	07A	08F	09F	10F
T/O (RMBm)	65,186	82,107	105,167	125,047	139,992
NP (RMBm)	17,644	20,581	29,337	35,101	38,829
EPS (RMBm)	0.975	1.110	1.460	1.777	1.947
EPS △%	-	13.8	31.5	21.7	9.6
P/E (x)	19.6	17.2	13.1	10.7	9.8
P/B (x)	4.95	2.93	2.47	2.09	1.81
EV/EBITDA (x)	14.1	11.9	9.1	7.5	6.8
Yield (%)	1.8	2.6	2.8	3.2	3.6
ROE (%)	25.3	15.9	20.3	20.5	19.2
ROCE (%)	22.9	19.1	na	na	na
N. Gear. (%)	61.7	6.1	na	na	na

Price Chart

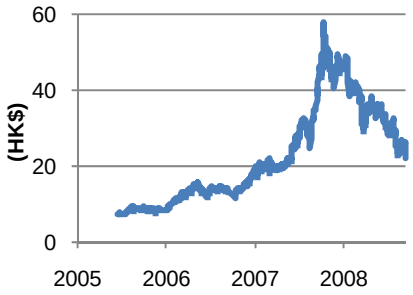

Table 5: Shenhua's power generation operation

	2004	2005	2006	2007	1H 2008
Total capacity (MW)	5,960	6,560	12,631	15,091	17,591
Equity installed capacity (MW)	3,075	3,441	7,513	9,286	10,569
Average utilization hours	6,551	6,533	6,087	5,995	2,795
Gross generation (GWh)	37,980	39,210	57,860	79,740	47,310
Average standard coal consumption rate (g/KWh)	314	308	332	332	332

Source: Company

Coal transportation. The company owns and operates five railways, Shuohuang Railway, Shenshuo Railway, Dazhun Railway, Baoshen Railway and Huangwan Railway, with an aggregate length of about 1,367.0km. The Shenshuo-Shuohuang line is one of China's two major railways for coal transportation linking the country's western regions with eastern areas. The company also owns and operates Huanghua Port and Shenhua Tianjin Coal Dock with the annual capacity for seaborne coal over 100.0m tons.

Track record. Between FY12/02A and FY12/07A, the company's revenue increased at a five-year CAGR of 30.8%, from RMB21,429.0m to RMB82,107.0m. Its net profit rose at a five-year CAGR of 66.7% from RMB1,597.0m to RMB20,581.0m. In FY12/08A, the company's net earnings increased 43.0% YoY to RMB14,817.0m, on a 26.8% YoY rise in turnover to RMB49,282.0m. Major drivers of the group's earnings included an increase in coal production and the amount of power dispatched, and coal price hikes.

Revenue breakdown. In 1H FY12/08A, the coal production division generated 69.9% of the company's operating revenue, the railway division 1.9%, port division 0.1% and power generation division 28.2%. They generated 65.4%, 22.2%, 1.0% and 11.4%, respectively, of the total operating profit.

Production. The company plans to produce 177.0m tons of coal in FY12/08A. In 1H FY12/08A, its output grew 17.5% YoY to 90.0m tons representing 50.8% of its annual production target. In the period, the company sold 115.1m tons of coal, up 17.7% YoY, with domestic sales of 104.5m tons (90.8% of the total sales volume), exports of 10.6m tons (9.2% of the total sales volume).

In 1H FY12/08A, the company's unit cost of self-produced coal increased 8.8% YoY to RMB74.2/ton. Meanwhile, its coal ASP increased 12.0% YoY to RMB353.5/ton. Thus, the operating margin of its coal division expanded to 34.9% from 28.1%. The company is operating four mining areas, Shendong Mines, Zhunge'er Mines, Wanli Minies and Shengli Mines. We believe their cost structures are similar but selling prices differ, making the sales mix a crucial factor in the company's operating margin.

Sales mix of the coal division. In 1H FY12/08A, Shenhua sold 50.3m tons of domestic seaborne coal under long term contracts, representing 43.7% of its total sales volume in the period. The ASP of contractual domestic seaborne coal increased 15.0% YoY to RMB410.2/ton in 1H FY12/09A, providing a major boost to the company's overall coal ASP. Out of the group's total sales, seaborne coal sold in the domestic market commanded the highest ASP of RMB518.7/ton, while the mine mouth coal in the domestic spot market enjoyed the highest price increment of 75.9% YoY in 1H FY12/08A. However, as 76.3% of the company's coal sales were locked in long term contracts, the recent spot seaborne coal price rally (up 102.1% YoY this August) provided a limited boost to its overall ASP. In our view, the company's sales mix is defensive when coal prices are declining but prudent during price rallies.

Table 6: Sales mix in 1H FY12/08A

m tons	1H FY12/07A	Weighting %	1H FY12/08A	Weighting %
Domestic long-term contract sales volume:				
Mine mouth	-	-	8	7.0
Direct arrival (along railway line)	24.7	25.3	29.5	25.6
Seaborne (port FOB)	45.4	46.4	50.3	43.7
Domestic spot market sales volume:				
Mine mouth	4.5	4.6	2.5	2.2
Direct arrival (along railway line)	4.5	4.6	6.6	5.7
Seaborne (port FOB)	6.5	6.6	7.6	6.6
Export sales volume:	12.2	12.5	10.6	9.2
Total	**97.8**	**100.0**	**115.1**	**100.0**

Source: Company

Table 7: ASP/by different sales

ASP (RMB/ton)	1H FY12/07A	1H FY12/08A	Change %
Domestic long-term contract sales:			
Mine mouth	-	98.2	-
Direct arrival (along railway line)	237.2	251.3	5.9
Seaborne (port FOB)	356.6	410.2	15.0
Domestic spot market sales:			
Mine mouth	95.8	168.5	75.9
Direct arrival (along railway line)	284.5	347.3	22.1
Seaborne (port FOB)	392.1	518.7	32.3
Export sales	374.6	492.6	31.5
ASP of domestic sales	307.3	339.4	10.4
ASP of domestic long-term contract sales	314.5	328.2	4.4
ASP of domestic spot market sales	274.6	398.4	45.1
ASP of total sales	315.6	353.5	12.0

Source: Company

Increase in government levies will boost unit cost. Between FY12/02A and FY12/07A, the company's unit coal production cost increased at a five-year CAGR of 10.1%, from RMB46.0/ton to RMB75.3/ton. In 1H FY12/08A, its unit cost of self-produced coal increased 8.8% YoY to RMB74.2/ton. Out of the total coal production cost (excluding coal purchased from third parties for RMB6,885.0m), the cost of materials, power and fuels and other items accounted for 55.0% of the total coal production cost. Other costs accounted for 35.0% of the company's total coal production cost. In 1H FY12/08A, the unit other cost increased about 36.0% YoY to RMB26.1/ton, while its weighting in the total unit cost increased from 28.1% to 35.2%. Since most government levies (transformation fund, environmental restoration fund, sustainable development fund and land use tax) are booked under other costs, an increase in government levies should boost other costs. Some provincial governments (in Sichuan and Shandong) have imposed special levies on coal producers. Should Inner Mongolia and Shanxi follow suit, the company's burden will increase but with its wide gross profit margin of RMB279.3/ton, the impact on profitability should be limited, in our view. Further, other than the unit other cost, other unit costs, such as materials, staff expenses, D&A and repairs and maintenance were either flat or declined, thanks to better economies of scale, as the company expanded its mining operation and production volume.

