AUSTRALIA'S ROLE IN THE FUTURE SEABORNE METALLURGICAL COAL INDUSTRY

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Summary

The fundamental changes which have occurred in the Seaborne Metallurgical coal trade have to a large extent been driven by Australian low cost, high quality hard coking coal production. The new production already announced and likely to be approved will sustain these changes.

The next 18 to 24 months will see critical tightness of supply continue, with resultant higher pricing and shortages of coal.

In the medium to long term new Australian production along with current exports from other countries such as Canada will meet demand and bring the market back into balance. Very low pricing similar to that seen in 1999/2000 though, is unlikely to reoccur without supply again being threatened.

Australian and Canadian production of hard coking coal is predominantly mid and low volatile, with higher phosphorous levels and lower fluidity than USA East coast high and mid vol coals which are reducing in supply. This will require buyers to change coke-making practices in the Atlantic to access this new Australian lower cost coal, or pay the very high prices the USA coal can achieve in its domestic market.

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Introduction

The world's seaborne Coking coal trade has experienced significant and fundamental change over the past 5-7 years, mainly driven by developments in Australian supply. Substantial tonnage of low cost, high quality production bought on in Queensland, Australia during the later half of the nineties, forced closures and withdrawal of North American supply from the market. Recent domestic demand and pricing in the USA has exacerbated the shortage of USA coal for export. This development has had, and will continue to have, logistical and quality implications for buyers. The significance of Australia's role in the seaborne metallurgical coal industry will is likely to increase due to the changed fundamentals.

The Present Market And How We Got There

Following moderate price increases in 1995/6, Australian production was substantially increased with new green and brown field capacity totalling over 20 million tonnes pa. This increased production reached the market in 1997/8 together with some extra capacity from Canada, and resulted in massive price decreases totalling approx USD13/mt over the following 3 years.

Mmt	1997	1998	1999	2000
Burton (Met)	**1.7**	**1.8**	**3.9**	**3.5**
Moranbah North	**0.0**	**0.5**	**3.3**	**4.6**
MIM Oaky Creek	**3.7**	**4.6**	**6.9**	**7.8**
German Creek	**4.7**	**4.8**	**5.1**	**5.0**
Kestral (Met)	**2.3**	**0.0**	**1.2**	**3.0**
Cumulative Growth from 1996	*3.3*	*2.7*	*11.5*	*14.8*

Table 1 - Queensland Metallurgical Coal Growth – Major Players

Not surprisingly the result put tremendous pressure on the producers at the high end of the cash cost curve and eventually led to mine closures, production / export cut backs and deferred maintenance / capital spending in the USA, Canada, Poland and parts of Australia. Together with increased imports by Germany and India, Supply and Demand for Coking coal was left precariously balanced at the end of 1999.

The Atlantic basin was particularly affected as the majority of the reduction in supply came from the USA, which predominantly exported, to the European and South American markets. The reduced Canadian supply also mainly came out of Europe, as these producers diverted tonnes from Europe to hang on to Japanese and East Asian sales. Atlantic buyers started to see shortages particularly in some coal qualities and all buyers experienced supply problems when mining problems occurred with some of the remaining producers during the year.

Mmt	1997	1998	1999	2000
USA	**43.5**	**38.3**	**26.3**	**24.8**
AUSTRALIA	**84.1**	**82.4**	**93.8**	**102.7**
CANADA	**29.2**	**28.5**	**26.1**	**26.4**
Excludes Met Coal trade between USA & Canada				

Table 2 - Metallurgical Coal Seaborne Exports

The end of 2000 and early 2001 bought a new and unexpected set of circumstances in the USA coal industry, which while returning it to strong profits and increasing production, continued the reduction in availability of Met coal for export. The high gas prices and strong demand for electricity forced the domestic price of coal for electricity generation to levels that are double what was paid last year for exported metallurgical coal. Further, some utilities had a preference for the high BTU, low Sulphur Met coal in order to maximise their generating capacity. Hence despite higher pricing, Met coal exports from the USA are expected to decline further this year. The tonnage that is exported will be very expensive. This reduction in USA coal has particularly affected high volatile coals and buyers in the Atlantic have been faced with having to minimise the amount of this quality in their coke oven blends. This has led to buyers having to deal with lower volatile, lower fluidity and higher Phosphorus blends.

