Report: Outlook 94 Conference
(Minerals and Energy)
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Executive Summary

- Overall commodity prices have bottomed, and by 1998/99 world commodity prices are projected to be 7 per cent higher in real terms than in 1993/94. Mineral resource earnings are anticipated to rise by 4 per cent in 1993/94 to $30.8 billion. A key assumption in ABARE's forecasts is growth in the industrial economies and the impact of GATT.

- The Australia dollar is projected to remain at around US70 cents in the medium term. Australia's recovery from the 1990s recession will be slower than that after the less severe 1980s recession. For the medium term Australian interest rates are forecast to rise, but only modestly. A key impact on commodities in the 1990s has been the impact of changes in supply from the Commonwealth of Independent States (CIS).

- Moves towards a National (South Eastern) Electricity Grid have commenced with a "paper trial" to test proposed transmission pricing and competitive trading in electricity is planned to commence in July 1995.

- Mineral exploration and mining is increasing in Victoria due to a new Mining Act in 1990 and further amendments are being planned. The environmental standards for any developments will not be compromised.

- The compatibility of mining and other land uses was emphasised, as was the concept of multiple land use. At a number of locations the application of high technology rehabilitation practices during mining or at its completion has been demonstrated.

- The Native Title Act 1993 does not resolve uncertainty of tenure and is extremely complicated, but does have the possibility of working. Mining has received restrictive special treatment through the legislation both with regard to past grants and the future extinguishment of native title. Miners will be at a severe disadvantage should a negotiated lease renewal be required, resulting in either mine closures or expensive plant sitting idle.

- Improved efficiencies in steel making technology have resulted in a decreased demand for metallurgical coal and Australia has received strong pressures on prices as a consequence of these changes. Demand for steaming coal is forecast to remain strong, but prices are likely to remain stable. Environmental market
premiums for low sulphur coal may become applicable in the medium term.

- Due to climate, population distribution and the immature state of Australia's natural gas grid, comparisons between natural gas grids in the USA or the UK and Australia are not always valid. However, the impediments on trade between the States remains the area with greatest potential for change.

- The price of oil is forecast to increase by 25 per cent to the year 2000 and similarly the market share held by OPEC will increase. Australia's domestic supply of oil is likely to decline, resulting in greater expenditure on imports of crude oil.

- The Framework Convention on Climate Change comes into force soon; however, all commitments to date are political only and not legally binding. The imposition of a carbon tax in Australia could lead to the relocation of energy intensive industries with a resulting impact on the economy. Analysis suggests the result would be decreasing wages and increasing CPI.

- Market opportunities exist for uranium around and after 1996. Under utilised capacity can fill much of the anticipated demand for low cost uranium, but to take full advantage of the market the Labor Party's three mine policy will need to be altered.
Introduction

The Outlook 94 Conference was held by the Australian Bureau of Agricultural and Resource Economics (ABARE) at Canberra's National Convention Centre on February 1-3, 1994. Thirty eight sessions were held, some concurrently and generally with three presenters per session and chair. Although their subjects ranged through the entire Australian resources and agricultural sectors, this paper concentrates on the mineral and energy industries.

Opening Address

The opening address to the conference by Senator Bob Collins, the Minister for Primary Industries and Energy, provided an overview of the benefits likely to accrue to Australia from recent progress in the General Agreement on Tariffs and Trade (GATT). An example provided was a bilateral coal agreement which is likely to be worth $500 million to the Australian coal industry. For the domestic sphere electricity reform is a key aspect of structural reform. Victoria is some way along this process and planning has commenced in NSW and Queensland.

Land access and tenure will continue to be an important issue in Australia. Senator Collins stated that the forthcoming Social Justice legislative package will not address veto issues. This has been discussed at length by the Ministerial Council involved and Senator Collins was most emphatic that such a move could damage the balance created in the Native Title Legislation.

The result of the recent Japanese coal negotiations is a disappointment to Senator Collins but he stated that the unions must realise this is a market issue. Unfortunately Canada was willing to drop its price on metallurgical coal, which impacted upon Australia.