Price - major profit determinant. In our view, ASPs, not costs, are a major factor determining in the company's divisional profitability. We expect the coal price to be flat or even drop in FY12/09F. In FY12/07A, the company produced 167.0m tons of raw coal, accounting for 6.6% of China's total of 2.5b tons. Shenhua plans to produce 177.0m tons of coal in FY12/08F, up 6.0% YoY. We project China's coal production in 2009 at 2,904.0m tons, up 5.6% YoY. Should the company's market share remain the same as in 2007 (6.0%) in terms of production volume, its production volume in FY12/09F would be 191.6m tons, up 8.3% YoY. Compared with the ASP, volume increments are less important for the company's revenue and profitability.

Secured sources of fuel. Compared with other well-established, non-five largest state-owned IPP power producers in China, such as China Resources Power (attributable installed capacity of 12,505.0MW), Shenhua's power operation is considerable. In 1H FY12/08A, it supplied 94.7% of the company's power plants' coal requirements, or 19.8m tons. Unlike other IPPs, Shenhua's power division has a stable coal supply. In its 11th Five-year plan, the government encourages the integration of coal and power producers to ensure the stability of fuel supply.

Beneficiary of the liberalization of China power market. High coal prices, regulated on-grid tariffs and credit-tightening policies have eroded the profitability and financial well-being of IPPs in China. In the first five months of 2008, almost all of China's IPPs reported losses. With on-grid tariffs under government control, IPPs are unable to pass coal cost increments to grid-companies and end users. Therefore, many private power generators are reducing their generation, or close down plants to trim losses. To ensure the stability of China's power supply in the long run, the government must liberalize its tariff fixing mechanism and the power market. Currently, the coal price is driven by market forces while power tariffs are fixed. The recent correction in commodity prices provided the government an opportunity to reform China's power market. In fact, this June, the government increased the reference prices of petroleum products by 18.0%. It also has hiked the tariff three times in 2H 2008. We believe the government may start reforming the power sector soon, which would benefit Shenhua and other power operators.

Highly integrated business model. We like the company's highly integrated business model. In a high coal price environment, the profitability of the power generation division would decline; however, any increment in the division's fuel cost would enhance the profitability of the coal production division. By the same token, if the coal price drops, the profitability of the power generation division will increase and partially offset the drop in the profitability of the coal production division.

Table 8: P&L

Year to Dec (RMBm)	06A	07A	08F	09F	10F
Operating revenue					
Coal revenue	45,948.0	55,741.0			
Power revenue	17,056.0	23,922.0			
Other revenue	2,182.0	2,444.0			
Total operating revenue	65,186.0	82,107.0	105,167.1	125,047.3	139,992.6
Cost of revenue					
Coal purchased from third parties	(6,935.0)	(10,719.0)			
Materials, fuel and power	(3,764.0)	(6,276.0)			
Staff expenses	(2,677.0)	(3,960.0)			
D&A	(6,456.0)	(7,785.0)			
Repairs and maintenance	(3,187.0)	(3,612.0)			
Transportation charges	(6,259.0)	(6,845.0)			
Other operating expenses	(3,777.0)	(4,576.0)			
SG&A	(4,359.0)	(5,144.0)			
Other operating expenses	(281.0)	(693.0)			
Profit from operation	27,491.0	32,497.0	44,655.2	53,085.5	58,125.4
Net finance cost	(2,137.0)	(2,383.0)			
Investment income/(loss)	(1.0)	38.0			
Share of profit of associates	564.0	627.0			
Profit before tax	25,917.0	30,779.0	42,226.4	50,941.6	56,173.6
Income tax	(5,394.0)	(6,742.0)			
Minority interests	(2,879.0)	(3,456.0)			
Net profit	17,644.0	20,581.0	29,337.6	35,101.5	38,829.1

Source: Company data, Bloomberg Estimates

Hidili

Volume to drive profit growth

Not Rated

China Energy

Fri, 12 Sep 2008

Andes Cheng
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andescheng@sbie2capital.com

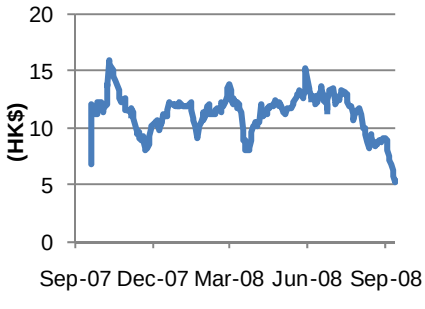
Stock data

Price	**HK$6.32**
Target price	na
12 mth range	HK$6.05-16.04
Market cap.	US$1,669.1m
Daily t/o, 3 mth	US$11.6m
Free float %	47.3%
Ticker	1393.HK/1393 HK

Financial summary

Year to Dec	06A	07A	08F	09F	10F
T/O (RMBm)	814.8	1,042.5	2,776.3	4,268.4	5,428.9
NP (RMBm)	89.7	568.4	1,390.7	2,115.1	2,334.9
EPS (RMBm)	0.075	0.371	0.684	1.046	1.193
EPS △%	-	394.7	84.4	52.9	14.1
P/E (x)	84.1	17.0	9.2	6.0	5.3
P/B (x)	30.91	2.60	2.17	1.69	1.39
EV/EBITDA (x)	22.2	16.8	6.4	4.1	3.5
Yield (%)	na	1.3	2.4	3.9	5.0
ROE (%)	36.6	11.3	24.4	30.1	24.8
ROCE (%)	9.4	9.3	na	na	na
N. Gear. (%)	(640.7)	Cash	na	na	na

Price Chart



Our view

Lucrative margin. A coking coal producer, Hidili has been a commanding lucrative gross profit margin of more than 50.0% since FY12/04A.

Driven by volume. We believe that the price of coking coal has peaked and that volume growth will be the major driver of the company's earnings.

Aggressive production plan. By end-2008, the company's coal resource base will expand by 300.0m tons to 806.0m. The company plans to expand its production at a four-year CAGR of 41.4% between FY12/08F and FY12/12F.

Company background. Established in 2000 and listed on the Hong Kong Exchange in Sep 2007, Hidili Industry International is a southwest-China based coal miner, focused on the production and sales of high quality of clean coal and coke.

Stellar 1H FY12/08A results. Thanks to strong product prices and sales volume increases, its net profit surged 272.5% YoY to RMB534.5m in 1H FY12/08A, on a 198.8% YoY increase in revenue to RMB1,190.7m. We expect its growth momentum to strengthen in 2H given the strong coke price. The average coking coal price this July and August was 48.3% higher than the average price for 1H 2008.