The major affect of these developments in met coal supply over the last couple of years, is that pricing is now back to levels of six years ago. Worse still, buyers are unable to source the coal they need / want and in some cases unable to source sufficient coal full stop.

WHERE TO IN THE FUTURE

Short Term

For the next 18 to 24 months, there would not appear to be any relief to the critical tightness in supply of Coking Coal. In the next two years further mine closures are planned in Canada, due to expiring reserves, which will offset any increased production by remaining mines in that country. Australian production is now at full capacity, with all Queensland and NSW producers maximising output from current equipment and workforce, as well as using any contractor production capacity available.

Indeed new green field mines and brown field expansions will take between one and a half and four years for the coal to be produced. Further, most of Queenslands coal loading facilities / ports are at their practical capacities, and significant capital expansions would be needed at Hay Point, Dalrymple Bay Coal Terminal and Gladstone to increase reliable supply. Together with the capital required for increased mine production, suppliers will need to be confident of maintaining good prices and or favourable exchange rates to invest.

In the coming 2 years the market mix for Australian coal may change, with more coal being directed to the tighter, now higher return Atlantic basin market. Until this year, many Australian (and almost all Canadian) suppliers have favoured the East Asian buyers when allocating where they would offer coal first. This was because the East Asian market has traditionally offered higher or the same pricing as Europe and South America. This is one of the reasons prices in Asia increased less in 2001 than in the Atlantic. Australian sellers offered all their production to Asian buyers first expecting these deals would give the best return. After Asian buyers had settled absorbing allot of the available Australian and Canadian production, and the shortage of USA coal for the Atlantic became apparent, Atlantic prices for Australian (and Canadian) coals rose above East Asian levels.

In the coming years if the Atlantic buyers act first, they may well get first choice of tonnes and qualities as sellers feel more comfortable that sales to these buyers will achieve the same or slightly better returns than Asia. Hence the market mix could change if these buyers take negotiate early.

This will not however address the quality needs and preferences of some European and South American buyers for USA high volatile coals. These coals are really not available in Australia. Asian buyers who have needed to increase the volatile content of their coke oven blends for gas / plant energy balance purposes, have purchased high volatile weak or semi-soft coking coals and addressed coke quality by buying high strength low and medium volatile hard coking coals. Also in Asia the PCI rates tend to be lower, and coke and fuel rates tend to be higher than those targeted in Europe. Many European steelmakers are already trying to minimise or remove USA high volatiles from their blends as this coal becomes even harder to access and is already very expensive. This change will obviously require other alterations to the blend and operating conditions in order to achieve current or better coke quality and blast furnace productivities.

Demand for the coming year looks set to increase in both Germany and India. If the demand for thermal coal generated electricity remains around current levels or increases in the USA, availability of Seaborne Met Coal may well worsen with prices rising significantly. Of as much concern is security of supply. Many of the Australian and American underground longwall mines have experienced regular production problems in recent years. With mines at capacity, there will be no capability to catch up or cover production problems and so the current 'nameplate capacity' which is the budgeted tonnage suppliers are selling, may be the optimistic supply scenario for the coming contract period. With minimal upside in supply and some possible downside, it is imperative that buyers look to win / win relationships with the producers they want, and lock down reliable supply at long term / annual pricing to avoid any need for spot purchases, which may not be available and or be extremely expensive.

