

ADDRESS TO THE SYDNEY MINING CLUB

6 OCTOBER, 2005

SLIDE 1

Newcrest has been blessed in as much as it is now mining at four operations that have been developed on ore reserves and mineral resources that its own exploration effort has found. This exploration success has enabled Newcrest to design and build new operations at Cadia, Gosowong, Cracow and Telfer over the past 7 or 8 years.

But this very exploration success brings with it a responsibility to make the most of these new projects and to optimise the financial returns – first by spending the capital wisely, and in the long haul, by being as efficient as we possibly can in operating these new projects.

I imagine that it goes without saying, but we at Newcrest do not have access to mining and metallurgical equipment that other companies do not; we do not have access to mining related software that other companies do not; we do not have access to systems and procedures that other companies do not.

So if we are to succeed in our drive to be good operators of these new mines, then it is to our people that we must turn.

But before we start talking about Newcrest people, let's begin by painting a picture of the mining industry at the moment to give us some context before we consider how Newcrest fits into the resources sector today.

The fantastic and unprecedented growth in china has meant that mining is going through a boom, with iron ore, coal, copper etc all doing very well and i want to get to the effect of this boom on the underlying issue of recruiting and retaining staff and to tell you how we at Newcrest are addressing the issue.

So, let's take a look at the recent movements in the various commodity prices to help get our eye in.

Slide 2

In the space of two years copper has more than doubled from around us\$ 0.80 per pound to recent levels in the region of us\$ 1.70 per pound as this graph shows.

During the same period both lead and zinc have also shown strong gains with prices for both these metals showing increases in the region of 50 percent.

Iron ore prices have moved up strongly with the round of price negotiations conducted earlier this year delivering price increases in excess of 70 percent. In the case of CVRD for example, this effectively increased the average iron ore sales price from US\$22 per tonne in 2004 to US\$38 per tonne in the current year. Iron ore price negotiations with Japanese buyers are expected to start in October and a view is emerging that the outcome is likely to be a further increase in the range 5 to 10 percent on top of last year's 71.5 percent increase.

Slide 3

Similarly, thermal coal prices have more than doubled over the last two years from around us\$ 27 per tonne in 2003 to over us \$50 per tonne. The JFY 2005 settlements for all grades of metallurgical coal reached record highs. Hard coking coal, for example, rose a substantial 112% to us\$125 per tonne.

On the back of these wonderful commodity prices, the minerals industry has been instrumental in boosting Australia's export earnings – recently i attended the MCA's mineral week in Canberra where the highlight was an address by the prime minister to the audience which comprised representatives from all parts of the mining industry. The pm started out by telling the gathering that he carried from the treasurer the very fondest of

greetings to us all, together with a hope that we all felt well and able to carry on in the manner to which the treasury was becoming accustomed. It seems no-one is arguing that the Australian economy is doing very well out of the boom in the resource sector.

Slide 4

Export earnings from Australia's mineral and energy sector reached a record high of AUD 67.4 billion in 2004-05. This is a 29 percent increase over the previous year. Coking coal posted the biggest rise, up 65 percent to AUD 10.7 billion. Strong rises were also recorded in iron ore and pellets, up 53 percent to AUD 8 billion and steaming coal up 45 percent to AUD 6.3 billion. Copper was up 41 per cent.

Current projections put export earnings from the minerals and energy sector for the 2005-06 year at around AUD 80.2 billion. This is a substantial 60 percent increase on the corresponding figure for 2003-04 and equates to a compound growth rate of 17 percent per year.

Slide 5

Given that I am among friends, it is worth reminding ourselves that the value of exports by the minerals and energy sector accounts for almost 53 percent of total goods exported and over 41 percent of total goods and services exported in 2004-05. Indeed minerals represent nine of the top ten export commodities.

These days, people increasingly understand that the resource sector is not the threat to the environment that perhaps was once thought to be the case, and they also increasingly understand that the Australian economy is a big winner from the efforts of the miners.

However, the rising commodity prices does have a down side as the cost of some consumables is going up – steel is twice what it was, and oil is up markedly.

Slide 6

Since mid-2004 the price of oil has increased by more than 50 percent – now whilst Cadia, Telfer and Cracow have power supplies that are not linked to the oil price in any way, we are now spending over AUD 20 million extra on an annual basis buying diesel to run our fleet of open cut and underground mining equipment and of course to produce power for the Gosowong operation.

Slide 7

Steel costs have also increased markedly with reports of quotes for fabricated steel having shown typical increases between 25 and 40 percent between the first and fourth quarters of 2004. I know that during the construction at Telfer the cost of a tonne of fabricated steel went up from AUD2900 per tonne for the first tonne we bought to AUD 5900 a tonne for the last tonne. And of course when you are buying 20,000 tonnes of steel for a project, an increase in the steel price like that is quite an issue, but one that is outside the scope of this address.