Production volume growth. Between 2004 and 2007, the company's raw coal, clean coal and coke production volume increased at a three-year CAGR of 29.0%, 27.6% and 25.7%, respectively, along its reserve base expansion. Originally, the company had 62.0m tons of coal resources in Sichuan. In 2007, it acquired 14 mines in Guizhou for RMB1,773.0m, boosting its resources to about 415.0m tons at end-FY12/07A. In 1H FY12/08A, it acquired another three mines in Guizhou, expanding its resource base to 506.0m at end-1H FY12/08A.

Acquisition-fuelled growth. China's mining resource consolidation program intends to consolidate small mines into larger ones to achieve economies of scale and to close down inefficient, polluting and unsafe mines. The Chinese government aims to reduce the number of small coal mining projects to 10,000 by 2010 from 20,000 in 2005. The company has been capitalizing on the government's mining resources consideration program by acquiring smaller mines in Sichuan and Guizhou. It plans to acquire eight to ten mines with 300.0m tons of resources by end-2008 and boost its resource base to 806.0m tons.

It also plans to boost its raw coal production by 137.5% from about 2.0m tons in FY12/08F to 4.5- 5.0m tons in FY12/09F. It aims to produce 6.0m tons of raw coal by end-FY12/11F and 8.0m tons by end-FY12/12F.

Surge in ASP. Between 2004 and 2007, the ASP of the company's coke and clean coal increased at a three-year CAGR of 5.0% and 16.0%, respectively. In FY12/07A alone, the ASP of clean coal and coke products increased 3.5% YoY and 28.4% YoY, respectively. Due to rising commodity prices, the company's clean coal and coke prices surged 95.0% YoY and 95.9% YoY in 1H FY12/08A, respectively, driving net profit growth in 1H FY12/08A. The McCloskey/Xinhua Infolink's coking coal price surged 100.6% YoY to RMB1,631.0/ton in this August. In the first eight months of this year, the McCloskey/Xinhua Infolink's coking coal price surged on

average of 35.3% YoY to RMB1,076.5.0/ton.

Coke price peaks. We believe the price of coking coal has peaked. In 2004-2007, China's pig iron production increased at a three-year CAGR of 23.2% from 250.0m tons to 466.9m tons. In the same period, the domestic price of coking coal used in pig iron production increased at a three-year CAGR of only 1.8%, from RMB796.0/ton to RMB840.0/ton. The monthly domestic coking coal price was RMB1,218.0/ton in Jul 2008, 45.0% higher than that of the annual average in 2007. In Jan-Jul 2008, China's pig iron output increased 7.6% YoY to 288.9m tons. The growth of coking coal prices has been running far ahead of pig iron output growth. Since demand for steel products is likely to weaken amid the global economic slowdown, we expect coking coal demand and price to come under downward pressure from 2009.

Expansion in downstream production capacity. At end-Jun 2008, the company had five coal washing plants with a total coal washing capacity of 2.55m tons per annum. It also had two coking plants with a total coking capacity of 0.8m tons per annum. The company is about to acquire 70.0% in Panxin Coking for RMB96.0m and 70.0% in Panyi Coal Washing for RMB31.5m. Panxi Coking has a coal washing plant and a coking plant in Guizhou, with annual processing capacities of 0.6m tons of clean coal and 0.2m tons of coke. Panyi Coal Washing has a coal washing plant in Guizhou with an annual production capacity of 0.5m tons of clean coal. After the acquisitions, the company's coal washing capacity will expand 43.1% to 3.65m tons per annum and its coking capacity 25.0% to 1.0m tons per annum.

Self-sufficient. The production yield of clean coal in Sichuan is 50.0% (2.0 tons of raw coal are needed to produce 1.0 ton of clean coal). In Guizhou, the production yield of clean coal is 57.1% (1.75 ton of raw coal is needed to produce 1.0 ton of clean coal). In general, the company takes 1.25 ton to 1.3 ton of clean coal to produce one ton of coke. In 1H FY12/08A, out of the total clean coal production volume of 549,900.0 tons, 27.6% were sourced externally, by our estimation, as the group could not produce all of its raw coal requirements. However, after the expansion, the group should be self-sufficient in raw coal for clean coal production and clean coal for coke production.

Table 9 : Products ASPs

RMB/ton	04A	05A	06A	07A	1H07A	1H08A
Coke	874.1	876.1	787.4	1010.9	906.8	1776.4
Clean coal	416.9	318.0	629.0	650.9	632.7	1233.5

Source: Company

Table 10: Production and sales volume

	04A	05A	06A	07A	1H07A	1H08A
Production volume (m tons)						
Raw coal	1.0	1.2	2.2	2.2	1.0	1.2
Clean coal	0.6	0.6	1.2	1.2	0.5	0.9
Coke	0.3	0.4	0.5	0.5	0.3	0.4
Sales volume (m tons)						
Clean coal	0.2	0.3	0.6	0.6	0.2	0.4
Coke	0.3	0.4	0.5	0.5	0.2	0.4

Source: Company

Lucrative gross margin. The company's gross profit margin widened 0.9pcp to 65.4% in 1HFY12/08. Since FY12/04A, the company's gross profit margin has been improving, from 52.0% in FY12/04A to 65.1% in FY12/07A, thanks to the better economies of scale (expansion and rising product ASPs). The company's COGS in 1H FY12/08A surged 191.1% YoY to about RMB412.0m. With increased procurement of clean coal and raw coal from external resources, material, fuel and power costs surged 364.6% YoY to RMB285.7m. We expect the procurement expenditure to decline as the company's own resource base expands. We estimate that the company's unit production cost per coke and clean coal actually dropped at a three-year CAGR of 4.5% and 4.9% between FY12/04A and FY12/07A, probably due to better economies of scale.

Government levies up. In 1H FY12/08A, the company's distribution and selling costs surged 324.7% YoY to RMB91.3m, partially due to higher government levies on coal production and sales. Currently, the company pays a resource tax of RMB8.0/ton to the provincial governments in Sichuan and Guizhou. The tax rate may increase to RMB30.0/ton this year. The company also pays RMB1.4/ton to the Sichuan government's coal mining fund. Also, coal enterprises in Sichuan are subject to pay special levy on coal production, as RMB40.0/ton on sales of raw coal, RMB60.0/ton on sales of washed coal and RMB70.0/ton on sales of coke.

Gearing to rise. At end-1H FY12/08A, the company was in net cash position of RMB935.2m.It has earmarked RMB4.0b for acquisitions of mining and downstream processing assets. About RMB3.4b of its investment requirement will be financed by debt and the rest from internal resources.

Stake sale. Baring Private Equity Asia III, a pre-IPO investor in the company with 10.7% immediately after its listing, unloaded all of its holdings in the open market in Oct 2007.

