

China Oil and Gas: A premium gas play

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Recommendation: Not Rated

China Utilities

Price	HK\$1.26	Yield (12/06A)	na
12 mth range	HK\$0.06-HK\$1.30	ROE (12/06A)	23.8%
Market cap.	US\$465.2m	Net gearing (12/06A)	cash
No. shares o/s	2,879.7m	Net cash/sh. (12/06A)	HK\$0.045
Daily t/o, 3 mth	US\$7.5m	BV/sh. (3/06A)	HK\$0.12
Free float %	49%	Consensus EPS	
Major shareholder	Xu Tie Liang – 27.9%	- 3/07F	na
Ticker	603.HK/ 603 HK	- 3/08F	na

Key points:

- CNPC's partner in downstream natural gas business.
- Access to new projects and gas sources in China thanks to CPP's support.
- Managed by pipeline and oil and gas experts.
- Proactively expanding CNG station network, which enjoy lucrative profitability.
- Establishing strong position in Shandong via acquisitions.
- LNG plants to expand its sources of gas, lower procurement costs and increase revenue.
- CCNG's other city natural gas projects will be operated under the successful Xining model.
- Higher tariffs and sales volume to boost Liling Project's profitability.
- Low gas procurement cost and higher gas price make CNG stations in Nanjing lucrative.
- Just increased stake in CCNG to 51.0% from 50.0% for RMB20.0m, implying that CCNG is worth at least RMB2.0b.

Company background. Formerly known as Nippon Asia Investments, China Oil and Gas Group is engaged in natural gas distribution and other gas and energy-related businesses in China. Through its 51.0%-owned joint venture with China Petroleum Pipeline Bureau (CPP, 中國石油天然氣管道局), China City Natural Gas Co (CCNG, 中油中泰), it distributes gas in various cities in China. It also operates its own CNG station networks.

Chart 1: Corporate chart



Source: Company

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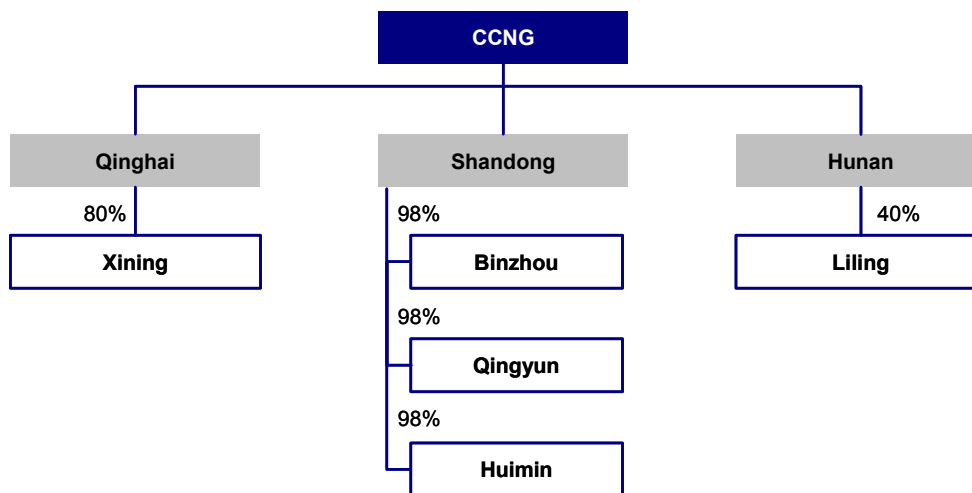
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Partnership with leader. Incorporated in 1973, CPP is a wholly-owned subsidiary of China National Petroleum Corporation (CNPC, 中國石油天然氣總公司), engaged in the design, construction and provision of facilities for long distance oil and gas transmission (and their peripheral facilities), oil and gas storage, power transmission and telecommunication. It also provides consulting services on pipeline network design and construction. CCP built almost all of China's major oil and gas transmission pipeline networks, including the world-renowned West to East project, Zhongxian-Wuhan, Ji-Ning Branch of West-East Gas Pipeline, Parallel Shaan-Jing Pipeline and Alashankou-Dushanzi Crude Oil Pipeline. As of the end of 2003, it completed about 30,000.0km of pipelines, accounting for 85.0% of China's total. CPP is expanding to overseas market with projects in Iraq, Kuwait, Tunisia, Sudan, Libyan and Malaysia. It has completed 5,000km of pipeline overseas and participated in the construction of Pakistan's White Oil Pipeline Project, the Sino-Kazakh Oil Pipeline and The Zhanazhol-KC13 gas pipeline.

