Macquarie Research
Equities

INDIA

Gujarat NRE Coke

15 August 2007

GNC IN **Outperform**

Stock price as of 14 Aug 07	Rs	57.80
12-month target	Rs	113.00
Upside/downside	%	+95.5
Valuation	Rs	113.00
- DCF (WACC 13.4%)		
GICS sector		materials
Market cap	Rs m	15,295
Market cap	US$m	378
Number shares on issue	m	264.6
6 months avg daily turnover	US$m	2.9

Investment fundamentals

Year end 31 Mar		2007A	2008E	2009E	2010E
Total revenue	m	5,145	11,575	17,471	17,911
EBIT	m	245	3,360	4,958	5,620
EBIT Growth	%	-74.7	1,273.0	47.6	13.4
Adjusted profit	m	492	1,962	2,487	2,565
EPS adj	Rs	1.50	5.97	7.57	7.81
EPS adj growth	%	-59.8	299.2	26.7	3.1
PE adj	x	38.6	9.7	7.6	7.4
ROE	%	9.3	31.8	30.8	24.7
EV/EBITDA	x	46.9	6.3	4.3	3.8
Price/book	x	3.5	2.7	2.1	1.6

GNC IN rel SENSEX performance, & rec history

Source: Datastream, Macquarie Research, August 2007
(all figures in INR unless noted)

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Black gold will keep NAV in the black

Event

- We initiate coverage on Gujarat NRE Coke (GNC) with an Outperform rating and a target price of Rs113. Our global commodities team is bullish on coal and we think GNC is well placed to take advantage of this through its recent acquisitions of hard coking coal mining assets with resources of around 550mt in Australia. Our NPV analysis suggests that the stock trades at a 49% discount to its fair value, based on conservative estimates of coal production of 70mt over the next 18 years. GNC is India's largest independent low ash metallurgical coke (LAM coke) producer.

Impact

- **Strong earnings growth.** We forecast strong consolidated EPS growth, rising from Rs1.5 in FY3/07A to Rs6.0 in FY3/08E as a result of high coking coal prices and LAM coke volume expansion from 1mtpa to 1.25mtpa. The real kicker to earnings is the development of 4.5mtpa of hard coking coal production, taking EPS to Rs18 in FY3/11E.
- **Attractive valuations.** The company owns a majority stake in three hard coking coal mines in Australia through two listed subsidiaries. The market value of these holdings is US$310m against our NPV calculation of US$700m. The valuation could rise further after the merger of these subsidiaries as the risk profile declines due to the multi-mine and multi-location characteristics of the company's assets. The geological findings suggest a much higher potential than the 70mt mineable reserves used in our analysis and provide significant potential upside to the NPV.
- **No infrastructure constraint.** Australia controls 60% of the global coal trade but its exports face logistical constraints, suggesting that higher prices are sustainable into the medium term (refer to Macquarie's report on the Australian coal sector dated 18 June 2007). GNC will export from Port Kembla (currently 0.5mtpa rising to 4.5mtpa in FY3/11), which has sufficient spare capacity, allowing the company to cash in on the high coking coal prices.

Price catalyst

- 12-month price target: Rs113.00 based on a DCF methodology.
- Catalyst: Announcement of merger of two Australian subsidiaries.

Action and recommendation

- For investors looking to play the bull run in coal price, GNC offers about 96% upside according to our DCF-based sum-of-the-parts valuation, which compares favourably with its peers. We initiate coverage with an Outperform rating and a target price of Rs113.

Fig 1 How GNC stacks up against its peers

	Price	Rating	PER FY08 (x)	EV/EBITDA FY08 (x)
Gujarat NRE Coke (GNC IN)	Rs57.8	Outperform	9.7	6.3
Centennial Coal Co (CEY AU)	AUD3.2	Neutral	22.8	9.4
MacArthur Coal (MCC AU)	AUD6.6	Neutral	19.8	11.8
Resource (Pacific Holdings) RSP AU	AUD1.8	Outperform	10.7	5.9

Source: Macquarie Research, August 2007

Company profile

India's largest independent LAM Coke producer

Gujarat NRE Coke (GNC) is India's largest non-captive producer of low-ash metallurgical (LAM) coke with a total capacity of 1.0mtpa. It imports hard coking coal, mainly from Australia, which it converts into LAM coke through destructive distillation of coal. Two of its plants are located in Gujarat in west India, from where it supplies to forging companies, chemical industries and cement manufacturers. One of its plants is located in Karnataka – a joint venture with Kalyani Steels (KS IN, Not rated) – and supplies up to 40% of its produce to its JV partner. Around 70% of the coke is sold through long-term off-take agreements, but the price is revised every month.

De-risking business through backward integration

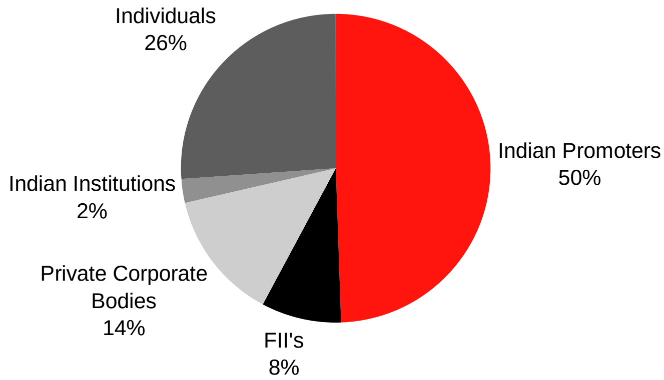
Over the past three years, the company has sought to de-risk its business through backward integration. It has bought hard coking coal mines in New South Wales in Australia, which have combined reserves of ~550mt. They will not only be a captive source for the company's in-house requirement but would also take the company to a new scale through significant addition to the top and bottom lines by sale of coal to other consumers. Major contribution to earnings from these mines will start from FY3/11, when production of 4.5mtpa will come onstream.

Hard coking coal reserves of ~550mt

GNC's mining assets in Australia are owned through two Australian subsidiaries: India NRE minerals Ltd (INML: INR AU, Not rated) and Gujarat NRE Resources NL Ltd (GNRL: GUJ AU, Not rated). These subsidiaries are listed on Australian stock exchange and have a combined market capitalisation of ~US$310m.

INML owns the NRE No.1 mine, with probable hard coking coal reserves of 300mt. This mine was started in 1887. GNRL controls the Elouera and Avondale mines (which is contiguous to NRE No.1), with probable reserves of 250mt. (For more detailed information on the mines, please refer to Appendices 3 and 4.)

