

Address to the Melbourne Mining Club

by

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Thursday, 13 February 2003

“FIVE GOALS FOR A COMPETITIVE AUSTRALIAN MINING INDUSTRY”

Thank you for the invitation to address the Melbourne Mining Club. This is quite a remarkable forum for the Australian mining industry and I would like to congratulate the organisers for building such a formidable platform.

One of the concerns that I have is will this forum be relevant in 15 – 20 years time. Indeed will our industry be relevant in this country in 15 – 20 years time?

This is the basis of my address today - the future of the Australian mining industry and I have identified five primary goals that I consider necessary for the maintenance of a competitive Australian mining industry.

Along with the farmers, the miners are still the backbone of the country and we need to ensure that both of these truly internationally competitive industries maintain a very strong presence in this country.

I am concerned about the future of the mining industry here and because of the significance of the Industry's contribution to the Australian economy, I am also concerned about the ability of the country to maintain our high standard of living.

What I intend to cover in my address today are the issues that we must attend to in order to maintain a vibrant mining industry.

We need to:

1. Find new mineral deposits
2. Efficiently develop and operate these new and existing mines
3. Maximise the value we can add to the minerals we mine,
4. Efficiently deliver the products to our customers wherever they are around the world, and
5. Be relevant.

In order to achieve this result, therefore, we need

- Access to land for exploration

- The managerial and operating skills, technologies and infrastructure to find, develop and operate mines, and
- Community support that comes from being a sustainable industry.

It is very difficult to adequately cover this subject matter in 20 minutes, but let me outline the five primary goals that I believe are necessary to ensure that the benefits of mining continue to flow through to all Australians.

1. The first point I want to make is Land access is a key fundamental factor in the future of this industry.

Goal No. 1 – Provide ready access to large areas of land for exploration.

I am concerned that the early signs of structural decline of the mining industry in Australia are appearing at the exploration end of our business. I know that everyone in this room recognises that the mines of the future are built on the discoveries of the present. In recent years, however, those discoveries have not been made. I understand that the last major (base metals) discovery in Australia was Ernest Henry, and that was some 12 years ago. We are, therefore, currently living off the discoveries provided by earlier generations.

It is easy to miss the first signs of decline in the exploration end of our industry because although the discoveries are not being made, the brownfields and downstream developments are proceeding. Existing mines are being expanded. Refineries and smelters are being built, modernised and increased in capacity. Ore reserves are being maintained around some of our existing mines. And some recent development of new mines on mineral deposits that have been known for decades also helps to mask the absence of new discoveries.

Spending on exploration in Australia has fallen significantly since the mid-1990's. The upturn in gold exploration in the last six months is welcome, but base metals exploration continues to fall. The number of exploration permits being granted today is half that of ten years ago.

There is no doubt that difficulties in accessing land have restricted the search for minerals in Australia. The problem is further highlighted by the increase in the amount of exploration on production leases – so the decline in greenfields exploration has been even more acute than the overall exploration figures indicate. While exploration expenditure has declined globally, we must consider restrictions on land access for our main industry as a self-imposed competitive disadvantage that will only encourage exploration in other countries where access is easier.

At the heart of the problem in Australia are the procedures relating to native title. Companies wanting to get on to land to begin the exploration process are frustrated by the delays and the associated costs. To demonstrate one facet of the problem, and that is the difficulty in getting on to land to have a first look, one large company had to wait a year for access to a certain piece of land for first stage exploration which turned out to require only one week's work.

Let me emphasise, if it is necessary to do so, that the issue facing Australia is not native title. The principle of the rights of indigenous people being embodied in native title is established and acknowledged, and like probably every person in this room I support native title. The issue is the facility with which land can be accessed for exploration.

The long term future of mining in Australia depends to a large extent on minimising delays in processing exploration applications today. The economic benefits for all Australians (including indigenous Australians) are derived from mining, not exploration. If we discourage exploration, we surely deprive the next generation of the benefits of new mining projects, and we drive exploration and mining offshore to countries where access is easier.

2. The second point I want to make is that professional skills and technology are key contributors to competitiveness and value adding.

Goal No. 2 – Attract good young Australians to the industry and provide resources for research and development.

We are losing the battle to attract young professionals into our industry. Fewer people are studying and graduating in mining engineering in Australia, and a similar trend can be discerned in metallurgy. As an indicator, there was a 30% decline in the number of first year students in mining engineering from 2001 to 2002, which points to a similar decline in the number of mining engineers to graduate in 2006. And while there are some excellent young people joining our companies, we need to attract more students of high quality. At MIM, despite the increased attractiveness of our improved operating performance and project developments, this year we have been unable to find enough suitable graduates to fill the mining engineering and metallurgy vacancies.

The Minerals Council of Australia has set up the Minerals Tertiary Education Council to tackle this problem as a long term project. This is a difficult and puzzling issue when you consider that mining and mineral processing should be one of the country's most attractive industries to young professionals – it pays very well and it has the prestige of being an international leader.

Australia has made a significant contribution to technological development in the mining industry. Probably the most important development of the last 100 years was flotation at Broken Hill which opened the way to modern mineral recoveries from sulphide ores. In the years since then, Australia has continued to be a leader in mining R & D.