Chart 2: CCNG corporate chart



Source: Company

Background of CCNG. CPP is possibly the strongest natural gas distributor in China thanks to its pipeline development and construction experiences and the fact that its parent, CNPC (also the parent of PetroChina, which controlled about 78.4% of China's natural gas production volume in 2006) controls gas sources. Nevertheless, CNPC and PetroChina have chosen to leave the downstream market alone and to deal with gas distributors as their bulk purchasing give them the benefits of economies of scale. With the help from Mr. Jiang Jiemin (蔣潔敏), the president of CNPC now and was the former president of CNPC, Vice Governor and Deputy Secretary of the Communist Party of Qinghai Province, CPP was allowed to expand downstream on the condition that it will operate outside the CNPC system. Without its parent's financial support, CPP needed a JV partner, ideally a listco to serve as a fund raising platform. In 2002, it teamed up with Hikari Tsushin (the predecessor of China Oil and Gas) and formed CCNG. To overcome management philosophy differences between the two parties, Xu Tieliang, chairman of China Oil and Gas, acquired the controlling stake in the group.

Tie up with CPP & CNPC. Chairman Xu (許鐵良先生) and CEO Qu Guohua (曲國華先生) came from CNPC. CCNG's chairman Su Shifang (蘇士峰), is also the chairman of CPP. China Oil and Gas has just increased its stake in CCNG to 51.0% from 50.0% at the consideration of RMB20.0m, which will allow it to fully consolidate CCNG's numbers into its accounts. The consideration implies that CCNG is worth at least RMB2.0b.

Strong support from partner. CCNG can capitalize on CPP's advanced pipeline construction technology in the development of its projects, while CPP's support allows CCNG and China Oil and Gas to identify and secure green field projects with great potential. The group can also use CPP's expertise in pipeline network management and with CNPC's backing secure gas sources, which are getting scarce in the country.

CCNG's projects. CCNG operates natural gas projects in five cities in China - Xining (Qinghai Province), Liling (Hunan Province), and Qingyun, Binzhou and Huimin (Shandong Province). The Xiling project is its flagship and major revenue contributor.