Fig 2 GNC: Shareholding structure as at 30 June 2007



Note: FII = Foreign institutional investors
Source: Company data, Macquarie Research, August 2007

Strong earnings growth

Earnings poised to rise sharply

Fully diluted and consolidated EPS should increase from Rs1.5 in FY3/07A to Rs6.0 in FY3/08E because of higher LAM coke prices. During FY3/08–11E, EPS is likely to grow at a CAGR 44.5% owing to production at the mines increasing to 4.5mtpa and capacity expansion in LAM coke production rising from 1.00mtpa to 1.25mtpa.

Fig 3 GNC: Financials – on an upward path

Rs m	2007A	2008E	2009E	2010E	2011E
Consolidated sales	5,145	11,575	17,471	17,911	25,258
Net profit	492	1962	2487	2565	5921
Diluted EPS	1.5	6.0	7.6	7.8	18.0

Source: Company data, Macquarie Research, August 2007

We have used our global commodities team's forecasts of hard coking coal prices in our DCF valuation – they believe prices will remain strong.

Coking coal prices to remain high

Our global commodities team forecasts high coking coal prices for the next three years (refer to their report on the Australian coal sector dated 18 June 2007) on the back of the following:

- China becoming a net importer of coal.
- Cost of marginal Russian supply (accounting for 10% of the market) being uneconomical below US$45/t, so a return to the sub-US$35/t level is unlikely.
- Major Australian coal export routes will likely be constrained by infrastructure till 2010.

Fig 4 Hard coking coal prices to remain high

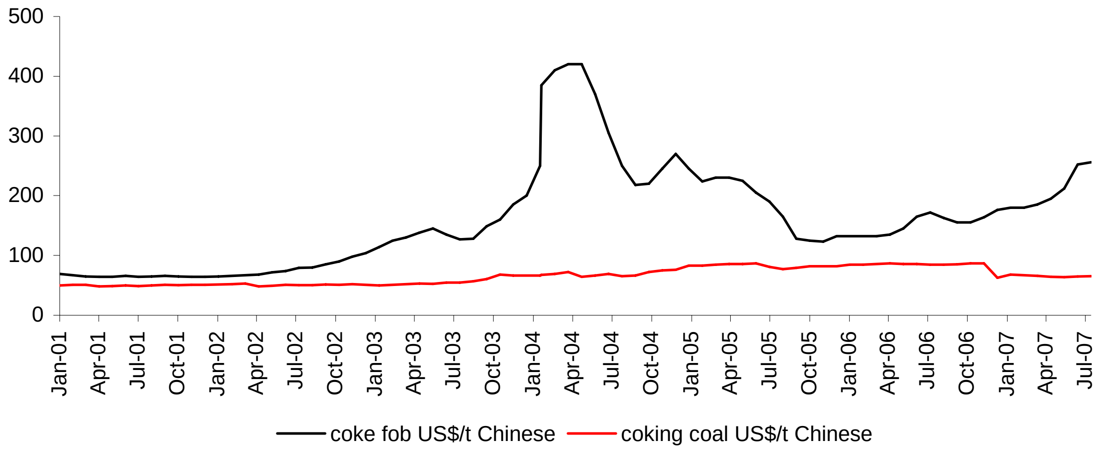
	US$/tonne
2004A	57.5
2005A	125.0
2006A	115.0
2007E	98.0
2008E	125.0
2009E	105.0
2010E	95.0
2011E	85.0
Sustainable	80.0

Source: Macquarie Research, August 2007

LAM coke realisations independent of hard coking coal prices

LAM coke has acquired its own demand-supply dynamics over the past few years, and there is very little correlation between the price of LAM coke and hard coking coal.

Fig 5 Correlation breaking down between coking coal and LAM coke



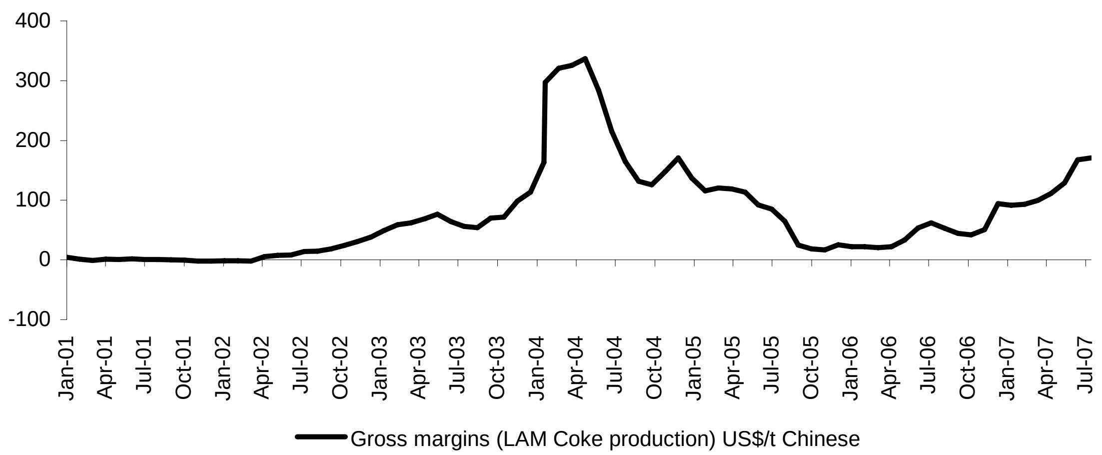
Source: Company data, Macquarie Research, August 2007

The breaking up of the relationship has made the long-term profitability estimation of Indian operations very difficult. Therefore, backward integration into the hard coking coal mining business was a business necessity for GNC. However, as it stands today, this new business is worth far more than the old coal-to-coke-conversion business.

Also, although the original LAM coke was throwing up large amounts of cash as a result of historically high margins, deployment of cash into further capacity addition was not considered an attractive investment opportunity because it was hard to predict profitability from it. Thus, GNC entered the comparatively more predictable and more profitable related business of hard coking coal mining.

Roughly 1.3 units of hard coking coal are required to produce 1 unit of LAM coke. LAM coke producers earn the spread between the prevailing price of hard coking coal and LAM coke. Historically, there has not been much of a correlation between the prices of these two commodities.

Fig 6 LAM coke production margins tend to be highly volatile



Source: Macquarie Research, August 2007

GNC's margins have not been similar to the above graph, due to freight cost differentials, differences between long-term contracts and spot contracts, and so on.