Table 11: P&L

Year to Dec (RMBm)	06A	07A	08F	09F	10F
Revenue	814.8	1,042.5	2,776.3	4,268.4	5,428.9
Cost of sales	(325.3)	(364.1)			
Gross profit	489.5	678.4			
Other income	38.8	283.1			
Distribution costs	(45.3)	(48.9)			
Administrative expenses	(52.1)	(210.2)			
Other non-operating expenses	(292.6)	(71.8)			
Finance costs	(30.3)	(38.8)			
Profit before tax	108.0	591.8	1,427.3	2,176.1	2,913.0
Income tax	(18.3)	(22.5)			
Minority interests	0.0	(1.0)			
Net profit	89.7	568.4	1,390.7	2,115.1	2,334.9

Source: Company data, Bloomberg Estimates

Yanzhou Coal Mining

All depends on coal price

Not Rated

China Energy

Fri, 12 Sep 2008

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(852) 2533 3721
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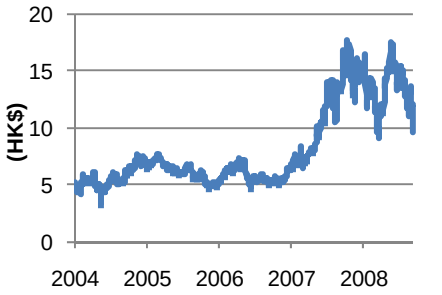
Stock data

Price	**HK$11.6**
Target price	na
12 mth range	HK$8.96-17.94
Market cap.	US$7,884.2m
Daily t/o, 3 mth	US$48.3m
Free float %	47.1%
Ticker	1171.HK/ 600188 CH

Financial summary

Year to Dec	06A	07A	08F	09F	10F
T/O (RMBm)	12,944	15,110	23,916	27,879	29,549
NP (RMBm)	2,373	3,230	7,184	8,182	8,465
EPS (RMBm)	0.480	0.660	1.444	1.655	1.720
EPS △%	-	37.5	118.8	14.6	3.9
P/E (x)	21.2	15.4	7.0	6.1	5.9
P/B (x)	2.64	2.33	1.78	1.46	1.25
EV/EBITDA (x)	10.3	8.2	4.3	3.8	3.8
Yield (%)	1.9	2.5	4.0	5.0	5.4
ROE (%)	12.5	15.1	30.2	27.4	24.8
ROCE (%)	25.1	28.0	na	na	na
N. Gear. (%)	cash	cash	na	na	na

Price Chart



Our view

Strong FY12/08F earnings expected. According to the street estimate, the company's net earnings will increase 122.4% YoY to about RMB7.2b in FY12/08F, which is achievable in our view, as the company booked 54.5% of earnings in 1H and the coal price remains strong in 3Q.

Mild production growth in FY12/09F. We project that the company's production volume will increase 17.4% YoY to 40.4m tons in FY12/09F.

Company profile. Shandong-based Yanzhou coal is mainly engaged in the production and sales of coal. It also provides coal transportation services and has some railway assets. The company's main products are prime-quality low-sulphur coal, which can be used in power generation and metallurgy. Currently, it has nine mines in operation, in Shandong and Shanxi, and in Australia.

Coal price - major driver. Thanks to the current coal price rally, the company's net profit rose at a four-year CAGR of 23.5%, from RMB1,386.7m in FY12/03A to RMB3,230.5m in FY12/07A, despite a production volume drop. Between FY12/03A and FY12/07A, Yanzhou's raw coal production fell at a CAGR of 4.8% to 35.6m tons and coal sales 2.8% to 35.1m tons. Meanwhile, the ASP of its coal products increased at a CAGR of 24.5%, from RMB172.4/ton in FY12/03A to RMB414.0/tons in FY12/07A, driving the company's earnings.

Strong growth expected in FY12/08F. In 1H FY12/08A, the company's raw coal production volume declined 0.4% YoY to 18.1m tons, while its coal sales volume increased 9.1% YoY to 18.5m tons. A 66.9% YoY increase in its coal product ASP to RMB651.0/ton boosted net profit by 160.4% YoY to RMB3,912.6m in 1H FY12/08A. The company's production volume target of 34.4m tons for FY12/08F represents a drop of 3.4% YoY from FY12/07A. According to the street estimate, Yanzhou's net profit will rise 122.4% YoY to about RMB7.2b, which, in our view, is achievable as 54.5% of the forecast was booked in 1H and the coal price remains strong in 3Q. The August and July average McCloskey/Xinhua Infolink's steam coal price was 48.7% higher than the average price in 1H 2008.

Output to grow in FY12/09F. We expect the company's production volume to increase 17.4% YoY to 40.4m tons in FY12/09F, given its production ramp up at the Zhaolou Mine and easing port congestion in Australia. The company owns the Austar Mine in Australia through Yancoal Australia Pty.

Strong price boosts margin. Thanks to the 66.9% YoY surge in the coal price, the company's average gross profit margin per ton of coal sold expanded to RMB RMB405.9/ton in 1H FY12/08A, from RMB202.6/ton in the year-earlier period, despite a 30.7% YoY rise to RMB245.11/ton in the unit cost of coal sold, due to higher government levies. From Aug 2007, the company has to pay RMB8.0/ton to the Coal Price Regulation Fund of the Jining municipality, Shandong. From Jan 2008, it also pays the Mining Right Resource Compensation Fee of RMB5.0/ton to the government. Expenses related to land use tax, harness fees and the compensation fee for the structures and greens attached on the surface of the mining areas increased as well. Excluding the government levies, the company's unit cost of coal sold increased 12.3% YoY to RMB210.7/ton in 1H FY12/08A. Between FY12/05A and FY12/07A, it rose at a two-year CAGR of 11.8%.

Table 12: P&L

Year to Dec (RMBm)	06A	07A	08F	09F	10F
Gross sales of coal	12,783.6	14,906.7			
Railway transportation services	160.4	203.7			
Total revenue	12,944.0	15,110.5	23,916.3	27,879.5	29,549.5
Transportation costs of coal	(936.6)	(549.8)			
Cost of sales and service provided:					
Materials	(1,320.6)	(1,257.4)			
Staff costs	(1,646.0)	(2,392.4)			
Electricity	(336.3)	(377.7)			
Depreciation	(963.0)	(1,121.6)			
Land subsidence, restoration, rehabilitation and environmental costs	(743.0)	(833.3)			
Repairs and maintance	(327.2)	(441.5)			
Amortization	(25.0)	(28.7)			
Transportation cost	(106.6)	(105.9)			
Others	(722.5)	(773.4)			
Cost of sales:	(6,190.1)	(7,331.9)			
Gross profit	5,817.3	7,228.7			
Selling and administrative expenses:					
Wages and employess benefits	(1,001.8)	(1,093.7)			
Additional medical insurance	(57.4)	(22.9)			
Staff training costs	(44.0)	(38.7)			
Depreciation	(112.8)	(129.4)			
Distribution charges	(57.1)	(93.0)			
Resource compensation fees	(107.5)	(117.8)			
Repairs and maintenance	(18.4)	(34.3)			
R&D	(46.0)	(79.0)			
Freight charges	(20.7)	(29.3)			
Property, plant and equipment written off		(339.7)			
Loss on disposal of property, plant and equipment	(73.5)	0.0			
Others	(690.8)	(876.7)			
Selling and administrative expenses:	(2,230.1)	(2,854.677)			
Share of loss of an associate		(2.438)			
Other income	165.8	198.930			
Interest expenses	(26.3)	(27.222)			
Profit before income taxes	3,726.6	4,543.3	10,027.1	11,339.6	11,557.1
Income tax expenses	(1,354.7)	(1,315.5)			
Minority interests	1.0	2.7			
Net profit	2,373.0	3,230.5	7,184.1	8,182.7	8,465.1

Source: Company data, Bloomberg Estimates

Appendix I: Facts of global coal market

What is coal. Coal is a fossil fuel. It is a combustible, sedimentary, organic rock, which is composed mainly of carbon, hydrogen and oxygen. It is formed from vegetation, which has been consolidated between other rock strata and altered by the combined effects of pressure and heat over millions of years to form coal seams.

