

Coal Quarterly – February 2007

Minerals & Energy: Gerard Burg

Gerard.Burg@nab.com.au

(613) 8641 3984

Summary – thermal prices firm on tight spot market, as China's demand continues to influence coal markets

- **Thermal coal markets firm...:** Strong demand from Asian consumers and supply constraints in key exporting nations have led to a rebound in spot prices for thermal coal in recent months.
- The diminishing export position of China has led to Korean and Japanese consumers – primarily in the cement industry – seeking alternative supplies.
- At the same time, heavy rain in Indonesia and a growing vessel queue at Newcastle has limited the capacity of coal producers to respond.
- **...and may influence contract negotiations:** The tight market conditions have emboldened Australian thermal coal producers – encouraging them to seek price upgrades for the 2007 Japanese financial year.
- With some of the tightness related to short term factors – particularly disruptions in Indonesia – we have revised our forecast price to US\$52.50 a tonne, a rollover of current contract prices (see page 3).
- Semi-soft coking coal prices are expected to settle in line with thermal – with a traditional premium for higher energy content – at around US\$56.40 a tonne, a decline of 2.8 per cent.
- Contract prices for hard coking coal have already been settled with Japanese steel mills – with premium grade coal settling at US\$98 a tonne, a decrease year on year of around 15 per cent.
- **Asia continues to drive coal demand...:** Asia remains the key growth region for coal imports – reflecting the strength of economic growth driving increasing demand for electricity and steel, as well as the lower levels of environmental regulation (see pages 3 and 4).
- Growth opportunities for both thermal and metallurgical coal revolve around China and India. While both countries are major coal producers, domestic demand continues to rise – straining the capacity of producers in both countries.
- **...while supply growth is likely from Australia and Indonesia:** Indonesian exports have surged in recent years, benefiting from constraints in other major exporting nations – such as Australia and South Africa – and the declining trade position of China.
- As constraints at the port of Newcastle are unwound, Australian coal exports are forecast to rise, albeit gradually. Thermal coal exports are forecast to increase by 6.4 per cent to 117 million tonnes.
- **China's role in global markets remains a major issue:** Since 2003 – the peak year for the country's coal exports – China's almost insatiable demand for energy has effectively removed 58 million tonnes of coal from global markets (see page 2).
- Our base case forecasts China's net exports to fall from 25 million tonnes in 2006 to around 10 million tonnes by 2008. Should China become a net importer, this would add upside risk to coal prices.

Summary of forecasts

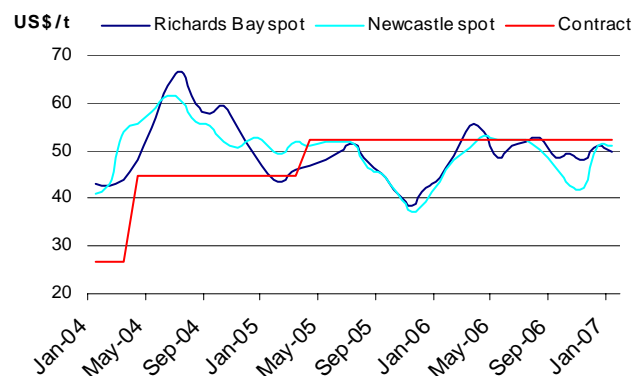
	2005	2006 e	2007 f	2008 f
Global trade – Mt				
- Thermal	571.2	609.5	632.2	651.9
- Metallurgical	218.7	224.9	231.0	237.7
Contract price – US\$/t				
- Thermal	52.50	52.50	52.50	48.00
- Semi-soft coking	85.00	58.00	56.40	51.60
- Hard coking	125.00	115.00	98.00	88.00

Source: ABARE, NAB Group Economics

Feature: Thermal market tightness may lead to protracted negotiations

Asian thermal coal prices rebounded sharply in late 2006 as a range of supply disruptions tightened markets, despite mild winter conditions that limited coal burn. Coal supply from China, Indonesia and Australia has been constrained – leading consumers to enter the spot market. Spot prices for thermal coal at Newcastle have risen sharply – from an average of US\$42.36 a tonne in November to US\$51.05 a tonne in January (globalCOAL).