Attractive valuations

Past transactions point to higher value

Acquisition transactions and attempts over the past five years have taken place at an average US$/tonne saleable price of US$155. This multiple represents significant upside to the current price of GNC's mining assets.

Fig 7 Past transactions took place at an average of US$155/tonne of saleable steel

Acquirer-target	Interest acquired	Saleable production (mtpa)	Bid price (US$m)	US$/saleable tonne
Xstrata-Gloucester Coal	100%	2.0	320	160.0
AMCI-Felix	19%	0.7	150	208.3
CVRD-AMCI	100%	8.0	668	83.5
Xstrata-Glencore	100%	8.7	1700	196.2
Peabody-Excel	100%	5.9	1500	253.2
Centennial-Austral	100%	1.7	270	163.5
Centennial-Power Coal	100%	7.7	158	23.3
			Average	**155.4**

Note: US$/saleable tonne valuation metrics fail to take into account variances in coal quality/type and reserve life.
Source: Various sources, Macquarie Research, August 2007

GNC's Australian mines have resources of approximately 550mt. At 4.5mtpa of production and if we apply the US$/saleable tonne matrix, the mining assets would be worth US$675m, more than the current EV of the company. Further, we believe that merger of the two listed mine subsidiaries will boost valuation due to the current discount being given to these single-mine operations.

Fig 8 Abundant mine resources

mt	Measured	Indicated	Inferred
NRE No.1	1.5	139.4	186.9
Elouera	0.9	17.4	44.5
Avondale	2.0	104.7	93.2

Source: Company data, Macquarie Research, August 2007

We have assumed a conservative mining schedule with cumulative production of 70mt against the resources of 550mt. The mine life and the amount of coal mined are likely to be significantly higher than our assumptions of 18 years and 70mt, respectively.

Fig 9 Production schedule – peaking in 2012

	NRE No.1 (mtpa)	Cumulative production (mtpa)	Avondale and Elouera (mtpa)	Cumulative production (mtpa)	Yearly production (mtpa)
FY08E	0.5	0.5	-	-	0.5
FY09E	0.6	1.1	0.5	0.5	1.1
FY10E	1.0	2.1	0.7	1.2	1.7
FY11E	2.5	4.6	1.5	2.7	4.0
FY12E	3.0	7.6	1.5	4.2	4.5
FY13E	3.0	10.6	1.5	5.7	4.5
FY14E	3.0	13.6	1.5	7.2	4.5
FY15E	3.0	16.6	1.5	8.7	4.5
FY16E	3.0	19.6	1.5	10.2	4.5
FY17E	3.0	22.6	1.5	11.7	4.5
FY18E	3.0	25.6	1.5	13.2	4.5
FY19E	3.0	28.6	1.5	14.7	4.5
FY20E	3.0	31.6	1.5	16.2	4.5
FY21E	3.0	34.6	1.5	17.7	4.5
FY22E	3.0	37.6	1.5	19.2	4.5
FY23E	3.0	40.6	1.5	20.7	4.5
FY24E	3.0	43.6	1.5	22.2	4.5
FY25E	3.0	46.6	1.5	23.7	4.5

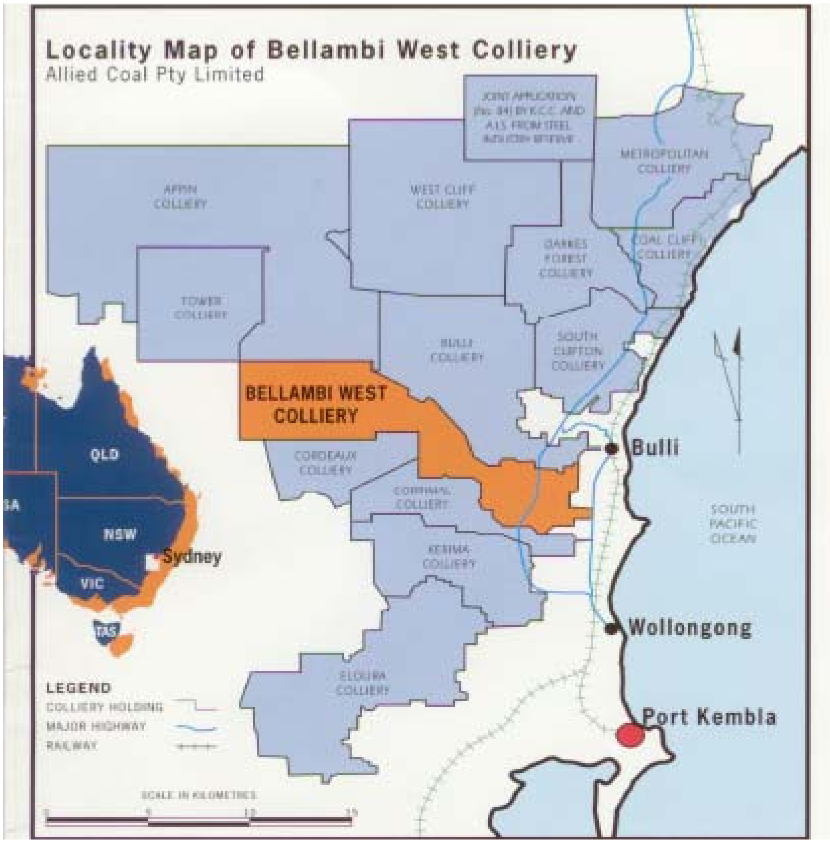
Source: Company data, Macquarie Research, August 2007

No infrastructure constraints

Gujarat NRE – advantageously located to reap the benefits of high prices

GNC's mines are located in New South Wales in Australia. The coal will be exported from the nearby Port Kembla. According to our global commodities team, Port Kembla, which is massively underutilised, has a throughput capacity of 16–18mtpa although it exported 10.7mt in 2006, approximately 60% of total capacity. Therefore, Port Kembla has more than 7mt of spare capacity. This should enable GNC to cash in on the high coking coal prices without worrying about logistical constraints. Further, close proximity to the port gives the company a freight-cost advantage.

Fig 10 NRE No.1 (previously Bellambi West Colliery) – located close to Port Kembla



Source: Company presentation, July 2007

The other ports of Australia are suffering from insufficient capacity, given the huge demand for commodity exports and inadequate investment over the past few years in infrastructure. All the major ports in Australia that export coal have planned for capacity expansion, but the logistical constraints are likely to remain as the demand that has been forecasted is very strong.