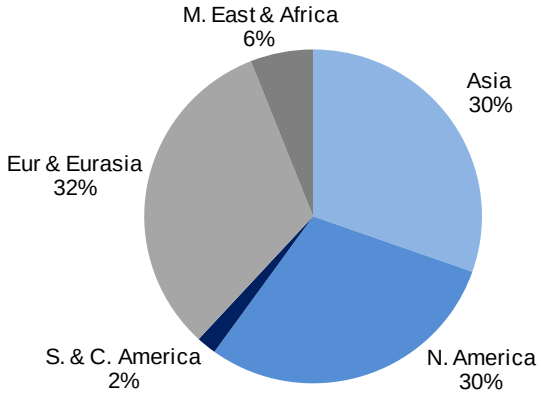
Types of coal. Coalification is the degree of change that coal undergoes as it matures from peat to anthracite. It ranks coal in terms of its physical and chemical properties. Low rank coal, such as lignite and sub-bituminous coal, are typically softer with a dull, earthy appearance, low energy content due to high moisture levels and low carbon content. It is used in power generation, cement manufacturing and in other industrial applications.

Higher rank coal or hard coal is generally harder and stronger, and often have a black, vitreous luster. It contains more carbon and less moisture, producing more energy. Bituminous coal and anthracite are two major types hard coal. Bituminous coal can be categorized as thermal coal (or steam coal) and metallurgical coal (or coking coal). Thermal coal is used in power generation, cement production and in other industrial applications. Coking coal is used in iron and steel production. Anthracite has the highest carbon and energy content and lowest moisture level.

Types of coal reserves. Reserves, or the amount of coal present in a deposit or coalfield, can be defined in terms of proved (or measured) reserves and probable (or indicated) reserves. Probable reserves are estimated with a lower degree of confidence than proved reserves. Proved reserves are considered to be recoverable economically and will change according to the price of coal; if the price of coal is low, proved reserves will decrease.

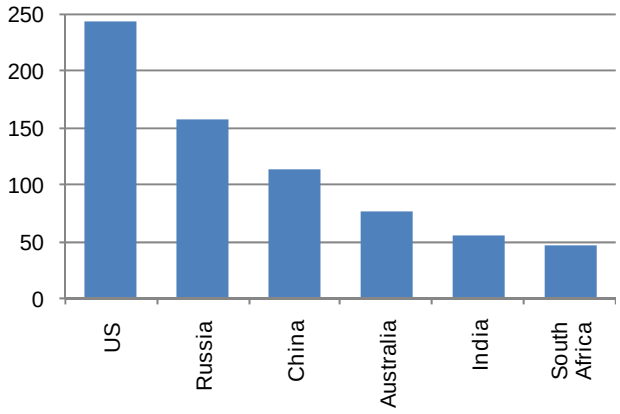
World coal reserves distribution. According to the BP Statistical Review of World Energy June 2008, world coal reserves stood at 847.5b tons at end-2007. Low rank coal accounted for 49.0% and high rank coal for 51.0% of the total. The US had 28.6% of the world's coal reserves, followed by Russia (18.5%), China (13.5%), Australia (9.0%), India (6.7%) and South Africa (5.7%).

Chart 2: Distribution of coal reserves



Source: BP Statistical Review of World Energy June 2008

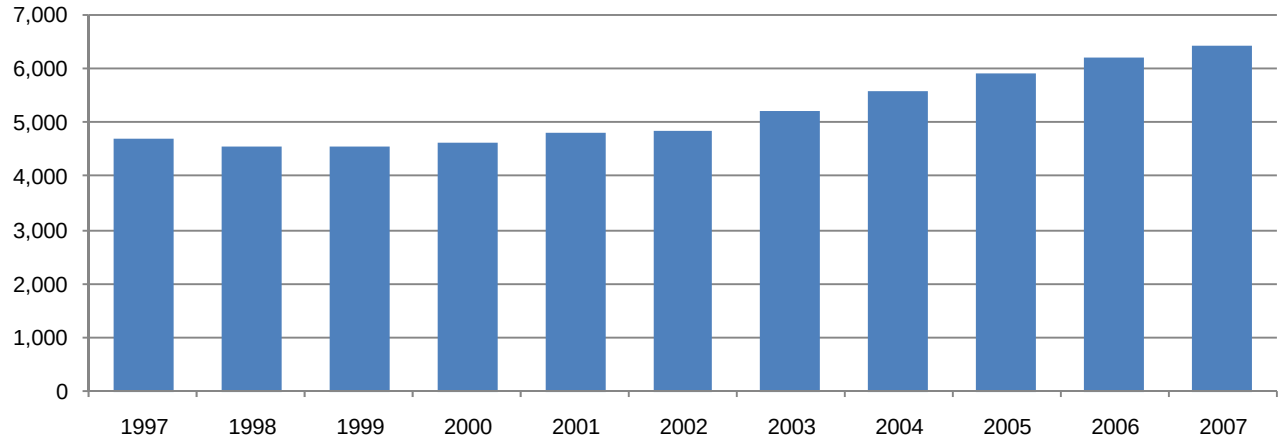
Chart 3: Countries with rich coal reserves (b tons)



Source: BP Statistical Review of World Energy June 2008

World coal production. Between 1997 and 2007, the world's coal production increased at a ten-year CAGR of 3.1%, from 4,702.7m tons in 1997 to 6,395.6m tons in 2007, according to the BP Statistical Review of World Energy June 2008. In 2007, the world's coal production increased 3.4% YoY. Asia Pacific is the largest global coal producer, accounting for 59.0% of the total in 2007, followed by North America (20.1%) and Europe and Eurasia (14.2%). China was the largest coal producing country in 2007, accounting for 41.1% of the world's output, followed by the US with 18.7%.