Tight markets drive up thermal prices at the end of 2006



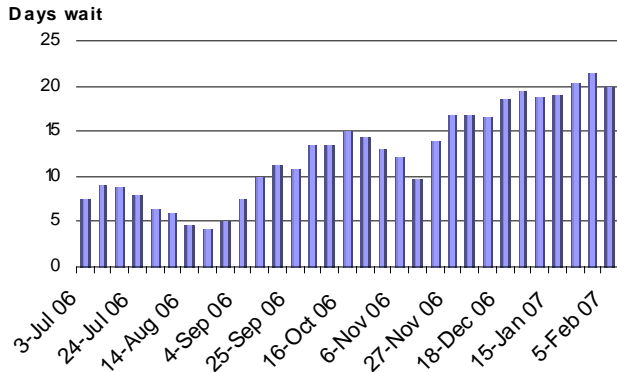
Source: globalCOAL, ABARE

Coal mine explosions in China's Shanxi province during December limited the country's export supply, with long term contract consumers in both Japan and South Korea – primarily in the cement industry – receiving reduced shipments. Consumers in China have also reportedly sought cargos from Australia to cover the shortfall in domestic supply (Platts).

Indonesian producers have also been hampered by heavy rain in December and January. The rains have limited production in the key regions of East and South Kalimantan and Sumatra, and restricted the capacity of producers to respond to increased demand.

Vessel queues at the port of Newcastle have also increased, particularly following the end of the controversial Capacity Balancing Scheme. In January, the vessel queue was around 50 ships, with waiting times exceeding 20 days by the end of the month.

Queues at Newcastle extend from late 2006



Source: Reuters

Expansions at the Newcastle port facility are scheduled for completion at the end of the first quarter – both the start of the new Japanese financial year and a period of seasonally lower demand.

The tight conditions have emboldened Australian coal producers, with preliminary contract negotiations targeting a price rise for the 2007 Japanese financial year. Reports suggest some major producers have offered volumes at US\$54-55 a tonne (Platts) – compared with US\$52.50 a tonne in both 2005 and 2006. Consumers are more than likely to seek a reduction.

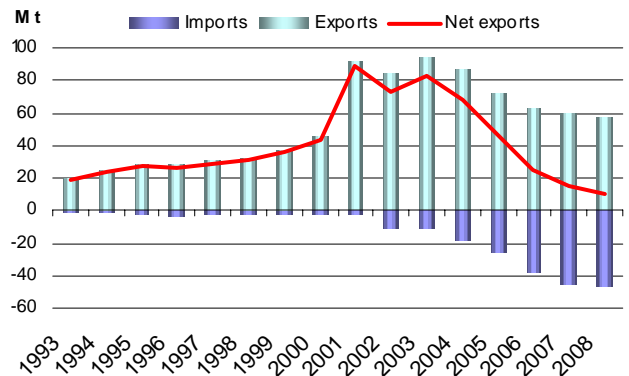
Given that the market balance may move in favour of consumers in coming months – as disruptions are resolved and demand diminishes from peak winter levels – negotiations between Australian producers and Japanese utilities may be protracted. We have revised our price forecast to a rollover for 2007 (see below).

Historically other Asian consumers – particularly major coal users such as South Korea and Taiwan – wait for the Japanese settlement before negotiating their own contracts. However, Korean settlements in 2006 – well before their Japanese equivalents – may signal a less structured approach to thermal coal contractual arrangements in coming years.

China's influence is not to be overlooked

China's domestic coal production continued to grow in 2006 – cementing its role as the world's leading coal producer – with raw coal output increasing by 8.1 per cent to 2.33 billion tonnes (excluding output from unregistered mines) (SACS). Yet despite another record production figure, China's trade position continues to evolve – as exports shrink and imports build.

China's net exports plunge as domestic demand takes precedence

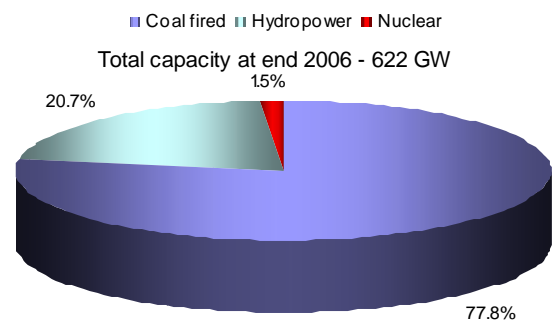


Source: CEIC, NAB Group Economics

In 2006, China's net exports continued their three year downward trend, plunging to just 25 million tonnes. Since 2003 – the peak year for the country's coal exports – China's almost insatiable demand for energy has effectively removed 58 million tonnes of coal from global markets.

Surging domestic demand – primarily from the electricity generation sector – has led to a domestic premium in coal prices and lower exports. China's government has also reduced the tax incentives for exports over domestic sales. Coal fired generation accounted for around 83 per cent of electricity generation in 2006 (Reuters).