Fig 11 Key Australian ports used for the export of coal

State/port	Annual capacity – coal (mt)	Planned expansion (mt)	Dedicated to coal export?
Queensland			
Abbot Point	15	25, 50 (potential)	Yes
Brisbane	5	5	No
Gladstone	45	72, 90 (potential)	Yes
Hay Point	99	197.5, 55 (potential)	Yes
New South Wales			
Newcastle	102	25, 95 (potential)	Yes
Port Kembla	16	16	No
Australia	**282**	**349.5, 473 (potential)**	

Source: Macquarie Research, August 2007

Although the ports have planned for capacity expansion over the next 2–3 years, estimated additional demand is likely to soak up almost all the newly added capacity. Our global commodities team believes that the tightness in the coal market due to infrastructure bottlenecks is likely to continue even after 2–3 years.

Fig 12 Estimated additional tonnage through Australia's coal-exporting ports

mt	2007	2008	2009	2010	2011	2012
Newcastle additional tonnage	21	31	41	54	57	61
Port Kembla additional tonnage	4	5	5	5	5	5
Abbot point additional tonnage	1	1	1	1	1	1
Dalrymple additional tonnage	4	8	12	14	19	23
Hay point additional tonnage	8	10	12	16	22	22
Gladstone additional tonnage	13	16	22	30	32	32
Brisbane additional tonnage	0	0	0	1	5	10
Total additional tonnage	**51**	**71**	**93**	**121**	**141**	**154**

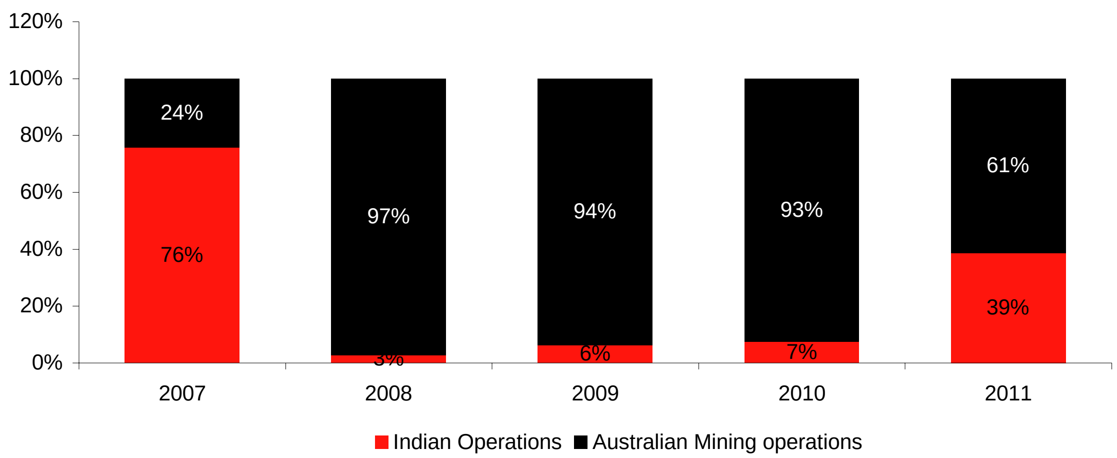
Source: Macquarie Research, August 2007

Financials – growing steadily

Changing business mix – from processing to mining

The company currently derives its revenue predominantly from production of LAM coke in India. But management has been aggressively changing the business mix by investing in high-yielding hard coking coal mining assets in Australia. This is clearly seen when we look at the breakdown of the capital expenditure for last year and the next four years.

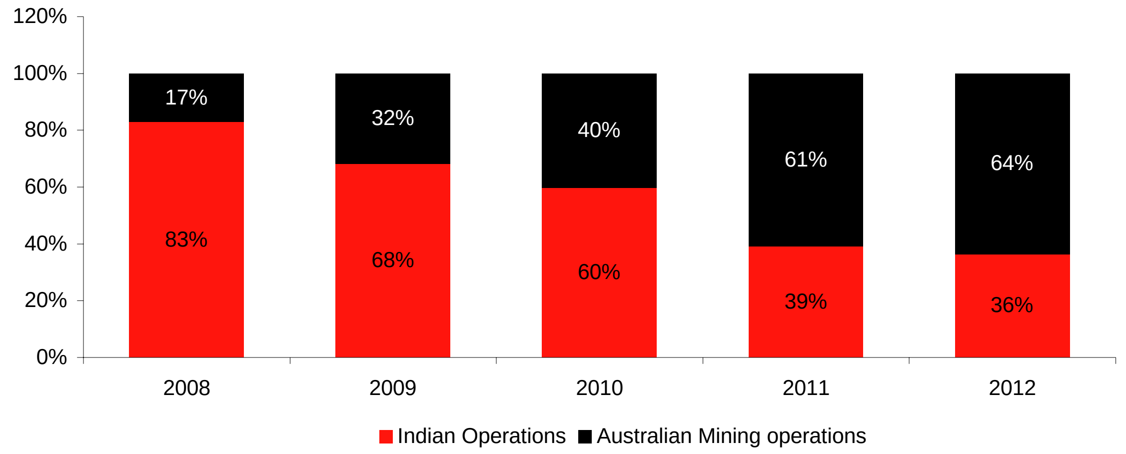
Fig 13 Future capex focused on mining rather than processing



Note: FY3/07 capex does not include investments made to purchase the Australian operations.
Source: Company data, Macquarie Research, August 2007

In FY3/07A, the company derived 83% of its consolidated income from the conversion of coking coal into LAM coke. We believe that going forward, the proportion of income from the Australian mining assets will rise to reach 64% of the consolidated top line in FY3/12E. This is because of the commencement of higher coking coal production in NRE No.1 and Avondale due to longwall mining.