So notwithstanding that there have been some undesirable side effects from the resources boom, the overall effect of the much improved prices for our products has been positive as you would expect. The improved commodity prices have led to a boom in construction of both expansion and new projects in WA in particular as companies strive to make the most of the boom and this has led to a shortage of skilled labour in just about every job category in the mining industry both in construction and in operations.

From the point of view of employees involved in the mining industry, life has never been so good

1. Newcrest has suffered young professionals leaving Telfer to work in the iron ore business for 25% more money. There are stories of mining graduates getting up and AUD 100 k first year out at remote sites.

2. FIFO means the need to take a young family out to the bush has become a thing of the past – though I would be the first to admit that the best friends I have made in life have all come from my experiences in the then WMC Mining towns of WA and so I can say FIFO would not have suited me.
3. There are real choices of work places – and the employers are all scrambling to make their sites attractive as possible from both a remuneration point of view and from a life style point of view. Improved gymnasiums, sporting facilities, live entertainment are becoming the standard at camps
4. The improvement in working conditions at mine sites means that the chances of getting hurt at work at a mine are greatly diminished and are probably less than would be the case in other sectors.

Slide 8

The story of Newcrest's growth over the past 10 years has been well documented with new mines in Indonesia, the Cadia Valley here in NSW, Cracow in Queensland and most recently, the Telfer mine in WA.

Slide 9

This rapid growth in the operational base has led to a strong need for a lot more people and in fact we have more than double the number of people than was the case pre Telfer. This growth in numbers has been, and continues to be, one of the biggest challenges in front of Newcrest.

The result is an employee profile that is very much skewed towards newer employees. Indeed some 41 percent of Newcrest's Australian based employees have been with the company less than one year and the average length of service is a mere 2.5 years. This in itself throws up a number of challenges.

Slide 10

Notwithstanding the unusual growth in the numbers at Newcrest the average age of Newcrest employees is 37 years which I imagine is reasonably normal - the only issue I have here is that I now fit into the column on the far right and it seems I have no further progress to make on this front! But what it does demonstrate is that the people who have joined Newcrest are experienced mining people – it's just that they have no experience with Newcrest and so we are going through a real learning curve as we get to know our new people and they get to know us.

One of the challenges has been that the recruitment issues are quite different in each of our 4 mining operations.

Slide 11

Cadia Valley is located very favourably and is a residential site in a very attractive area just a few kilometres from the city of Orange in NSW. Recently we took a decision to go owner mining at the Ridgeway underground mine, and we were gratified at the response to our advertisements for the necessary workforce. Clearly, the attractiveness of a residential job in such an area was a major contributing factor here.

Slide 12

Cracow is 5 hours in land from Maroochydore and is a FIFO site though it has to be said that it is a reasonably attractive place to work. It is only a year or so since the mine treated its first tonne of ore and so far the whole thing has been very predictable which perhaps indicates that recruitment there is not such an issue.

Slide 13

Telfer is on the edge of the great sandy desert & is obviously a FIFO site in WA where there is enormous competition for the workers at all levels. The construction phase was somewhat disappointing and this can be put down

for the most part to the very great difficulty in attracting the experience people needed to have the construction effort comply with the plan. The commissioning of both the mine and the metallurgical plant has presented real challenges that can only partially be put down to manpower issues, but it hasn't been easy to find all the people needed – particularly underground workers.

Slide 14

Indonesia has its own set of issues - something that has been underlined again last weekend at Bali. Our Indonesian operation has faced a series of significant issues since construction commenced there in the late 90s with Christian – Muslim 'war fare', illegal miners, and the various bombing incidents in Indonesia. Nevertheless, it must be said that we have managed to get it all done at Gosowong and the outlook at the mine is as rosy as it has ever been as we proceed to develop the extremely high grade Kencana ore body and with relationships at a local and national level being as good as they have been for us thus far. We manage with just 20 or so expatriates and the remainder of the workforce is Indonesian. Undoubtedly, security remains the biggest challenge.

Slide 15

The people challenges are not confined to the operations. Our exploration spend is in the middle of being doubled in an effort to keep pace with Newcrest's production profile post Telfer. To get the best bang for our Greenfield exploration buck we have thought it necessary to spread our wings geographically and we are now exploring in places like Peru and the USA as well as Australia. Our exploration in and around the existing operations remains a key focus at Newcrest as we have a relatively low percentage of our mineral resources successfully converted to ore reserves and we are intent on accelerating that conversion consistent with the need to spend the discretionary dollar as wisely as possible.

In recent times, the major gold producers have rediscovered exploration as a means of adding to reserves, and the competition for ground has become fierce whereas a few years ago, Newcrest had it much easier.