Chart 3: CCNG city natural gas projects



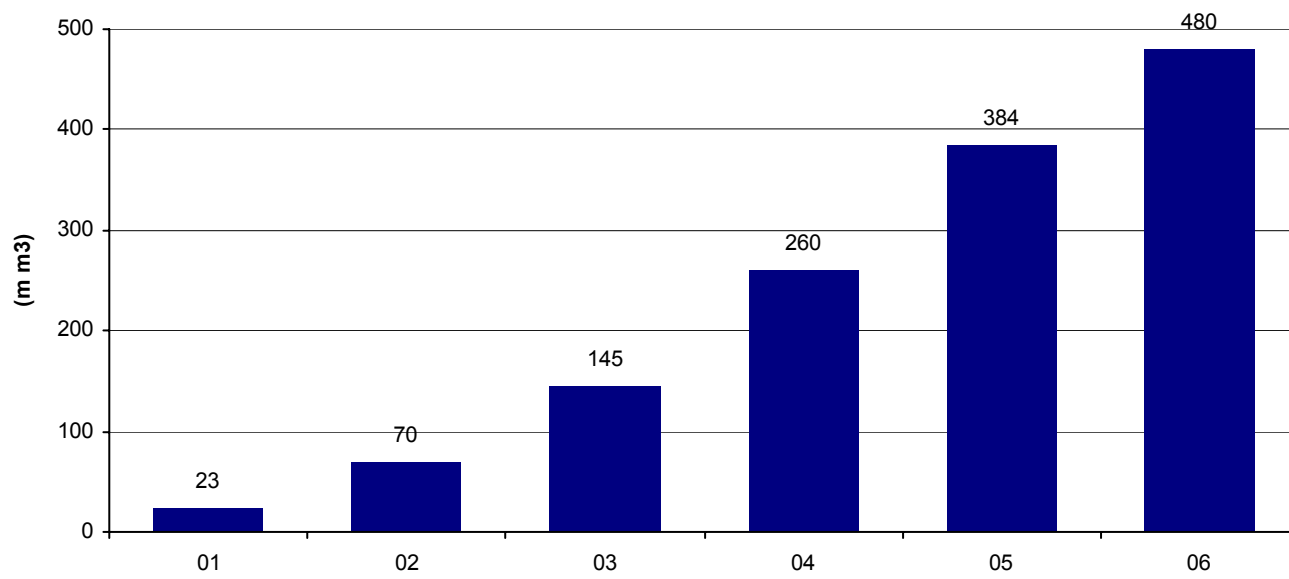
Source: Company

Xining project. CCNG 's 80.0%-owned Xining project started operation in May 2001. The company is a sole natural gas distributor in the city. It is also engaged in the construction and maintenance of the pipeline network, processing and pressure regulating stations, provision of compressed natural gas to vehicles in Xining through its CNG stations; and manufacturing of regulating equipment. At end-2006, Xining's population totaled 2.1m and the city covered 7,665.0 m². In 2006, Xining's GDP grew 14.5% YoY to RMB28.2b.

Strong execution. The project is CPP's first city distribution venture. Started from scratch and built in less than a year, it cost about RMB100.0m, with about RMB70.0m from the National Western Development Project Fund and the balance from the local government. Started in July 2000, with main infrastructure completed in May 2001, the actual capital expenditure was below the budgeted RMB30.0m. The average certified quality of the project reached 95.0%, while the welding of its pipeline reached 90.4%. Its safety quality reached 100.0%. In May 2002, the project was awarded the ISO9001 certificate on its superior quality and management.

Well-developed pipeline network. The 530.0km long pipeline network supplies natural gas to 40,000 households, 31 industrial users and 106 restaurants in the city. The project company has also modified boilers and blast furnaces in the city from coal-fired to gas-fuelled. The natural gas coverage ratio in Xining reached 97.0% by end-2006. The city's natural gas consumption surged at a five-year CAGR of 83.6%, from 23.0m m³ in 2001 to 480.0m m³ in 2006. The switch to natural gas has substantially lowered air pollution, with sulfur dioxide (SO₂) emissions down 12.0%, ash emissions down 23.4% YoY in 2004, and air quality rate up at 76.5% in 2004 from 42.0% in 2001, according to the city's environmental monitoring station. Zhengzhou Gas (8099HK, HK\$1.12, NR) is a close comparable to the Xining project. It operates a 75.0 km long pipeline network and seven CNG stations, serving a population of 7.0m in Zhengzhou City. The natural gas coverage ratio in Zhengzhou was less than 10.0% at end-2006.

Chart 4: Gas consumption in Xining



Source: Company

CNG stations. The company has modified more than 5,000 automobiles into hybrid vehicles (powered by gasoline and compressed natural gas), including 2,600 taxis (about 50.0% of the city's total) and more than 3,000 buses (almost entire bus fleet). Currently, the company operates eight CNG stations in the city, with most of them capable of supplying 10,000-20,000 m³ a day.

Stable gas source. The Xining project is fed by the Sebei natural gas field (涩北氣田) situated in the eastern part of Qinghai's Qaisam Basin. Xining City is also under the coverage of Qaidam-Lanzhou gas transmission pipeline (澀寧蘭管線), one of the major truck lines in western China. With the gas field operator, Qinghai Oilfield Co, pledging to supply gas for 40 years, the city has secured a very stable gas source.

Pilot project in China. The Xining project is one of China's few highly-integrated city natural gas distribution projects that combine pipeline networks and CNG stations. It comprises five systems (pipeline management, natural gas dispatch, pipeline repair and maintenance, emergency center and customer service center) to ensure smooth operation and serves as a model and training ground for many natural gas distributors and related enterprises. In recognition of its success in increasing the natural gas penetration rate in Xining and profitability, it was awarded the title of "Excellent Enterprise" by the China Enterprise Confederation. We expect all CCNGC's projects to eventually replicate the Xining model.

Boost to Liling. The JV's 40.0%-owned Liling project is expected to drive growth of the company's pipeline distribution business. Situated in Hunan province, Liling is China's major ceramic manufacturing base. The project's major clients are big industrial users. To encourage them to switch to natural gas as fuel, the company has been offering special discounts. Currently, the project is supplying less than 70.0m³ per annum of gas to the city but when the special offers expire by end-2007, the amount will increase over time. With its stable gas source, Zhong County -Wuhan pipeline (忠武輸汽管道), the project can supply 180.0m³ per annum. Gross profit per m³ of natural gas sold is expected to increase upon the end of the special offers. CCNG plans to increase its stake in the project to 60.0% from 40.0% which should enhance its profitability by increasing the group's share of Liling's profit.