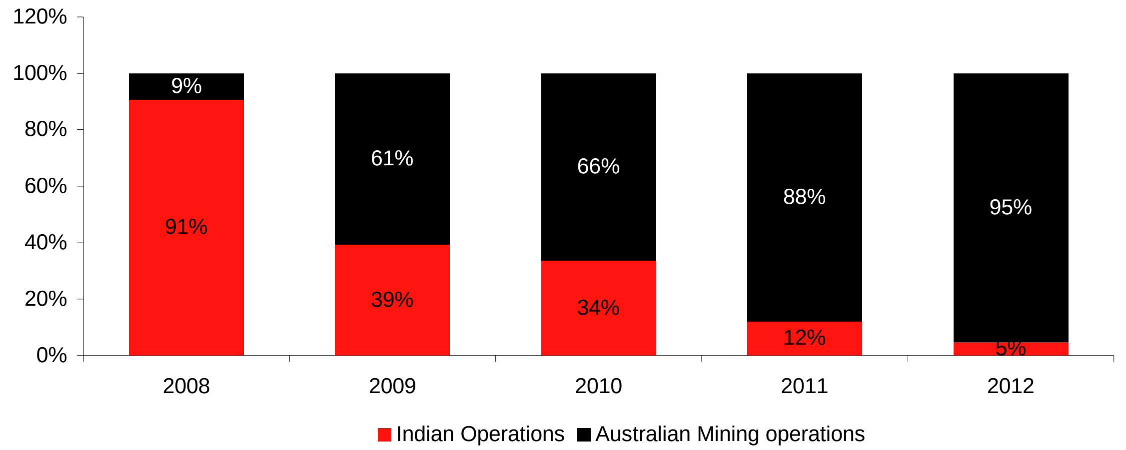
Fig 14 GNC: Mining to become a dominant contributor to top line



Source: Company data, Macquarie Research, August 2007

This change in business should also have a major impact on the composition of earnings. We forecast 88% and 95% of net profit to come from the mining operations in FY3/11E and FY3/12E respectively.

Fig 15 Company to derive the bulk of earnings from mining in future



Source: Company data, Macquarie Research, August 2007

Valuations – huge upside

Our sum-of-the-parts valuation based on DCF methodology recommends a fair price of Rs113/share. Major contributors to the total value are the hard coking coal mines in Australia.

Fig 16 Components of value

	NPV (Rs/share)	% of total value
Gujarat NRE Coke - standalone	28	24.7%
60% stake in Bharat NRE Coke	3	2.8%
93.5% stake in India NRE Minerals	56	49.8%
80.3% stake in Gujarat NRE Resources NL	22	19.9%
19.9% stake in Rey Resources	0*	0.1%
12% stake in Pluton Resources	1*	0.9%
10% stake in Pike River Coal	2*	1.7%
Total	**113**	

* Based on quoted market value
Source: Macquarie Research, August 2007

Methodology

There are three elements in our sum-of-the-parts valuation:

- Sale of hard coking coal from the mines is the major value generator for the company but a material amount of cash from these mines should start flowing from 2011. We did a DCF analysis of these mines based on the estimated production schedule and the hard coking coal prices forecasted by our global commodities team. We found these mines worth Rs78/share.
- We also carried out a DCF analysis of the Indian hard coking coal to LAM coke conversion operations. This yielded a value of Rs31/share.
- To the above two valuations, we added GNC's small investment stakes in some Australian-listed companies. The quoted market capitalisation of these companies was used for determining their value. The company derives Rs3/share of value from these small investments – Rey Resources (REY AU, Not rated), Pluton Resources (PLV AU, Note rated) and Pike River Coal (PRC NZ, Not rated).

Key assumptions

For the purposes of the DCF analysis, we have used a weighted average cost of capital (WACC) of 13.4% based on following assumptions:

Fig 17 Cost of capital assumptions

WACC calculation		Rationale behind assumptions
WACC	13.4%	
Risk-free rate	8.0%	10-year government bond yield
Beta (Raw)	1.02	3 year weekly returns regressed against the BSE Sensex
Risk Premium	7.0%	High country risk
Marginal tax rate	34.0%	
Cost of equity	15.3%	High cost of equity
Gross cost of debt	12.0%	
Net cost of debt (post tax)	7.9%	
Target debt/EV ratio	25.0%	Long-term debt equity ratio

Source: Macquarie Research, August 2007

For the Indian operations, we used the following price and volume assumptions:

Fig 18 Coal and coke price realisation

US$/tonne	2008	2009	2010	2011	2012
Hard coking coal realisation	98	125	105	95	85
LAM coke realisation	275	250	220	200	175

Source: Macquarie Research, August 2007

Fig 19 Coal and coke capacity and production

US$/tonne	2008	2009	2010	2011	2012
LAM coke capacity (mtpa)	1,006,000	1,006,000	1,256,000	1,256,000	1,256,000
LAM coke production (mtpa)	393,322	705,900	1,004,800	1,004,800	1,004,800

Note: The above figures also included the capacity of the JV with Kalyani Steels (Bharat NRE Coke).
Source: Macquarie Research, August 2007

For production and price assumptions related to Australian operations, refer to Figures 7 and 12.

Until now, the company has spent US$75m on the purchase of assets in Australia. It will invest a further US$225m to develop these mines.

The company has Rs5,079m of convertible debt. In all our calculations, we have used fully diluted number of shares to arrive at the resulting value.

Risks to recommendations

- **Slowdown in China's economy.** The major driving force behind the historically high commodity prices is the large demand from China. The Chinese economy continued expanding at double-digit growth (11.1%) in 1Q CY07. However, the performance of the economy is difficult to predict and its economic activities can put to risk both our hard coking coal and LAM coke price forecasts.
- **Delay in the development of mines.** Any delay in developing the mines can cost the company through non-realisation of the high prices forecasted in the next few years. In addition, the capital cost of developing the mines will go up as a result of delay, negatively impacting profitability.
- **Currency risk.** The mining cost will be incurred in Australian dollars, the sale contracts will be denominated in US dollars and the final earnings will accrue to the investor on conversion of profits to Indian rupee. Movement in the foreign exchange rates for these three currencies will impact our forecasts.

Appendix 1: Coking coal scenario

Hard coking coal derives its demand from the demand for LAM coke by the steel industry. Steel production through blast furnace requires 500kg of LAM coke per tonne of steel. Production of 500kg of LAM coke needs 700kg of hard coking coal as raw material.

The surge in steel production in recent years has led to rise in the demand for coking coal. The global sea-borne trade in hard coking coal is dominated by Australia. The country exports around 130mtpa of coal, or about 60% of the total global trade volume. Queensland and New South Wales are the major coal-producing regions in Australia.

We expect the demand-supply scenario for the coking coal industry will remain tight in the medium term for the following reasons:

- Supply disruptions and delays in Australia – huge problems in the Australian ports exporting thermal and coking coal and the rail infrastructure supplying these ports, which are exacerbated by bad weather.
- Delays in expansion to capacity in Canada (coking), South Africa (thermal) and Indonesia (thermal problems in recent months and a delay in coking coal expansions).
- A demand boom in India (coking and thermal) and China (thermal in particular), offsetting some weakness from Europe.