People wise, the exploration team has easily the longest average length of service with Newcrest with the core of the team having come to Newcrest from BHP gold at the time of the inception of the company. We are finding that our team members are becoming targeted as the 'exploration spend' internationally picks up.

Slide 16

The turnover figures shown on this slide sort of reflect what i have been saying about the differences from a recruitment point of view at each part of our business. Overall, the turnover rate is too high though it is hard to know what to do about this given the boom times the bulk of the industry is enjoying right now. Of note is that workforce turnover in the mining industry is the highest of any industry – something you might expect given the good times being enjoyed at the moment.

I might be giving you the impression that Newcrest has been facing monumental people issues over the past few years and that this must have proved to be a real problem for us in that time.

Well, interestingly enough, the company has done a lot of really quality work in recent times that i am very proud of in spite of all the recruitment issues i have been talking about.

Large and small scale open pit work

We have been focussing on the design and condition of the in-pit ramps. "fleet productivity optimisation" and "application severity analysis" software is used to highlight running surface hotspots which are then allocated a high priority for road condition improvement work. Wherever possible, trucks are operated on elevated roadways. This protects the road surface during the

wet season by providing better drainage, allows for more effective roadway maintenance, and also reduces cycle times. By changing the ramp gradient from 1:10 to 1:11 and incorporating refinements such as super elevation of selected corners so that higher ramp up and down speeds can be accomplished, the trucks can remain in 2nd gear on the uphill run. This increases average speeds from 8kph to 14kph, and decreases cycle times, allowing the mine to reduce overall haul fleet requirements.

Other initiatives include a focus on tray weights and payloads and analysis of loaded truck speeds on ramps to identify “slower” trucks that have an impact on haul cycle times. These “slower” trucks are usually shut-down until the problem can be resolved rather than being allowed to impact the entire load and haul fleet performance. A focus on operator training has also resulted in improved productivity.

Sublevel caving – and our work in the international caving study

Newcrest has been an active participant in the international caving study with companies including Codelco, Ikab, de beers, and Rio Tinto. The choice of sublevel caving as the mining method has been instrumental in the success of the Ridgeway mine and the many improvements introduced at Ridgeway will be applied at Telfer where we expect to produce first stoping ore early in the second quarter of 2006. Through the R & D work conducted at Ridgeway we have been able to develop a better understanding of draw behaviour and to more accurately predict mine performance. Sublevel caving costs at Ridgeway in the region of between \$7 & \$8 per tonne of ore place the cost of this underground mine close to the cost of open pit mining at modest stripping ratios of say four or five to one.

Cu flotation performance enhancements

When Newcrest began processing ore at Cadia in mid-1998, the Cadia team focussed on opportunities to enhance performance of the process plant. In the past year or so the float circuit has been altered such that 100 percent of rougher concentrate produced was reground ahead of cleaning. At the same

time, trials of different reagents had identified a particular reagent that materially improved both gold and copper recoveries. The combined impact of these initiatives resulted in improved gold and copper recoveries somewhere in the region of 10 percent for copper and 5 percent for gold without compromising concentrate grade which has in fact been slightly improved. The payback on this initiative was just a few months.

Whilst time does not permit to go on about such operational improvements, there have been other areas where real improvements are being made in:

- CIP technology
- The Merrill Crowe process for gold and silver recovery
- Gravity recovery of gold
- Underhand cut and fill planned for Kencana
- Modified Avoca as practiced at Cracow

In addition to these impressive operational gains, Newcrest has been a successful constructor of mines with Cadia, Ridgeway, Gosowong and Cracow all being built in line with budget expectations. It was only the boom in WA which led to shortages in labour, steel and the like and caused our reputation in this area to be somewhat dented - temporarily i hope – on the Telfer construction effort.

I had been asked in preparing this address to make some of these operational improvements personalised by naming some of the young people involved. Discretion is the better part of valour however, and i would like to make it as difficult as possible for any member of the mining industry to identify Newcrest's up and comers by refraining from naming names so to speak.

What i will do by way of an alternative is talk about some of our initiatives in dealing with our people.

Values based leadership

First and foremost, we have spent a lot of time and effort in a series of workshops at every level to talk about values based leadership.

I strongly believe that companies that endure and flourish have a strong ethical foundation and a vision that its employees can all relate to. People want to be more accountable for their work and this implies they are demanding more authority as without the latter, the former is a pipe dream. The values framework within which we operate at Newcrest is contained by the following five points:

- We act with honesty and integrity**
- We care about people**
- We seek high performance in ourselves and others**
- We work together**
- We value innovation and problem solving**

It is worth noting that these 5 values were not imposed on the work force at Newcrest, but rather were generated from a work shop of a group of Newcrest people that was specifically put together some three or so years ago.