Coal dominates electricity generation capacity



Source: Reuters

According to reports in January, China's National Development and Reform Commission intends to cap coal output to 2.6 billion tonnes in 2010 – a level which the agency forecasts will be equivalent to the country's demand (AFX). In order to accomplish this target, the NDRC intends to establish a series of large scale coal mining companies which are intended to produce around 50 per cent of this output, while closing around 8000 small coal mines. The State Administration of Coal Mine Safety intends to close 2209 mines in 2007 alone (Platts).

These moves may signal an intention to reduce China's involvement in global coal trade. Our base case forecasts China's net exports to fall from 25 million tonnes in 2006 to around 10 million tonnes by 2008. Should China become a net importer, this would add upside risk to coal prices.

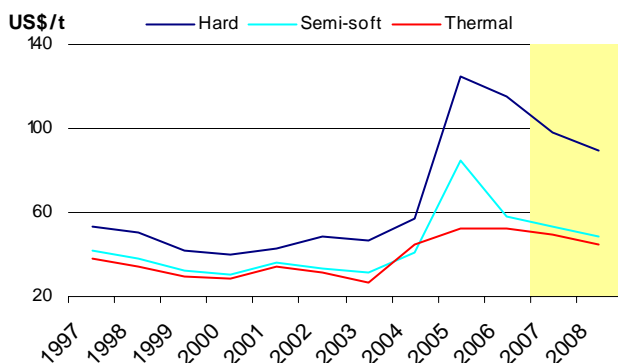
However, China's trade position is a fraction of production – exports totalled less than 1.1 per cent of output in 2006 – suggesting even a modest change in domestic consumption

could have a major impact on global coal markets. Developments in China will remain a major watch issue for the coal industry.

Coal contract prices – hard coking settles lower, but thermal settlements may be far away

Hard coking coal settlements were reached quickly in mid-December, with Nippon Steel securing premium hard coking coal brands for US\$98 a tonne FOB (Platts), broadly in line with our forecast of US\$100 a tonne. This price represents a decline in prices of around almost 15 per cent – reflecting weaker market conditions with more readily available product.

Coal prices trend lower, but remain historically high



Source: ABARE, NAB Group Economics

As discussed above, contract negotiations for thermal coal are likely to be protracted – with producers seeking a price increase, and consumers seeking a reduction. We believe there is a risk of the latter – if growth in capacity is sufficient to shift the market balance into surplus.

However, given current market tightness, we are revising up forecast contract prices to US\$52.50 a tonne FOB (previously US\$46) – a rollover of current contract prices for the second straight year.

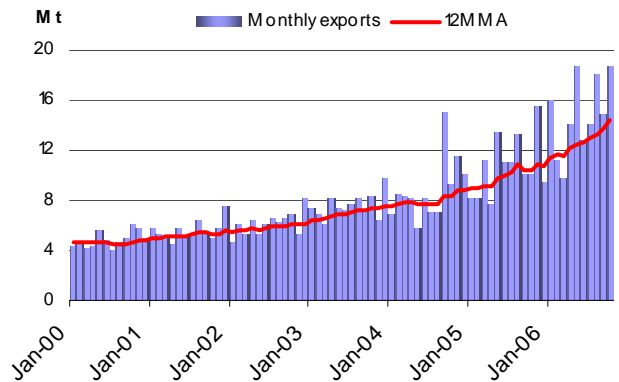
Prices for semi-soft coking coal are also likely to be delayed by thermal negotiations. Typically these prices are settled with a premium to thermal – reflecting the higher energy content of semi-soft coal. Coal producers are unlikely to seek an earlier settlement, given the outcome in 2004 when earlier settled semi-soft coal was sold at a discount to later settled thermal.

As a result, semi-soft coking coal prices are forecast to fall by around 2.8 per cent to US\$56.40 a tonne FOB.

The supply side – Australia and Indonesia offer growth, but China set to decline further

Indonesian exports have surged in recent years, benefiting from constraints in other major exporting nations – such as Australia and South Africa – and the declining trade position of China. In the first ten months of 2006, Indonesia's total coal exports increased by a staggering 43 per cent to 148 million tonnes, exceeding Australia's thermal coal exports (CEIC).

Indonesian exports continue to trend higher



Source: CEIC

Despite infrastructure constraints, rising diesel prices (following the abolition of subsidies) and relatively low quality, Indonesian coal exports are forecast to gain further in 2007, to reach 175 million tonnes.

In the medium term, growth in Indonesian exports is likely to be constrained by increased domestic demand. Indonesia's State Electricity Company plans to rapidly increase coal-fired generation capacity in response to power shortages and rising oil prices.