Coking coal prices have been high for the past few years. Macquarie expects the tightness to continue for a few more years as

- The rising cost structure of the industry, particularly at the high-cost end of the industry (Russian thermal and North American coking) should support prices and raise the floor price levels.
- Industry structure and discipline are improved – the consolidation in coking coal and thermal coal supply means that producers are now more ready to cut production to defend prices than they were in the past.
- Higher energy prices generally will support coal – higher oil prices are now likely to be maintained into the future, and coal will increasingly be priced as an oil “substitute”, especially if coal-to-liquid technologies take off.

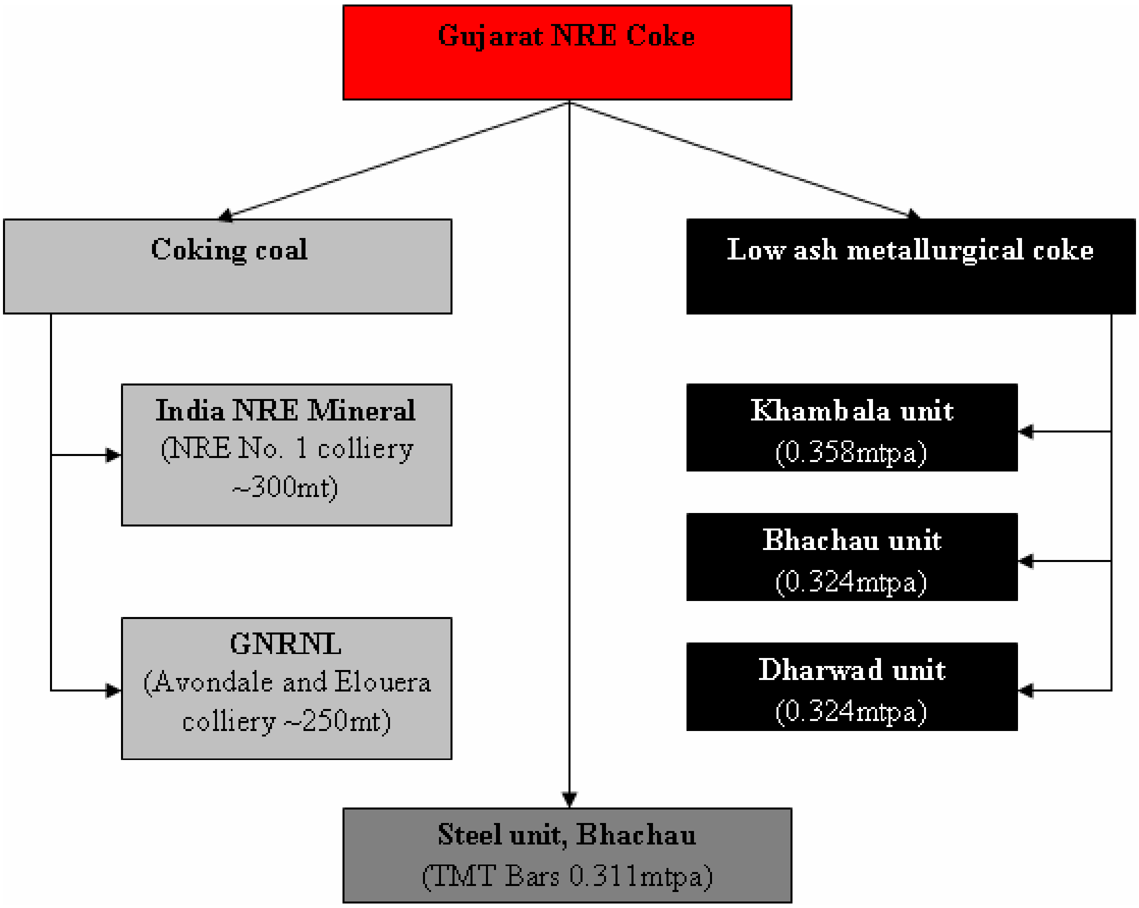
Fig 20 Macquarie coal forecasts

US$/t	2007	2008F	2009F	2010F	2011F	Long-term
Hard coking coal	98.0	125.0	105.0	95.0	85.0	80.0
Semi-soft coking coal	63.5	70.0	70.0	64.0	62.0	50.0
Thermal coal	55.5	63.0	63.0	57.5	55.0	45.0
Low-vol PCI	66.3	82.5	80.0	73.0	70.0	60.0

Source: Macquarie Research, August 2007

Appendix 2: Gujarat NRE Coke holdings

Fig 21 GNC: Asset holdings



Source: Company data, Macquarie Research, August 2007

Appendix 3: Details of the NRE No. 1 mine

Ownership: 93.5% owned by Gujarat NRE Coke.

Location: NRE No.1 (formerly known as South Bulli Colliery) is located in the Sydney-Bowen basin, which extends from the Illawarra region of New South Wales to Central Queensland. It is located 10km north of Wollongong, extending westward from Russell Vale over a distance of 19km. The Colliery holding covers an area of slightly over 63 sq km.

Leases: Consolidated coal lease 745 and mining purpose lease 271 spread over 6,421 hectares.

Seams: Bulli, Balgownie and Wongawilli seams from top to bottom in order of depth.

Fig 22 Seam depth and thickness

	Depth	Thickness
Bulli Seam	Variable as function of topography, average is 430.0m	2.0-2.7m
Balgownie Seam	7.0 to 13.0m below Bulli Seam	1.0-1.5m
Wongawilli Seam	30.0 to 46.0m below Bulli Seam	1.6-2.6m

Source: Company data, Macquarie Research, August 2007

Resources details

Fig 23 Resources details

mt	Measured	Indicated	Inferred
Bulli Seam	1.50	29.18	39.47
Balgownie Seam	-	32.40	46.30
Wongawilli Seam	-	73.50	101.11
Total	1.50	135.08	186.88

Source: Company data, Macquarie Research, August 2007

Coal quality –

Fig 24 Bulli seam – physical criteria

Seam dip	Maximum	3.5 degrees	
Seam ash content	Average	16.15%	Range: 11.1 – 22.7
Seam volatiles (daf)	Average	23.7%	Range: 21.9 – 24.9
Total vitrinite content (mmf)	Average	34.8%	Range: 26 – 41
Rank (Romax)	Average	1.22	Range: 1.17 – 1.30
Sulphur (%)	Average	0.36	Range: 0.27 – 0.54
Phosphorus	Average	0.024	Range: 0.006 – 0.05