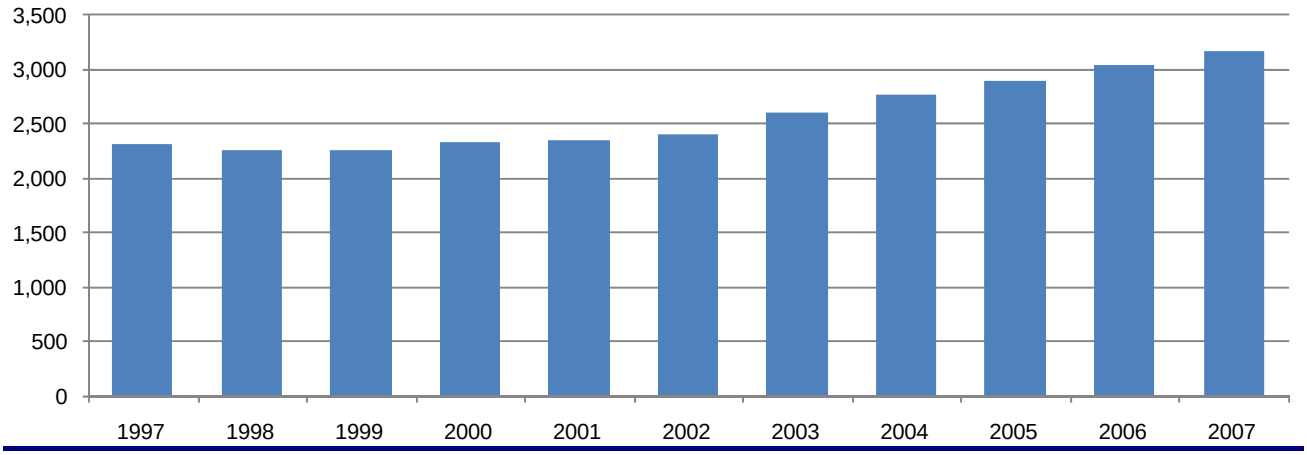
Chart 4: Global coal production (m tons)



Source: BP Statistical Review of World Energy June 2008

World coal consumption. The world's coal consumption increased at a ten-year CAGR of 3.2% between 1997 and 2007, from 2,317.7m toe (tons oil equivalent) to 3,177.5m toe. In 2007, it rose 7.0% YoY. China was the world's largest coal consumer in 2007 with 1,311.4m tons of coal, or 41.3% of the total.

Chart 5: World coal consumption (Mtoe)



Source: BP Statistical Review of World Energy June 2008

End-uses of thermal coal. 1) Power generation – coal generated 28.4% of global primary energy consumption in 2006, according to the BP Statistical Review 2007; 2) Heat and steam production; 3) Pulverized coal injection (PCI) in blast furnaces and blending with coking coal.

End-uses of coking coal. 1) Production of coke used in blast furnaces for the production of pig iron; 2) Electricity and heat generation; 3) Heat and steam production - demand for coking coal and coke is linked to demand for pig iron and demand for steel.

World coal trade. Between 1996 and 2006, international hard coal trade increased at a ten-year CAGR of 4.7%, from about 513.0m tons to 815.0m tons. International thermal coal trade and coking trade increased at a ten-year CAGR of 6.4% and 1.3%, respectively, according to the World Coal Institute.

Table 13: Top seven coal exporters in 2006 able: Top seven coal importers in 2006

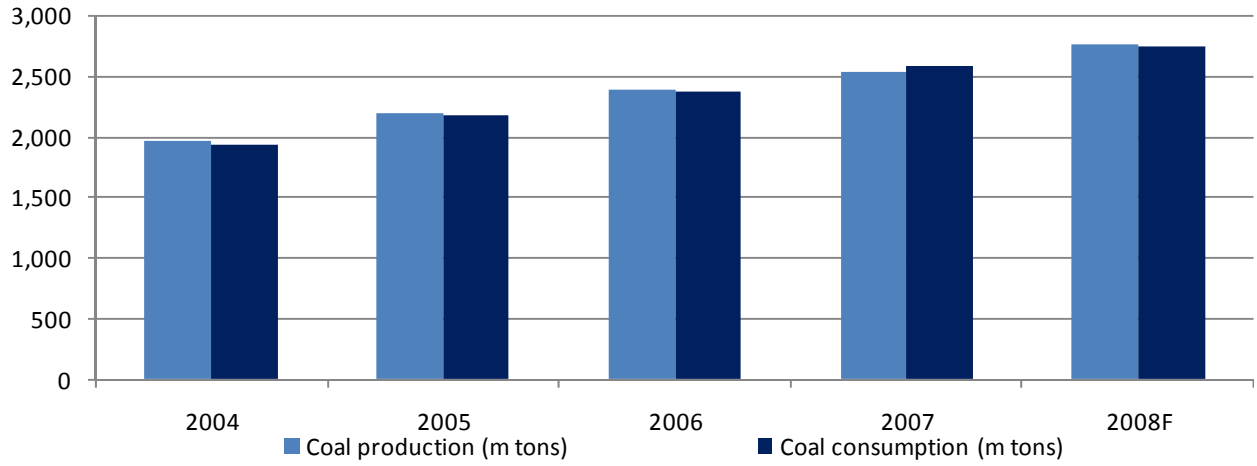
Top Coal exporters in 2006 (by estimation) Country	Total m tons	Thermal m tons	Coking m tons
Australia	231.0	111.0	121.0
Indonesia	129.0	104.0	25.0
Russia	92.0	82.0	10.0
South Africa	69.0	68.0	1.0
China	63.0	59.0	4.0
Colombia	60.0	60.0	-
U.S.	45.0	20.0	25.0

Source: World Coal Institute

Appendix II: China coal industry

China coal production and consumption. Between 2004 and 2007, China's coal production increased at a three-year CAGR of 9.0% from 1,956.0m tons to 2,536.0m tons, while its consumption rose at a CAGR of 10.0% from 1,936.0m tons to 2,580.0m tons. In 2008, China's coal production is estimated to increase 8.4% YoY to 2,750.0m tons and consumption 6.2% to 2,740.0m tons.

Chart 6: China coal production/consumption (m tons)



Source: China Shenhua Energy

About 90.0% of China's coal reserves and production is situated in the western and northern part of the country. According to the National Bureau of Statistics, in 2006, the aggregate coal output of Shanxi, Inner Mongolia, Henan, Shangxi and Shandong accounted for 53.6% of the country's total. Shanxi was the largest coal producing province in 2006, accounting for 20.9% of the country's total, followed by Inner Mongolia (12.5%), Henan (7.8%), Shangxi (6.5%) and Shandong (5.9%). Demand is the highest in the eastern and costal part of the country, in Jiangsu, Guangdong and Zhejiang. For example, Jiangsu consumed 164.9m tons in 2006 and Guangdong 96.8m tons, compared to their output of 28.2m tons and 2.4m tons, respectively.

Coal – China's major energy source. In 2006, coal accounted for 69.4% of China's energy consumption, followed by crude oil (20.4%), natural gas (3.0%) and other renewable energy (7.2%). Under its 11th Five-year Plan, the government aims to reduce the ratio of coal consumption to the country's total energy consumption to 66.1% by 2010.

Breakdown of coal consumption by sector. According to China Coal Resources, in the first nine months of 2007, exports represented 2.2% of China's total coal consumption, power generation 56.4%, the iron and steel industry 25.7%, construction materials industry 11.8% and chemical industry 3.9%.