As constraints at the port of Newcastle are unwound, Australian coal exports are forecast to rise, albeit gradually. Thermal coal exports are forecast to increase by 6.4 per cent to 117 million tonnes.

On the metallurgical coal front, Australia is likely to be the key growth exporter in the short term. Exports appear to have slowed in 2006 – in response to increased domestic availability in China – but are forecast to increase by around 6.5 per cent to 131 million tonnes.

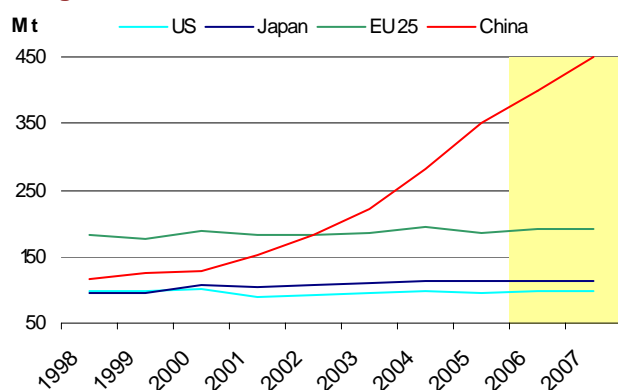
Coal exports from other major exporters are forecast to remain relatively unchanged – with the exception of declining volumes from China (see above).

Coal demand – Asia remains the key

Asia remains the key growth region for coal imports – reflecting the strength of economic growth driving increasing demand for electricity and steel, as well as the lower levels of environmental regulation.

Growth opportunities for both thermal and metallurgical coal revolve around China and India. While both countries are major coal producers, domestic demand continues to rise – straining the capacity of producers in both countries.

China's surging steel production still the main coking coal driver



Source: IISI, NAB Group Economics

Despite massive coal reserves, China's supply of hard coking coal is insufficient to meet the growing demands of the country's steel industry. Steel production is forecast to increase by around 12 per cent in 2006, requiring imported coking coal to support this growth. China's metallurgical coal imports are forecast to increase by 25 per cent in 2007 to 9.0 million tonnes.

Similarly growth in India's steel production will also be supported by imported coking coal. India has only modest reserves of metallurgical coal, which are primarily semi-soft quality. Indian coking coal imports are forecast to increase by 19 per cent to 24 million tonnes.

Imports of metallurgical coal in other major regions – such as Japan and the European Union – are forecast to remain relatively flat, reflecting the modest growth expectations for steel production in the short term.

Thermal coal trade forecast

	2005	2006 e	2007 f	2008 f
Total trade - Mt	571.2	609.5	632.2	651.9
Key importers				
- Japan	115.2	115.0	116.2	116.0
- South Korea	60.6	63.0	66.0	70.2
- Taiwan	55.2	57.8	60.0	62.0
- China	22.0	27.2	34.2	38.2
- India	18.2	31.0	36.0	37.0
- European Union	157.2	159.0	160.5	162.0
Key exporters				
- Australia	107.6	110.4	117.5	125.0
- China	63.1	58.2	55.2	52.4
- Indonesia	123.3	170.0	175.0	180.0
Contract price – US\$/t	52.50	52.50	52.50	48.00

Source: ABARE, NAB Group Economics

Metallurgical coal trade forecast

	2005	2006 e	2007 f	2008 f
Total trade - Mt	218.7	224.9	231.0	237.7
Key importers				
- Japan	65.6	67.1	67.4	67.0
- South Korea	18.3	18.6	18.0	18.2
- India	18.0	20.5	24.4	25.2
- China	7.2	7.2	9.0	10.0
- European Union	59.5	60.0	59.5	61.2
- Brazil	15.8	17.8	19.9	22.0
Key exporters				
- Australia	124.9	123.0	131.0	135.0
- Canada	27.8	31.1	34.0	35.3
- United States	26.0	25.8	20.0	18.0
Contract price – US\$/t				
- Semi-soft coking	85.00	58.00	56.40	51.60
- Hard coking	125.00	115.00	98.00	88.00