Australia's Commodity Markets

Dr Brian Fisher, the Executive Director of ABARE, provided an optimistic outlook for Australia's commodity markets. Overall commodity prices have bottomed, the September 1993/94 Quarter being the low point of a fall which commenced in the early 1990s. By 1998/99 world commodity prices are projected to be some 7 per cent higher in real terms than 1993/94. Australia's mineral resource export earnings are anticipated to rise by 4 per cent in 1993/94 to $30.8
billion with a 3 per cent increase in mine production. From 1993/94 to 1998/99 mine production is projected to increase by 15 per cent mainly through new mines and mine expansion. A key assumption of ABARE's projections is growth in the industrial economies. The assumed impact of GATT is also tied into the optimistic forecasts. Through the medium term the Australian dollar is forecast at around US70 cents.

**Comment on the Australian Economy**

Dr Paul O'Mara of ABARE projected that the Australian dollar would have to remain at around US70 cents in the longer term for inflation to remain under control. O'Mara believes that the recovery from the 1990s recession will be slower than the 1980s recovery and the nature of the 1990s recession was more severe. The impact of the recession on commodity prices in Australia was strongly buffered by the depreciation of the dollar which fell by more than 20 per cent between 1988/89 and 1993/94. Globally, problems remain in the CIS, Europe and Japan while Asia, USA and Latin America are improving.

Alan Oster, the Chief Economist for National Australia Bank concurred with ABARE's positive assessment of the economy, stating that there are clear positive signs. Also perceptions for both the world and domestic economy are good. The only uncertainty in Australia seems to be the decreasing level of expenditure on plant and equipment. The three main global risks are Japan, the investment outlook and productivity. For the medium term Australian interest rates are likely to increase but only modestly.

**Electricity**

The realities of Demand Side Management (DSM) were investigated by Bruce Bowen of ABARE, who concluded that DSM costs are often underestimated and similarities between the United States and Australia cannot be assumed. The Reform Coordinator of the Victorian Electricity Supply Industry, Peter Troughton, provided an insight into power privatisation in Victoria. Risks can be large in this process as efficiency improvements may only pay electricity generators rather than taxpayers or Government. This was the case in the United Kingdom.

Practical trials of the South East Australian electricity grid, known as the National Electricity Market Paper Trial, are being coordinated by Brian Spalding of Pacific Power. As with the National Grid Management Council (NGMC) the objectives are: major customer to generator access, no access discrimination, transparent pricing, and no
entry barriers to any sector. A major impact upon the grid is the practical reality that electricity cannot be stored so any customer can have an impact upon supply. Network charges can be applied to control the location of generators and distributors of power, rather than legislative control. The timetable outlined by the NGMC for the grid development is:

November 1993 to April 1994  - National Paper Trial (Qld, NSW, Tas, SA and Vic)
July 1994                   - Transfer Arrangements
July 1995                   - Competitive Trading Commences

**Resource Access**

The Secretary of the Victorian Department of Energy and Minerals, David Downie, emphasised that Victoria is 'open for business' to responsible mining companies. The Department has three clear objectives:

1. Create the right environment for minerals exploration
2. A better approvals system
3. The needs of industry must be met, while environmental standards must not be compromised.

The alteration in Government policy and changed legislation in 1990 has already resulted in increased total expenditure in mining and exploration in Victoria. Additional amendments to the legislation are proposed.

The compatibility of mining and other land uses was examined by Malcolm Broomhead of North Broken Hill Peko. Minerals exploration requires large tracts of land but is not intrusive on other land uses. Mining on the other hand does have clear impact but is limited in terms of area affected. Mining is clearly a temporary land use particularly with the high technology rehabilitation practices employed by Australia's mining industry. During mine life the operation can promote species conservation and management, examples being Ranger and Olympic Dam. Problems with access are expensive to companies, $300,000 having been spent on Shoalwater Bay to date, without a single drill hole.