Source: Company data, Macquarie Research, August 2007

Fig 25 Balgownie seam – physical criteria

Seam dip	as for Bulli seam
Seam ash content	12–25%
VM. (dmmf)	Usual range 22.5 - 26.5
Total vitrinite content (m mf)	45 – 60% in the east, 50 – 70% in the west
Rank (Romax)	1.21 – 1.28
Max. dilatation %	-10 to +60
Max fluidity (ddm)	400 to 5000 for a 10.6% ash product
Sulphur (%)	0.35 – 0.55

Source: Company data, Macquarie Research, August 2007

Fig 26 Wongawilli seam – physical criteria

		East	Cataract	West
Seam dip	Maximum	2.5 degrees	3.0 degrees	0.5 degree
Seam ash content	Average	30.5	25.5	29.0
	Range	24.0 – 36.5	21.5 – 26.5	25.0 – 35.0
Seam volatiles (daf)	Average	23.6	23.5	24.0
	Range	23.1 – 24.0	22.4 – 24.9	22.5 – 26.0
Total vitrinite content (m mf)	Average	77	81	84
	Range	68 – 86	75 – 84	78 – 88
Rank (Romax)	Range	1.28 – 1.36	1.39 – 1.42	1.30 – 1.48
Max. dilatation (%)	15 – 140			
Max. fluidity (ddm)	70 – 2100			
Sulphur (%)	0.45 – 0.57			
Phosphorus	0.002 – 0.011			

Source: Company data, Macquarie Research, August 2007

Drilling status: Currently producing coal using board and pillar methods and plans to start using longwall method by FY3/11.

Infrastructure: The coal is transported to Port Kembla by trucks. Port Kembla exports around 10–11mt of coal and coke every year and has a capacity to handle 16mtpa. The port authority is planning further expansion of the capacity by 16mt.

Appendix 4: Details of the Elouera and Avondale mines

Elouera coal mine

Ownership: 80.3% owned by Gujarat NRE Coke.

Location: The Elouera Colliery is located approximately 100km south of Sydney and represents the amalgamation of various older collieries (Wongawilli and Nebo).

Seams: Nebo and Wongawilli seams.

Drilling status: Currently producing coal using board and pillar methods and plans to start using longwall method by FY3/11.

Infrastructure: The coal is transported to Port Kembla by trucks. Port Kembla exports around 10-11mt of coal and coke every year and has a capacity to handle 16mtpa. The port authority is planning further expansion of the capacity by 16mt.

Avondale mine

Ownership: 80.3% owned by Gujarat NRE Coke.

Location: The Avondale Colliery is located approximately 100km south of Sydney and about 20km south-west of Wollongong.

Seams: Wongawilli and Tongarra seams from top to bottom in order of depth.

Resources details

Fig 27 Resources details

mt	Measured	Indicated	Inferred
Tongarra Seam	-	50.4	62.2
Wongawilli Seam	1.0	54.3	31.0
Total	**1.0**	**104.7**	**93.2**

Source: Company data, Macquarie Research, August 2007

Coal quality

Fig 28 Coal specifications

	Wongawilli seam coal	Tongarra seam coal
Ash % (a.d.)	33 to 34	18 to 26
Volatile matter % (a.d.)	Not shown	21.5 to 22.0
Specific energy (Mj/kg)	Not shown	26 to 29
Sulphur, total (%)	Not shown	0.45 – 0.5
Seam thickness (metres)	2.9	1.9 to 2.0
Depth of cover (metres)	200	230

Source: Company, Macquarie Research, August 2007

Drilling status: Drilling using longwall method to start by FY3/09.

Infrastructure: The coal will be transported through Port Kembla.

Gujarat NRE Coke (GNC IN, Outperform, Target price: Rs113.00)

Quarterly Results		1Q/08A	2Q/08E	3Q/08E	4Q/08E
Revenue	**m**	**2,894**	**2,894**	**2,894**	**2,894**
Gross Profit	**m**	**0**	**0**	**0**	**0**
Cost of Goods Sold	m	1,965	1,965	1,965	1,965
EBITDA	**m**	**929**	**929**	**929**	**929**
Depreciation	m	89	89	89	89
Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0
EBIT	**m**	**840**	**840**	**840**	**840**
Net Interest Income	m	-173	-173	-173	-173
Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	56	56	56	56
Pre-Tax Profit	**m**	**722**	**722**	**722**	**722**
Tax Expense	m	-159	-159	-159	-159
Net Profit	**m**	**563**	**563**	**563**	**563**
Minority Interests	m	-72	-72	-72	-72
Reported Earnings	**m**	**563**	**563**	**563**	**563**
Adjusted Earnings	**m**	**491**	**491**	**491**	**491**
EPS (rep)		1.71	1.71	1.71	1.71
EPS (adj)		1.49	1.49	1.49	1.49
EPS Growth YoY (adj)	%	299.2	299.2	299.2	299.2
EBITDA Margin	%	32.1	32.1	32.1	32.1
EBIT Margin	%	29.0	29.0	29.0	29.0
Earnings Split	%	25.0	25.0	25.0	25.0
Revenue Growth	%	125.0	125.0	125.0	125.0
EBIT Growth	%	1,273.0	1,273.0	1,273.0	1,273.0

Profit & Loss		2007A	2008E	2009E	2010E
Revenue	**m**	**5,145**	**11,575**	**17,471**	**17,911**
Gross Profit	**m**	**0**	**0**	**0**	**0**
Cost of Goods Sold	m	4,649	7,861	12,109	11,845
EBITDA	**m**	**497**	**3,715**	**5,362**	**6,066**
Depreciation	m	252	355	404	446
Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0
EBIT	**m**	**245**	**3,360**	**4,958**	**5,620**
Net Interest Income	m	-273	-694	-1,280	-1,779
Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	633	222	222	221
Pre-Tax Profit	**m**	**605**	**2,888**	**3,899**	**4,061**
Tax Expense	m	-129	-637	-1,022	-1,089
Net Profit	**m**	**476**	**2,252**	**2,876**	**2,972**
Minority Interests	m	16	-289	-390	-408
Reported Earnings	**m**	**476**	**2,252**	**2,876**	**2,972**
Adjusted Earnings	**m**	**492**	**1,962**	**2,487**	**2,565**
EPS (rep)		1.45	6.85	8.75	9.05
EPS (adj)		1.50	5.97	7.57	7.81
EPS Growth (adj)	%	-59.8	299.2	26.7	3.1
PE (rep)	x	39.9	8.4	6.6	6.4
PE (adj)	x	38.6	9.7	7.6	7.4
Total DPS		0.00	0.00	0.00	0.00
Total Div Yield	%	0.0	0.0	0.0	0.0
Weighted Average Shares	m	329	329	329	329
Period End Shares	m	329	329	329	329