Source: ABARE, NAB Group Economics

Group Economics – Some Useful Contacts by Specialisation

Alan Oster Alan.Oster@nab.com.au	Group Chief Economist Economic, Financial & Business Conditions	(03) 8641 3464
Jeff Oughton Jeff.Oughton@nab.com.au	Head of Australia Economic, Financial & Business Conditions	(03) 8641 3469
Dean Pearson Dean.Pearson@nab.com.au	Senior Economist Telecommunications, Media, Recreation, Personal	(03) 8641 3474
Skye Dixon Skye.C.Dixon@nab.com.au	Economist Agribusiness	(03) 8641 3442
John Sharma John.Sharma@nab.com.au	Economist Property, Construction, Transport, Hospitality	(03) 8641 3473
Ian Gordon Ian.D.Gordon@nab.com.au	Economist Healthcare, Retailing, Business Services, Education	(03) 8641 3472
Gerard Burg Gerard.Burg@nab.com.au	Economist Minerals & Energy	(03) 8641 3984
Vacant	Economist Manufacturing, Wholesaling	(03) 8641 3762
James McKinlay James.McKinlay@nab.com.au	Economist (Australia) Economic & Financial Conditions	(03) 8641 3848
Tom Taylor Tom.Taylor@nab.com.au	Head of International Economic & Financial Conditions	(03) 8641 3475
Robert De lure Robert.De.lure@nab.com.au	Economist Country Risk & Asian Economies	(03) 8641 3445
Carolyn Fraser Carolyn.Fraser@nab.com.au	Economist (United Kingdom) Economic & Financial Conditions	(03) 8641 3694
Vacant	Economist (Europe) Economic & Financial Conditions	(03) 8641 4304

DISCLAIMER: “[While care has been taken in preparing this material,] National Australia Bank Limited (ABN 12 004 044 937) does not warrant or represent that the information, recommendations, opinions or conclusions contained in this document (“Information”) are accurate, reliable, complete or current. The Information has been prepared for dissemination to professional investors for information purposes only and any statements as to past performance do not represent future performance. The Information does not purport to contain all matters relevant to any particular investment or financial instrument and all statements as to future matters are not guaranteed to be accurate. In all cases, anyone proposing to rely on or use the Information should independently verify and check the accuracy, completeness, reliability and suitability of the Information and should obtain independent and specific advice from appropriate professionals or experts. To the extent permissible by law, the National shall not be liable for any errors, omissions, defects or misrepresentations in the Information or for any loss or damage suffered by persons who use or rely on such Information (including by reasons of negligence, negligent misstatement or otherwise). If any law prohibits the exclusion of such liability, the National limits its liability to the re-supply of the Information, provided that such limitation is permitted by law and is fair and reasonable. The National, its affiliates and employees may hold a position or act as a price maker in the financial instruments of any issuer discussed within this document or act as an underwriter, placement agent, adviser or lender to such issuer.”

UK Disclaimer: So far as the law and the FSA Rules allow, National Australia Bank Limited (“the Bank”) disclaims any warranty or representation as to the accuracy or reliability of the information and statements in this document. The Bank will not be liable (whether in negligence or otherwise) for any loss or damage suffered from relying on this document. This document does not purport to contain all relevant information. Recipients should not rely on its contents but should make their own assessment and seek professional advice relevant to their circumstances. The Bank may have proprietary positions in the products described in this document. This document is for information purposes only, is not intended as an offer or solicitation nor is it the intention of the Bank to create legal relations on the basis of the information contained in it. No part of this document may be reproduced without the prior permission of the Bank. This document is intended for Investment Professionals (as such term is defined in The Financial Services and Markets Act 2000 (Financial Promotion) Order 2001) and should not be passed to any other person who would be defined as a private customer by the rules of the Financial Services Authority (“FSA”) in the UK or to any person who may not have experience of such matters. Issued by National Australia Bank Limited A.C.N. 004 044 937, 88 Wood Street, London EC2V 7QQ. Registered in England BR1924. Head Office: 500 Bourke Street, Melbourne, Victoria. Incorporated with limited liability in the state of Victoria, Australia. Regulated by the FSA in the UK.

U.S. DISCLAIMER: This information has been prepared by National Australia Bank or one of its affiliates or subsidiaries (collectively, “NAB”). If it is distributed in the United States, such distribution is by National Australia Capital Markets, LLC (NACM) which accepts responsibility for its contents. Any U.S. person receiving this information wishes further information or desires to effect transactions in the securities described herein should call or write to NACM, 200 Park Avenue, New York, NY 10166 (or call (877) 377-5480). The information contained herein has been obtained from, and any opinions herein are based upon sources believed to be reliable and no guarantees, representations or warranties are made as to its accuracy, completeness or suitability for any purpose. Any opinions or estimates expressed in this information is our current opinion as of the date of this report and is subject to change without notice. The principals of NACM or NAB and/or its affiliates may have a long or short position or may transact in the securities referred to herein or hold or transact derivative instruments, including options, warrants or rights with securities, or may act as a market maker in the securities discussed herein and may sell such securities to or buy from customers on a principal basis. This material is not intended as an offer or solicitation for the purchase or sale of the securities described herein or for any other action. It is intended for the information of clients only and is not for publication in the press or elsewhere.