Coal transportation. China's main coal transportation routes connect northern and western coal production bases with eastern and coastal high-demand areas. The national rail system is the primary means of long-distance transportation, includes the Daqin Line, Shenshuo-Shuohuang Line, Houyue Line and Setning-Tongliao Line.

Daqin Line. Running from Datong city in Shanxi province to the port of Qinhuangdao in Hebei province, the line is one of China's three major railway coal transport systems. Its transport capacity expanded 20.0% YoY to 300.0m tons per annum in 2007 and should reach 350.0m tons per annum (up 16.6% YoY) by end-2008 and 400.0m tons by 2010.

Shenshuo and Shuohuang lines. The 270km-long Shenshuo line stretches from the Daliuta mine in Shaanxi province to Shuozhou. The 594km Shuohuang line stretches Shenchi south station on the Shenshuo line to Huanghua port in Hebei. Their capacity expanded 18.2% YoY to 130.0m tons per annum in 2007 and should reach 139.0m tons (up 6.9% YoY) in 2008. China Shenhua Energy owns 52.7% of the Shuohuang line.

Houyue Line. The 252km Houyue line stretches from Houma in Shanxi province to Yueshan in Henan province. In 2007, its capacity expanded 14.3% YoY to 120.0m tons per annum, and should reach 130.0m tons (up 8.3% YoY) per annum in 2008.

Qinhuangdao port. China's largest coal shipping port (annual capacity of 193.0m tons) located in northeast Hebei, on the west coast of the Bohai Sea.

Tianjin port. A major port located in the coastal area of the Bohai Bay. In 2007, its throughput increased 20.0% YoY to 309.0m tons.

Huanghua port. A port located in Hebei province, about 230km southeast of Beijing. Its annual throughput capacity is 65.0m tons and coal storage capacity 4.5m tons. The port is 70.0% owned by China Shenhua Energy.

Rizhao port. A port located in Shandong province, with three coal-handling berths and an annual capacity of 35.0m tons (to expand to 45.0m tons in the near future). It has a coal storage capacity of 3.5m tons per annum.

Lianyungang port. Situated in Haizhou, northeastern Jiangsu, the port has a total throughput capacity of more than 40.0m tons per annum.

Qingdao port. Located in the Yangzi River basin, the port has three coal-handling berths with an aggregate daily handling capacity of 400,000.0 tons.

Expansion in coal transport capacity. In its 11th Five-year Plan, the government aims to expand China's railway coal transport capacity by 400.0m tons a year and port coal throughput capacity by 200.0m tons by the end of 2010.

China's law and regulations regarding mining licenses. All mineral resources in China are owned by the state under the Mineral Resources Law. The Ministry of Land and Resources (MLR) is responsible for the supervision and administration of the mining and exploration of mineral resources nationwide.

Applications for all coal mine development projects within China's planned mining areas are required to be submitted to the National Development and Reform Commission (NDRC) for approval, and for other general coal mining development projects to investment departments of local governments. The bureaus of geology and mineral resources of each province, autonomous region and municipal government are responsible for the supervision and administration of the exploration development and exploitation of mineral resources within their own jurisdictions. Enterprises engaged in the exploration and exploitation of mineral resources must obtain exploration rights and mining rights which are transferable.

According to the Coal Law and the Mineral Resources Law, exploration and exploitation of coal is subject to supervision by MLR and relevant local mineral resource bureaus and coal administration departments. Upon approval, an exploration license for each proposed mine or a mining right permit for each mine will be granted by MLR or the relevant local mineral resource bureau.

Holders of mining right permits are required to fill annual reports and submit them to the relevant permit-issuing authorities. A coal producer must also obtain a coal production permit for each of its mines to begin producing and selling coal in China. The production capacity of each coal mine is subject to annual review by the NDRC or its provincial counterpart.

Enterprises or individuals who conduct mining activities without permits are subject to penalties. However, the applicable PRC laws do not prescribe any penalties for cases when coal mining is conducted at mines for which mining right, coal production or safe production permits are obtained and the completion of the transfer of the permits to the new mine owner is delayed not due to any default of the new mine owner.

Under the Coal Law and the Mineral Resources Law, coal producers are required to achieve certain reserve recovery rates and any failure may result in penalties, including the revocation of the production permit. It is illegal for an entity or individual to conduct mining operations in areas previously authorized for exploitation by other mining operators.

Under the Mineral Resources Law, a mine operator in China must follow certain procedures in closing a mine, including submitting mine closure geology report to the regulatory authority that originally approved the opening of the mine.

Mining rights are transferable, subject to the approval of relevant geological and mineral resources and land bureaus and upon satisfaction of other conditions, as stipulated by laws and regulations.

A holder of a mining right permit has the right to conduct mining activities in the area within the time period designated in the mining right permit, as well as the right to set up necessary production and living facilities within the designated area and acquire the land use rights necessary for the production.

He also has additional obligations, such as to conduct reasonable exploitation and protect and fully utilize mineral resources, pay resources tax and resources compensation levy, comply with the laws and regulations related to occupational safety, soil and water conservation, reclamation and environmental protection, as well as submit mineral resource reserve and utilization reports to relevant government authorities.

In Dec 2004, the NDRC promulgated the Measures on Coal Operation Supervision to regulate the sale and processing of coal products. Under the measures, an enterprise must obtain a coal operation qualification certificate to engage in sales of coal products that are not self-produced and self-processed.

Mine safety in China. Mine safety in China is supervised and regulated by the State Administration of Work Safety (SAWS) and the State Administration of Coal Mine Safety (SACMS). Prior the construction of a coal mine project, the mine operator must submit the project's safety designs and procedures to SACMS for examination and approval. Upon the completion of a coal mine construction project and before production starts, the project must be inspected and approved by SACMS. The SACMS also conducts regular safety inspections of coal mine projects. Mine operators who fail to comply with safety regulations are subject to penalties. Coal mine operators in China are required to apply to SACMS or provincial bureaus for coal production safety permits, which are valid for three years.

In its Urgent Notice Regarding the Advice on the Standardization of the Coke Industry issued in May 2004, the government ordered the closure of all facilities with coke ovens which adopt low-tech processes causing heavy pollution. The Notice also specified the conditions for entering the coke industry and eliminated coke export rebates. Coke facilities should be located in line with provincial development planning and equipped for clean production.

Taxation and government levies. Various of taxes and fees are imposed on coal producers in China, including corporate income tax, value added tax, business tax, city construction tax, education surcharge, resources tax, mining rights utilization fee, compensation for the depletion of coal resources, maintenance fee and safety fund.

Resources tax is calculated as an aggregate volume of raw coal or coal products sold multiplied by the rate per ton. In Sichuan this tax is RMB2.5 per ton of coal and in Shandong RMB3.6.

Mining rights utilization fees are calculated as the mining area multiplied the rate of RMB1,000.0 per kilometer.

Compensations for the depletion of coal resources are calculated as 1.0% of the ratio between the approved coal mining recovery rate and the actual mining recovery rate.