Medium to Long Term

The recent fundamental changes that have occurred in the seaborne met coal market are highly likely to remain in effect over the long term. That is:

1. USA exports will remain at current levels or fall further. If USA domestic markets and prices continue to remain high, American production will stay at home. Should these prices fall and the tonnage return to the export market, these prices will fall again to levels near those of recent years, and the USA tonnage will again drop off for cost reasons (as it was doing prior to 2001). In other words, any substantial return of USA tonnage to the export market is likely to be temporary.

2. Rationalisation and consolidation will continue in both the coal and steel industries. Benchmark pricing that existed in Asia has gone and pricing will be determined on supply / demand and value in use for each product category in each market region.

From 2004 the size of Australia's role in the seaborne Metallurgical coal trade will consolidate and grow further, as some of the recently announced projects come on stream. Replacement mines such as Dendrobium and Grasstrees are likely to be approved to replace closing underground mines in the Illawarra and Bowen basins. Brown field expansions of Tahmoor in NSW and Goonyella in Queensland should add up to five million tonnes of mid vol coal to current levels, and the recently announce Greenfield development of the Hail Creek mine in the Bowen Basin should add up to 6 million tonnes of low vol hard and weak coking coal. Along with these mine expansions will come required expansions to the port and rail capacity. High volatile hard coking coal production will likely remain at current levels for the next ten years. Likewise there is no expected significant increase in availability of high volatile semi-soft coking coal from the Hunter Valley, though some of the production from this area has the ability to swing between thermal and semi-soft coking coal markets. Hence most new production will be between 19% and 26% volatile matter.

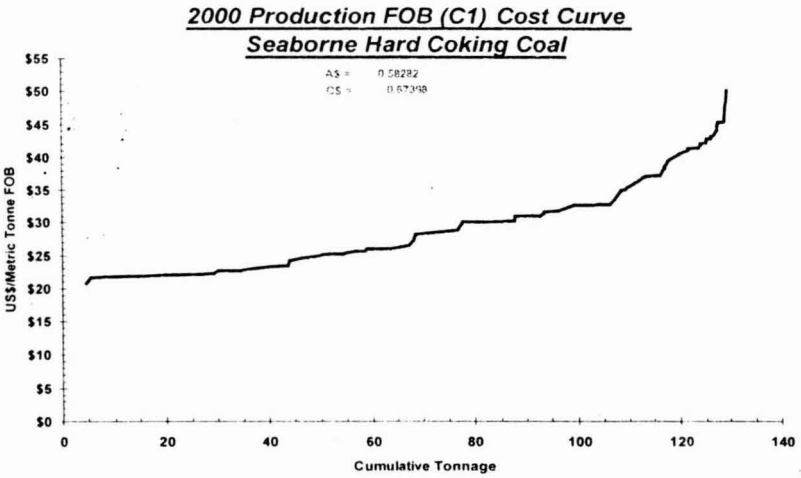

Figure 1 – Seaborne Hard Coking Production Coal Cost Curve (2000)

Additionally over the next ten years, much of the current coking coal produced in the Bowen Basin will increase in rank as mines move down dip, and the volatile matter content of coal from these mines is likely to decrease by an average of 1%.

All of this new production will be very low on the cash cost curve, in line with the current Australian mines, but will be low to mid volatile hard and semisoft coking coal.

This new production should help return the market for low and mid vol hard coking coal to balance and guarantee security of supply to buyers for these categories of coal. There is still uncertainty though on the current tonnage levels and qualities of USA exports. Can these be replaced with coal from other sources such as China If high volatile supply is not secured for Atlantic buyers from either the USA or PRC, then greater levels of mid volatile and mid / low volatile coal maybe required from Australia.

Reserves of this coal are available from undeveloped leases such as Daunia, Poitrel, Moranbah South and Wards Well, and or via Brownfield expansions of current Bowen Basin mines. Moving away from blends with high fluidity high volatiles however will obviously require technology and or philosophical changes by Atlantic coke makers. Buyers would need to address gas balance and coke ash chemistry differences as well as changing the way they make coke.