Building presence in Shandong. With a population of 93.1m and annual GDP growth of 14.7% in 2006, Shandong is one of China's most affluent provinces. It is also a major industrial base in Northern China, with industrial production up 23.6% YoY in 2006. CCNG plans to expand in Shandong by acquiring three more projects especially for industrial users. The Cangzhou-Zibo (蒼州淄博管線) pipeline is Shandong's major gas source. Since CCNG has only three projects in Shandong (Qingyun, Binzhou and Huimin), it cannot secure a large quantity of gas from the pipeline. Should the group's capacity in the province expand, it will be able to secure more gas for its city pipeline and planned liquefied natural gas (LNG) plant.

Refill stations to drive growth. China Oil and Gas has been developing its own compressed natural gas (CNG) station networks in Shandong, Jiangsu and Anhui. The group holds majority stakes in its CNG station projects. It operates three CNG stations in Shandong (one in Qingyun and two in Binzhou). The Qingyun station supplies 50,000.0m³ per day. Situated right next to the 165 National Highway and close to Dezhou (德州), one of China's major manufacturing bases, it serves mainly high-volume industrial customers and demand is rising fast. Since the

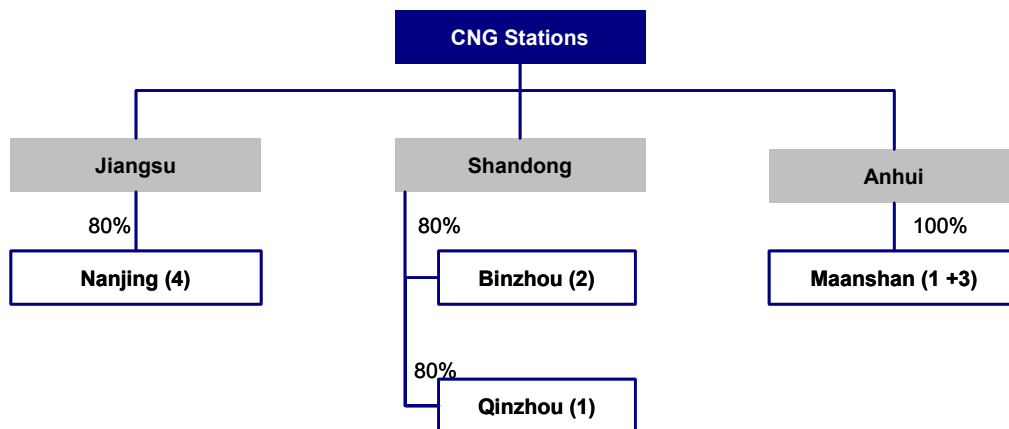
group's JV operates a city pipeline in Qingyun, the station has a stable source of gas from the Cangzhou-Zibo pipeline. CNG stations in Binzhou also source gas from the Cangzhou-Zibo pipeline. Gross profit per m³ of CNG sold in Shandong is estimated at RMB0.8.

Chart 5: CNG stations location



Source: Company

Chart 6: CNG station structure



Source: Company

Profitable in Nanjing. The company has set up a 60%-owned processing station in Maanshan, Anhui. Three more LNG stations are planned in Maanshan by end-2008. The gross profit margin per m³ of CNG sold in Maanshan is estimated at RMB1.68, much higher than that in Shandong. The Maanshan processing station has a stable source of gas from the West to East pipeline. Since Maanshan is just 30 minutes away from Nanjing, one of the most

affluent cities in the Yangtze River Delta, the processing station will serve the company's four CNG stations planned in Nanjing by end-2008. The gross profit margin per m³ of CNG sold in Nanjing is estimated at RMB1.90. It is expected that by the end of 2009, the group's CNG stations will source gas from the pipeline and its LNG plants. The group plans to acquire operation rights to three or four more CNG stations by end-2009.

Upstream expansion. To secure natural gas sources, increase revenue and lower gas procurement costs, the group will set up three LNG production plants in Xining, Qinghai Province, Shanxi Province and Heilongjiang Province with an annual production capacity of 200.0mm³ each by the end of 2010. It is estimated that LNG will be priced between RMB4.0 and RMB5.0 per m³, and 1.0 m³ of natural gas can be condensed by 60.0x. Since LNG is easy to store and transport, the group can serve industrial users who are situated in areas not served by pipeline networks or sell LNG to other downstream distributors. The Xining LNG plant will be equipped with advanced production facilities utilizing the pressure of the Qaidam-Lanzhou gas transmission pipeline to condense natural gas into LNG, rather than coal-fired electricity, which should keep its production costs low.

Strong management background.