The maintenance fee is calculated as the volume of raw coal produced by a mine operator multiplied by the designated rate ranging from RMB8.50 to RMB10.50 per ton.

The safety fund is calculated as the volume of raw coal produced multiplied by the rate ranging from RMB3.0/ton to RMB8.0/ton.

Special levy. Provincial governments in Sichuan and Shandong have imposed a special levy on coal producers. Sichuan levies RMB40.0/ton on sales of raw coal, RMB60.0/ton on sales of washed coal and RMB70.0/ton on sales of coke. In Aug 2007, Shandong started levying RMB8.0/ton on coal sales.

Coal pricing mechanism. Since 2002, prices of all types of coal have been subject to market forces, although the government can still influence them by regulating power tariffs and controlling the allocation of national railway capacity. Prior to 2006, the government used temporary measures to stabilize the coal price. In Dec 2005, the NDRC eliminated all temporary coal price intervention mechanisms and freed the price of thermal coal completely. However, it will issue guidelines to curb excessive thermal coal price increases.

In Jul 2008, the NDRC capped spot prices of coal with the heat value of 5,500.0cal/kg at major seaports at levels recorded on 19 Jun 2008 (RMB860.0/ton in Qinhuangdao, RMB840.0/ton in Tianjin and RMB850.0/ton in Tangshan).

Long term sales contracts. Large coal suppliers sell a large portion of their production in the domestic market by sales contracts. In FY12/07A, long-term sales contracts represented more than 70.0% of China Shenhua Energy and China Coal Energy's total sales.

Sales contracts usually have a minimum term of one year and some producers negotiate the price and volume with buyers in the annual national coal trading convention conducted by the Coal Administrative Bureau. Representatives from the Ministry of Railways and the Ministry of Transport join the convention to negotiate rail transport arrangements with coal producers and buyers.

Long-term contracts contain provisions relating to price adjustment mechanisms, coal quality requirements, coal quantity, permitted sources of supply, future regulatory changes, extension options, force majeure, termination and assignment of contract. Depending on the sales region and the type of customer, coal prices

may be quoted as ex-mine prices, FOB, DES or CFR (all inclusive of VAT).

However, some producers, such as China Shenhua Energy, negotiate with buyers individually in November of every year, with some giving buyers an option to adjust their annual or monthly volumes. Coal producers generally bear transport costs from the mine to the port or other point of delivery, while the purchaser meets any subsequent shipping charges.

Major energy and coal sector targets set in the 11th Five-year plan

Increase efficiency - the government aims to lower energy consumption per unit of GDP by 20.0% (reduce the standard coal equivalent consumption per GDP from 1.22 to 0.98), representing the energy saving rate of 4.4%.

Curb energy consumption - the government aims to keep China's energy consumption at 2.7b tons of the standard coal equivalent by 2010, implying an average annualized growth rate of 4.0% in 2005-2010

Reduce coal consumption – the government aims to reduce the ratio of coal consumption in total energy consumption to 66.1% by 2010 from 69.1% in 2005.

Boost energy output - the government plans to boost China's energy production to 2.4b tons of the standard coal equivalent by 2010, representing an average annualized growth rate of 3.5% in 2005-2010.

Designate coal production bases - Shendong (in southern Inner Mongolia and northern Shaanxi), Shanbei (northern Shaanxi), Huanglong (Shannxi province), Jinbei, Jinzhong and Jindung (Shangxi province), Luxi (Shandong province), Huaiyin and Huaian (Jiangsu province), Kwezhong (Hebei province), Henan, northeastern Inner Mongolia, Yunnan and Guizhou and Ningdong (Shaanxi province)

Develop mine mouth power plants - in Shanxi, Inner Mongolia, Shangxi, Guizhou and Yunnam under the government's "West to East Energy Transmission" plan, generating power in coal-rich provinces in the west and transfer it to energy-hungry eastern areas

Expand transport capacity

Develop coal based fuel through coal liquefaction and coal-based chemical processing, as well as biological-based liquefied fuel.

Lower the standard coal consumption rate - of coal-fired power plants to 355.0g/kwh by 2010 from 370.0g/kwh in 2005 and of the steel industry from 760.0kg/ton in 2005 to 730.0kg/ton by 2010.

Increase the recovery rate of mine by 4.0ppt to 50.0%.

Expand reclaimed and restored areas of coal mines from 9,000.0 hectares to 22,000.0 hectares.

Cap coal production - According to government projections, by 2010, China's coal demand will exceed 2.6b tons per annum and under the plan production will be capped at that level by 2010. Major coal mines will produce 56.0% of the target, medium 17.0% and small 27.0%.

Increase capacity – the government plans to increase the total coal mine production capacity by 430.0m tons per annum by 2010, consolidating small mines into medium and large mines, developing new projects and expanding existing projects' capacity. It aims to develop ten key mining projects with higher mine safety standards and expand coal exploration.

Foster 6-8 mining giants with annual production capacities exceeding 100.0m tons each and develop eight to 10 large mining companies with annual production capacities exceeding 50.0m tons each. They are expected to represent 50.0% of China's mining market in terms of production volume.

Increase mechanization at large and medium mines to 95.0% and 80.0%, respectively, and at small mines to 40.0%.

Raise safety standards - the government aims to have 380 mining projects with high safety standards and efficiency by end-2010, including 25 with production volumes exceeding 10.0m tons p.a (accounting for 45.0% of the country's annul coal output).

Increase the use of coal gangue - the government plans to have 3,000.0MW of installed capacity fuelled by coal gangue and save 8.0m tons of standard coal by using coal gangue as fuel to produce 130.0m tons of cement and 25.0b units of standard bricks.

Increase coal bed gas extraction - new mining projects are required to extract coal bed gas prior to coal mining, with the coal bed gas extraction rate of at least 40.0% and 10.0bm^3 of gas produced by 2010. Open-cut mines

will contribute 50.0% of the target and underground mines the remainder.

Phase out small mines - the government plans to reduce the number of small coal mining projects to 10,000 by 2010 from 20,000 in 2005.

Small mine closures. The government plans to consolidate small mines into medium and large mining projects in 2005-2010. In 2005, small coal mines in Shaanxi, Inner Mongolia and Shanxi produced 350.0m tons of coal. After consolidation, the region's capacity should increase by 150.0m tons, with a number of small mines (total production volume not exceeding 250.0m tons per annum) retained. Small mining projects in Heilongjiang, Hebei, Anhui, Shandong, Henan, Guizhou, Yunnan, Gansu, and the Xinjiang Autonomous Region produced 380.0m tons of coal in 2005. After consolidation, the region's coal production capacity should increase by 40.0m tons per annum, with a number of small projects (total production volume not exceeding 270.0m tons per annum) retained.

Small mining projects in Liaoning, Jilin, Jiangsu, Fujian, Jiangxi, Hubei, Hunan, Guangxi, Chongqing and Sichuan produced 240.0m tons of coal in 2005. After consolidation, the region's production capacity will increase by 10.0m tons per annum, with some small projects (total production volume not exceeding 200.0m tons per annum) retained.

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