I am pleased to say that MIM has been punching well above its weight in the range and significance of the technologies developed by a couple of generations of outstanding people right to the present day. Some 40 per cent of the world's copper is refined using the Isa Process. The company is also at the forefront of technologies in fine grinding, flotation cells and smelting.

3. The third point I want to make is Leadership from management is the key to good operational performance.

Goal No. 3 – Executive and operational management must earn the respect of their workforce.

We are blessed in this country with the world's best workforce. Because of this if we, as managers, earn their respect we will readily achieve world class performance in our mining operations.

This is an area where my colleagues and I have earned our stripes over the years, and I have subsequently witnessed many amazing operational turnarounds due to this simple change in management practice.

Many Managers still make the mistake of targeting work practices only, but the facts are that restrictive work practices are an outcome of management incompetence.

MIM provides good examples of the changes I am talking about. Over recent years, there has been a major change of management personnel and corporate culture.

MIM's coal business today is based on the same assets and employs most of the same employees that it did in the mid 1990's. Yet from 1995 to 2002 production and productivity were doubled and the coal business went from losses to earnings of more than \$400 million a year – a remarkable half a billion dollar turnaround.

A couple of years ago, we sent a new Australian management team to Argentina. The operational improvements that they have achieved at the Alumbreira mine have lifted production to record levels and contributed to much lower costs and increased earnings. From a disappointing beginning, Alumbreira is now one of the great open cut mines of the world.

Let me repeat that the people who do the work are more than capable of achieving the result we want – the key goal required here is management skills.

4. The fourth point I want to make is that competitively priced energy has been central to the competitiveness of the mining industry and to the general high standard of living in this country.

Goal No. 4 – Maintain Australia's competitive coal-based energy supplemented by development of Australian gas resources for use in Australia.

The Australian economy depends more on coal than any other commodity – for both direct export and for power generation. Coal is far and away Australia's most valuable export and the contribution of coal to export earnings has been increasing. Last year coal earned \$13.4 billion in export revenue for Australia, an increase of 24% on the previous year.

Coal as a domestic energy source has, however, ensured that the cost of electricity in Australia is among the lowest in the world. It has enabled us to add billions of dollars a year to the value of minerals. Regions and cities such as Gladstone base their growth and prosperity on coal and low cost electricity, but the influence of coal-based low cost power permeates our entire economy.

Recognising the competitive advantage that coal gives Australia, national and State governments should pursue policies that maintain and increase that competitive advantage.

Increasing emphasis is now being placed on improving the environmental credentials of coal. This ranges from improving the performance of current applications of coal to developing new applications such as coal gasification. This leads me to my fifth and final goal.

5. The last point I want to make is that sustainability is the key to the future scale and scope of the mining industry in Australia.

Goal No. 5 – Achieve zero emissions generally in our Industry but specifically in the use of coal for power generation.

In this address I will talk more about the specific than the general and this very specific goal has to be placed in the context of sustainable development. For the mining industry, sustainable development can be defined as ensuring that the activities of today's industrial society do not prevent future generations from continuing to enjoy the benefits of the world's resources.

I believe that the mining industry and the global community generally are headed in the right direction when you consider the plan of implementation that the World Summit on Sustainable Development produced in Johannesburg last year. The plan asks governments to “diversify energy supply by developing advanced, cleaner, more efficient, affordable and cost-effective energy technologies, including fossil fuel technologies and their transfer to developing countries.”

With regard to coal, which is the world's principal source of electricity, the issue is to extend the benefit of low cost electricity from coal while controlling its environmental impact. There are two routes to follow - improve the efficiency of coal-based power stations and capture the carbon dioxide emissions. Power station efficiency has improved from 5% a century ago to around 40% today, with the next generation power plants heading for 50%. The technology to capture and sequester CO₂ is now becoming available. Much of the work to be done now will concentrate on the matters of cost and of understanding the long term environmental impacts of actions such as pumping large quantities of CO₂ underground and into oceans.

Zero emissions is not science fiction but a realistic goal towards which progress can be made over the next decade. This is enormously significant for the Australian mining industry and for the world. The sustainable use of coal to improve the living standards of everyone is now in prospect.

The Australian Government is strongly supporting research and development into these areas, most recently with funding for Cooperative Research Centres. The importance of maintaining and strengthening the place of coal in our economy and society is clearly understood in Canberra.

So there we have it – five goals, some of which we have already kicked and some we have not yet attained.

- Access to land – Australian miners explore overseas, but they would prefer to focus in Australia, and the Australian industry will fail to serve Australians in the future as we know it can, if we as a nation deliberately restrict mineral discovery in our own country.
- Leadership from management – a vital part of our success that must be extended across the whole of the industry

- Encouraging young professional people to maintain the momentum, and be stimulated, as we have been, to take mining forward
- Maintaining competitively priced energy, in particular continuing to recognise the crucial value of low cost base load coal fired power
- Achieving zero emissions generally in our industry and specifically in the use of coal for power generation. We need clear targets as we pursue the task of including mining as part of the sustainable development of the world.

These are the five goals – all achievable in our lifetime.