- **Chairman Xu Tieliang (許鐵良先生)**, aged 43, graduated from the Xi'an Shiyu University majoring in accounting and finance and is a registered certified public accountant and lawyer in China, who worked as an accountant in subsidiaries of CNPC. He also worked at Shengli Oilfield. He was an independent director of Hua Xia Bank, listed on the Shanghai Stock Exchange, Shandong ShengLi, listed in Shenzhen Stock Exchange, and Leadership Publishing Group Limited (now known as SMI Publishing Group Ltd), listed on the GEM board of the HKEX. He was also director at various companies specializing in oil and energy investments and legal and management consultancy services. Mr. Xu worked in various legal departments of China's government, as vice chairman and general manager of China Legal Service (Hong Kong) Limited and vice chairman of China Law Magazine Limited. He has extensive experience in investments, mergers and acquisitions, legal, accounting, financial and corporate governance aspects.

- **CEO Qu Guohua (曲國華先生)**, aged 55, graduated from South West Petroleum University in 1987 and Air Force Logistic Institute in July 2000. He is a senior engineer, working for China Petroleum Pipeline Bureau as a pipeline expert. Mr. Qu is also a representative of the 13th Session of the National People's Congress of Xiling, a member of Qinghai Provincial Committee of the Chinese People's Political Consultative Conference. He was managing director of China City Natural Gas Co. (CCNG), a 51% controlled entity of the China Oil and Gas. He has worked in CNPC subsidiaries since 1968, holding post of chief operating officer and deputy operating manager. He is responsible for organizing and supervising ground surface construction of CNPC's oilfields and construction of long distance pipelines. He participated in major pipeline construction projects in China, including Shanghai's natural gas distribution and supply, Suzhou Industrial Park's water and gas pipeline construction and a large oil storage tank in Zhoushan. He has extensive experience in the petroleum and gas industries and expertise in oil and gas pipeline construction.

Corporate deals. 1. February 2006 - current major shareholder Sino Advance acquired 321.0m shares from Kingston Finance for HK\$38.0m, representing 17.8% of the total issued share capital of the group during that time.

2. September 2006 - the group raised HK\$64.2m through a placement of 540.0m new shares at HK\$0.12 each.

3. November 2006 - the group acquired Accelstar for HK\$58.5m (HK\$48.0m in cash and an issue of 175.0m shares at HK\$0.06 each). Accelstar invests in and operates CNG gas stations in Qingyun and Binzhou, Shandong.

4. January 2007 - the group raised HK\$105.6m through a placement of 360.0m new shares at HK\$0.29 each.

5. February 2007 - the group acquired 80.0% in Plentigreat for HK\$133.0m (HK\$67.0 m in cash and an issue of a two-year term convertible bond worth of HK\$66.0m, convertible into 275.0m shares at HK\$0.24 each). Plentigreat invests in and operates CNG gas stations in Nanjing, Jiangsu.

6. March 2007 - the group acquired Vast China for HK\$196.4m (HK\$10.4m in cash and an issue of a two-year term convertible bond worth of HK\$90.0m to the vendor, convertible into 375.0m shares at HK\$0.24 each; and an issue of 400.0m of new shares to the vendor at HK\$0.24 each). Vast China invests in and operates CNG gas stations in Maanshan, Anhui.

Notes: SBI E2-Capital Securities Ltd. acted as the Placing Agent for China Oil And Gas Group in January 2007.