The Dean of Melbourne University's Law Faculty, Michael Crommelin, presented an analysis of the *Native Title Act 1993*. The legislation is extremely complicated and it does not resolve uncertainty of tenure, but does have the possibility of working. Four main objectives are defined in the legislation:
1. Recognition of native title
2. Regulation of future native title dealings
3. Establishment of a mechanism for dealing with native title claims, that is a tribunal not bound by rules of evidence

Native title is an additional layer on the title law of Australia, yet does not clearly resolve deficiencies on terms and uncertainty with regards to the Racial Discrimination Act 1975. Mining has received restrictive special treatment through the Act both in past grants and the future extinguishing of native title. National Parks can be claimed under native title, but the holders of native title do necessarily have the right to approve mining.

Coal

According to Roger Stuart of ABARE, changes in steel making technology resulting in improved efficiencies have decreased the requirement for metallurgical coal. Australia has felt the pressure from this change recently with the poor price result in the Japanese coal sale negotiations. The market for steaming coal is not affected by these changes and sharp increases for demand are forecast, particularly in Asia. Indonesia will become Australia’s main competitor in the region. To assure long term contracts for coal sales there is likely to be increasing Build/Own/Operate/Transfer (BOOT) power station construction. The coal exporting company funds, builds and operates the power station with imported coal under long term contracts. A recent example is that of Coal & Allied in Sri Lanka.

Alan Burrel stated that the World and Asian Development Banks provide around US$1 billion each for power development, but the requirement is around US$50 billion, hence leaving a market for alternative means of capital development. Rather than poverty which Burrel sees as the greatest threat to the environment, a mutually beneficial means of development is thus accessible. Due to improving coal technology, only part of Asia’s growth will be supplied by seaborne coal. Fluidised beds, for example, will allow the burning of low grade indigenous coals.

Terry O’Reilly of Pacific Coal agreed that increased demand for thermal coal is likely and that competition for this market is likely to remain strong. The cumulative result will be an extended period of flat coal prices. Charles Johnson of the East West Centre in Honolulu stated that coal prices are likely to remain flat and that environmental pressures are likely to increase. Environmental control is possible but at a price, for example the control of sulphur dioxide in the United States adds about US$25/tonne, hence there is a premium payable for
coals with a sulphur content of less than $\frac{1}{2}$ per cent. Other competition for coal is likely from pipeline natural gas, whereas by contrast the provision of LNG is generally not cost competitive.

**Minerals and Energy, Commodity Analysis**

Phillip Crowson of RTZ, London concluded that oversupply not reduced demand was the core problem through the 1990s recession, exacerbated by the large changes in the CIS. Even if the CIS were to return to a command economy the problems would remain. Similarly the current aluminium negotiations are unlikely to reap a great benefit to suppliers of that commodity.

The greening of international trade policies was investigated by Kym Anderson of the University of Adelaide. GATT is often perceived by hard line environmentalists as environmentally unfriendly but this ignores the purpose of the promotion of trade liberalisation, the result of which should be increased incomes and thus increased environmental standards. A body similar to GATT was set up by the UN at the same time as GATT to address environmental issues.

Gold is one of the main commodities produced by Australia and, according to Mark Bethwaite of Renison Goldfields, the industry is world competitive. However, this vibrant industry is affected strongly by perception, which in Australia is not positive. There is a great risk that the ramifications of Mabo will impact further upon this perception particularly in the longer term. Mining leases will have to be renegotiated at intervals, at which time the miner will be over a barrel with expensive plant sitting idle. The result will either be closure of mines or agreements which are unfavourable to miners.

**Gas**

Leanne Holmes of ABARE indicated that the outlook for natural gas in Australia will be affected by Government policy changes. Slow progress characterises these changes as the policy framework is difficult to create and issues such as price and market regulation must be addressed through time consuming negotiation. Where pipelines are available there is likely to be growth in gas usage, since in past times the decision to use electricity was not only based upon economic considerations. The key concern of explorers remains their access to profitable markets, any policy which restricts the sale of gas making access more difficult.
Concern about the development of policy was raised by Grant King of AGL, who believes that conventional wisdom (where something is spoken long and hard enough) often rules development. Examples were provided with regards to the 'myths of competition'. Australia will not necessarily benefit like the UK or the USA because the gas grid is not 'mature' enough. Reasons for this are complex and include climate and population distribution. Impediments between the States remain the area needing the greatest change.