Profit and Loss Ratios		2007A	2008E	2009E	2010E
Revenue Growth	%	-7.5	125.0	50.9	2.5
EBITDA Growth	%	-54.4	647.9	44.3	13.1
EBIT Growth	%	-74.7	1,273.0	47.6	13.4
Gross Profit Margin	%	0.0	0.0	0.0	0.0
EBITDA Margin	%	9.7	32.1	30.7	33.9
EBIT Margin	%	4.8	29.0	28.4	31.4
Net Profit Margin	%	9.3	19.5	16.5	16.6
Payout Ratio	%	0.0	0.0	0.0	0.0
EV/EBITDA	x	46.9	6.3	4.3	3.8
EV/EBIT	x	95.2	6.9	4.7	4.1
Balance Sheet Ratios					
ROE	%	9.3	31.8	30.8	24.7
ROA	%	1.5	15.3	16.6	15.6
ROIC	%	2.4	31.0	30.7	26.8
Net Debt/Equity	%	47.0	56.7	49.9	29.2
Interest Cover	x	0.9	4.8	3.9	3.2
Price/Book	x	3.5	2.7	2.1	1.6
Book Value per Share		16.4	21.2	28.0	35.2

Cashflow Analysis		2007A	2008E	2009E	2010E
EBITDA	**m**	**945**	**3,715**	**5,362**	**6,066**
Tax Paid	m	-129	-637	-1,022	-1,089
Chgs in Working Cap	m	-1,078	407	-1,366	177
Net Interest Paid	m	-273	-694	-1,280	-1,779
Other	m	-252	-355	-404	-446
Operating Cashflow	**m**	**-787**	**2,436**	**1,289**	**2,929**
Acquisitions	m	-623	0	0	0
Capex	m	-1,031	-4,546	-2,435	-2,021
Asset Sales	m	0	0	0	0
Other	m	185	222	222	221
Investing Cashflow	**m**	**-1,468**	**-4,324**	**-2,214**	**-1,800**
Dividend (Ordinary)	m	-454	-412	-234	-206
Equity Raised	m	1,446	0	0	0
Debt Movements	m	2,879	2,577	2,412	2,069
Other	m	-1,073	290	390	408
Financing Cashflow	**m**	**2,799**	**2,455**	**2,568**	**2,270**
Net Chg in Cash/Debt	**m**	**815**	**-789**	**1,611**	**3,382**

Balance Sheet		2007A	2008E	2009E	2010E
Cash	m	754	1,726	3,337	6,720
Receivables	m	1,529	2,689	3,474	3,216
Inventories	m	2,123	3,015	5,136	4,887
Investments	m	0	0	0	0
Fixed Assets	m	5,890	9,846	11,919	13,546
Intangibles	m	197	197	197	197
Other Assets	m	7,561	8,379	9,840	9,404
Total Assets	**m**	**18,054**	**25,852**	**33,903**	**37,969**
Payables	m	1,754	5,010	7,355	6,778
Short Term Debt	m	7	0	0	0
Long Term Debt	m	3,448	6,032	8,444	10,513
Provisions	m	1,362	1,382	2,037	1,848
Other Liabilities	m	5,733	5,838	5,835	5,831
Total Liabilities	**m**	**12,304**	**18,263**	**23,671**	**24,971**
Shareholders' Funds	m	5,405	6,955	9,207	11,566
Minority Interests	m	345	635	1,024	1,432
Other	m	0	0	0	0
Total S/H Equity	**m**	**5,750**	**7,589**	**10,232**	**12,998**
Total Liab & S/H Funds	**m**	**18,054**	**25,852**	**33,903**	**37,969**

All figures in INR unless noted.
Source: Macquarie Research, August 2007

Important disclosures:

Recommendation definitions

Macquarie Australia/New Zealand
Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts)
Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts)
Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)

Macquarie Asia
Outperform – expected return >+10%
Neutral – expected return from -10% to +10%
Underperform – expected return <-10%

Macquarie First South Securities (South Africa)
Outperform – expected return >+5%
Neutral – expected return from -5% to +5%
Underperform – expected return <-5%

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Recommendation proportions

	AU/NZ	Asia	RSA
Outperform	46.81%	61.36%	45.30%
Neutral	39.01%	18.67%	35.80%
Underperform	14.18%	19.97%	18.90%

For quarter ending 30 June 2007

Volatility index definition*

This is calculated from the volatility of historic price movements.

Very high–highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low–medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.
* Applicable to Australian/NZ stocks only

Financial definitions

All "Adjusted" data items have had the following adjustments made:
Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa*
ROA = adjusted ebit / average total assets
ROA Banks/Insurance = adjusted net profit /average total assets
ROE = adjusted net profit / average shareholders funds
Gross cashflow = adjusted net profit + depreciation
*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

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Ulrike Pollak-Tsutsumi (Frankfurt)	(49) 69 7593 8747
Daniel Fust (Geneva)	(41) 22 818 7710
Thomas Renz (Geneva)	(41) 22 818 7712
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Stuart Smythe (India)	(9122) 6653 3200
Chris Gray (Indonesia)	(6221) 515 7304
K.Y. Nam (Korea)	(822) 3705 8607
Derek Wilson (London) (N Asia)	(44) 20 7065 5856
Julien Roux (London)	(44) 20 7065 5887
Lena Yong (Malaysia)	(603) 2059 8888
Ismael Pili (Philippines)	(65) 6231 2840
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Regional Heads of Sales cont'd

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Mark Lawrence (New York)	(1 212) 231 2516
Sheila Schroeder (San Francisco)	(1 415) 835 1235
Giles Heyring (Singapore)	(65) 6231 2888
Mark Duncan (Taiwan)	(8862) 2734 7510
Angus Kent (Thailand)	(662) 694 7601
Dominic Henderson (Tokyo)	(813) 3512 7820
Nick Cant (Tokyo)	(813) 3512 7821
Charles Nelson (UK/Europe)	(44) 20 7065 2032
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Sales Trading

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Sales Trading cont'd

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Alternative Strategies

Convertibles - Roland Sharman	(852) 2823 4628
Depository Receipts - Robert Ansell	(852) 2823 4688
Derivatives - Vipul Shah	(852) 2823 3523
Futures - Tim Smith	(852) 2823 4637
Hedge Fund Sales - Darin Lester	(852) 2823 4736
Structured Products - Andrew Terlich	(852) 2249 3225