P & L (HK\$m)	04A	05A	06A	Cash Flow (HK\$m)	04A	05A	06A
Year to Dec				Year to Dec			
Turnover	153.1	200.9	369.9	EBIT	(33.6)	(67.9)	88.5
% chg	-	-	84.1	Depre./amort.	10.0	8.1	10.5
Gross profit	16.4	61.7	79.6	Net int. paid	(3.1)	(2.0)	(7.7)
EBITDA	(23.6)	(59.9)	99.0	Tax paid	0.3	(1.3)	0.7
Depre./amort.	(10.0)	(8.1)	(10.5)	Dividends received	-	-	(3.9)
EBIT	(33.6)	(67.9)	88.5	Gross cashflow	(26.4)	(63.2)	88.0
Net int. income/(exp.)	(3.1)	(2.6)	(7.8)	Chgs. in working cap.	114.2	(124.5)	59.7
Exceptionals	(175.3)	(56.3)	(7.3)	Operating cashflow	87.8	(187.6)	147.7
Associates	-	-	-	Capex	(51.8)	(16.5)	(21.1)
Jointly-controlled entit.	(3.2)	(2.3)	2.0	Free cashflow	36.0	(204.1)	126.6
Pre-tax profit	(215.2)	(129.1)	75.5	Dividends paid	-	-	-
Tax	(0.5)	(3.4)	(7.3)	Net distribution to MI	-	-	-
Minority interests	(0.2)	(7.3)	(10.8)	Investments	(190.1)	(0.1)	-
Net profit	(215.9)	(139.8)	57.3	Disposals	11.4	12.1	32.3
% chg	-	-	-	New shares	19.5	25.0	64.8
Dividends	-	-	-	Others	(24.8)	186.7	(64.2)
Retained earnings	(215.9)	(139.8)	57.3	Net cashflow	(147.9)	19.6	159.5
EPS (HK\$) - Basic	(0.039)	(0.102)	0.060	Net (debt)/cash - Beg.	81.3	(66.6)	(47.0)
EPS (HK\$) - F.D.	(0.039)	(0.102)	0.060	Net (debt)/cash - End.	(66.6)	(47.0)	112.6
DPS (HK\$)	-	-	-				
No. sh.s o/s (m) - W.A.	8,526.6	1,502.3	1,881.5	Interim Results (HK\$m)	04A	05A	06A
No. sh.s o/s (m) - Y.E.	8,685.7	1,502.3	1,881.5	Six months to Jun			
No. sh.s o/s (m) - F.D.	8,526.6	1,734.7	2,519.7	Turnover	39.0	200.9	150.8
				% chg	(74.9)	415.7	(24.9)
Margins (%)				Profit from operations	(33.7)	(105.1)	54.0
Gross	10.7	30.7	21.5	Interest expenses	(1.5)	(3.1)	(1.5)
EBITDA	(15.4)	(29.8)	26.8	Associates	-	-	-
EBIT	(21.9)	(33.8)	23.9	Jointly-controlled entit.	-	(2.3)	(2.4)
Pre-tax	(140.6)	(64.3)	20.4	Pre-tax profit	(35.1)	(110.5)	53.3
Net	(141.0)	(69.6)	15.5	Tax	(0.1)	(3.5)	(1.7)
				Minority interests	-	(7.3)	(6.6)
				Net profit	(35.2)	(139.8)	44.91
				% chg	-	-	-
Balance Sheet (HK\$m)	04A	05A	06A	EPS (HK\$) - Basic	(0.003)	(0.093)	0.025
Year to Dec				DPS (HK\$)	-	-	-
Fixed assets	133.7	120.3	123.2				
Intangible assets	-	4.9	62.0	Shareholding Structure			
Other LT assets	123.5	6.3	1.1				
Cash	33.1	35.8	165.4				
Accounts receivable	36.7	116.3	96.6				
Other receivables	-	-	-				
Inventories	13.7	11.9	8.2				
Due from related co.s	-	-	-				
Other current assets	16.0	17.0	36.1				
Total assets	356.8	312.4	492.5				
Accounts payable	(59.9)	(42.5)	(95.9)				
Other payable	-	-	-				
Tax payable	(1.0)	(3.4)	(8.6)				
Due to related co.s	-	-	-				
ST debts	(24.7)	(9.1)	(14.1)				
Other current liab.	-	-	-				
LT debts	(75.0)	(73.7)	(38.7)				
Other LT liabilities	(0.4)	-	(2.6)				
Total liabilities	(161.0)	(128.7)	(160.0)				
Share capital	238.0	17.3	25.2				
Reserves	(46.4)	153.4	286.2				
Shareholders' funds	191.6	170.8	311.4				
Minority interest	4.2	13.0	21.2				
Total	195.8	183.7	332.6				
Capital employed	295.5	266.5	385.4				
Net (debt)/cash	(66.6)	(47.0)	112.6				
				Key Ratios	04A	05A	06A
				Net gearing (%)	(34.0)	(24.7)	Cash
				Net ROE (%)	(112.7)	(77.2)	23.8
				EBIT ROCE (%)	(11.4)	(24.2)	27.2
				Dividend payout (%)	-	-	-
				Effective tax rate (%)	(0.2)	(2.6)	9.7
				Net interest coverage (x)	na	na	11.4
				A/R turnover (days)	87.5	138.9	105.0
				A/P turnover (days)	142.8	93.0	68.3
				Stock turnover (days)	36.7	33.6	12.6

Notes: FY04: August 2003 to July 2004; FY05: August 2004 to July 2005; FY06: August 2005 to December 2006