**Oil**

The price of oil is forecast by Tom Waring of ABARE to trend upwards by 25 per cent to the year 2000; simultaneously, the market share of OPEC will also grow (1994 : 41 per cent, 1999 : 43 per cent). Domestic supply in Australia will peak at 550,000 barrels per day in 1994/95 and decline thereafter. The only growth basin in Australia will be the Carnarvon and the great hope held for the Timor Gap has proved ill founded. An average decline of 12 per cent per annum will occur in the Gippsland Basin. Crude imports will increase by 25 per cent to 1998/99 at an additional cost of $1.6 billion (1993/94-$1.4 billion).

**Greenhouse**

The Framework Convention on Climate Change comes into force soon. According to Brian Fisher of ABARE, much of what this means to the signatories, including Australia, remains to be negotiated. The stabilisation of carbon dioxide emissions at 1990 levels remains the main goal. Any policy measures initiated will have far reaching consequences, for example, the imposition of a carbon tax could lead to the relocation of energy intensive industries out of Australia. Fully twenty five per cent of the cost of aluminium production is energy. Any unilateral action beyond the current 'no regrets' strategy (that is, energy conservation which is worth doing for its own sake) would be expensive and damaging to the Australian economy, which is particularly energy intensive. A global tradeable quota system would be difficult to agree on and enforce.

John Daley of ACIL provided an example on greenhouse gas stabilisation from the OECD Green model which indicates a reduction in GDP. A similar analysis by ACIL on the Australian economy using the US$40 carbon tax suggested by the Industry Commission showed a real decrease in wages of 5.53 per cent while the CPI would increase by 0.49 per cent; additionally terms of trade would fall. Due to the energy intensive nature of the Australian economy, no other nation has more to lose from policy initiatives on greenhouse stabilisation. Robert
Reinstein of the Washington International Energy Group noted that the commitments to greenhouse stabilisation are currently political only, and not legally binding.

Uranium

Two recent, large changes in global politics have impacted strongly on the market for uranium, according to Lindsay Jolly of ABARE. The first is the integration of Eastern Bloc countries with Western countries, and the second is the integration of military and civil uranium markets. The end of the cold war has resulted in a flood of uranium on the Western market and consequently further depressed prices. The result of this is that, over the past two years mine production has made up only half of consumption, stock draw down being significant. As supply from the CIS declines there is the potential for a market upswing resulting in the possible doubling of uranium price by the 1999. The main assumption built into this projection is a limited effect of Highly Enriched Uranium (HEU) from dismantled nuclear weapons on the global market. Some 500 tonnes of Russian HEU has recently been purchased by the United States and is to be stockpiled under the contract terms. However, if there is any pressure on deficits this may at some time be sold. For Australia, mine production will continue and is likely to expand above the current 60 per cent of capacity, particularly as these mines are low cost producers.

George White of NUXICO provided a less optimistic outlook than ABARE mainly due to a larger assumed affect from HEU and the inclusion of nuclear plant closure in demand forecasts. The growth in uranium demand is forecast at 1 per cent annually, as the plans held by Thailand and Indonesia for development of nuclear power are viewed by NUXICO as overly ambitious. The mine supply of uranium remains at only 60 per cent of consumption and price is likely to remain stable. Richard Knight of ERA assumed an intermediate position between ABARE and NUXICO with a forecast of moderate price increases after applying similar analysis to the uranium market. Should the Labor Party of Australia change its three mines policy there is likely to be a potential market for uranium of 6,500 tonnes of yellowcake (uranium oxide, U₃O₈) by 1998 and more than 9,000 tonnes of U₃O₈ by 2003. Supply from Australia in 1992/93 was 2,289 tonnes of U₃O₈.