Guilds

Newcrest is encouraging its professional people to participate in a guild programme. This programme sees the underground miners from each of our mines for example meeting from time to time to get to know one another, to compare notes and to make sure the lessons learnt at one mine don't have to be re-learnt at another. All of the professions, open cut miners, bookkeepers, metallurgists, hr people, geologists and maintenance staff are encouraged to be active in their guilds and to pursue excellence.

Remuneration

It is clearly necessary to have a remuneration policy that is competitive and fair though i certainly believe money is purely a health issue and that wages and salary alone are not the only answer to retaining people in a satisfying work environment. A range of factors including quality of work, work environment, recognition, acknowledgement of a balance between work and home life and quality leadership all have a part to play.

Indeed in a recent paper by Narelle Hooper, the author notes that “behavioural management research literature shows company reward and performance systems require three key factors or ‘reinforcers’ to affect performance: money, feedback and social recognition. Each has a significant impact but it is only when they are combined that they have the strongest link to task performance.”

Succession planning

Having just said that money is not the only factor in attracting and retaining good people, what is important is that outstanding young people are challenged in the workplace and provided with the opportunities to develop and enhance the breadth of their skills. If Newcrest does not identify who its young guns are and develop them properly, then another company will, and that is clearly not the desired outcome.

Target zero

Newcrest is committed to a programme called target zero that is designed to eliminating time lost from work due to accidents altogether.

Slide 17

The Australian mining industry has demonstrated a long standing commitment to improving safety in the work environment. If we look at figures presented in this graph, showing data for the last seven or eight years, we see well defined favourable downward trend in the metalliferous mining industry LTIFR though a graph over 10, 20 or 30 years would show the improvement is not something new. It is something that we should all talk about more openly especially in political circles though we have generally been reluctant to do that in case it brought bad luck.

Happily, Newcrest is doing a bit better statistically than the average of the mining industry at large though I am well aware that all of the industry is making a concerted effort to make its workplaces safer places to be.

This improvement in mine occupational health and safety is one of the things that is a stand out for me when i look back over my career in mining – the reduction in lost time figures over the years has been outstanding and we can say with some pride that the industry is at the forefront of a sustained effort to still further reduce the statistics in oh & s.

Slide 18

Wellness programmes

At Cadia Hill we have established a wellness programme. This wellness program is aimed at promoting better overall health and wellbeing through individualised programs targeting diet and exercise.

Fitness for work

In addition, fitness for work is now well accepted by the work force – gone are the days when the darts competition at the local pub at a mining town saw many of the work force turn up for work in less than ideal condition the next day. The efforts of some to stand in the way of drug and alcohol testing prior to work have not found favour with the overwhelming bulk of the work force which has enthusiastically embraced the *target zero* programme at Newcrest.

Time does not permit me to dwell on all of the various aspects of the *target zero* programme, but i believe it to be a most important element of the effort to both attract and retain good mining people.

Contractors

Modern mining has seen the use of contractors grow enormously in the past 20 years or so. This is particularly the case in FIFO sites where there is no natural work force that is committed to living in the area. It is important to realise that a mining company cannot expect to lay off risk by writing a long term, hard money contract with a contractor with a small balance sheet. This does not mean that hard money contracts are out the door – it just means we shouldn't kid ourselves when assessing risk. Smaller contractors have a real part to play if we are to succeed and flourish, but they have no ability to absorb significant adverse outcomes in their daily work.

Even more important is to treat the contractor's people in exactly the same way as your own in terms of safety programmes, communication from management and the like.

Communication

This last point leads me onto perhaps the most important element of all in modern mining and particularly when attraction and retention of a

satisfactory work force is such a challenge. And that is the very real need to talk to your people regularly and in a way that promotes a feeling of team.

At the Cadia valley for example, a communication day is built into each roster cycle so that leaders at all levels can talk to their people about business improvement initiatives, safety, leadership, the weather, the latest footy match or what ever.

It's a bit like raising kids. If you aren't talking to them about the issues in their life, then it's a fair bet some one else is, and that third party might not always have an agenda that suits your family aspirations.

So it is with the work force in the modern mining industry. The greatest advantage that individual contracts have brought to the work place is the opportunity to talk to our people without a third party interfering. It is a precious and crucial opportunity and one that has led quite directly in my view to the improving productivity in the mining world. And it is interesting that the work force has recognised the advantages of this new relationship with the management and increasingly sees individual contracts as being most worthwhile.

If we fail here – and I believe it is in our own hands as to whether we fail or not - we will return to the bad old days of demarcation issues and resistance to change – at a time when the need for constant change has never been more compelling.

As i said right at the start of this address Newcrest does not have access to trucking fleets that our competition does not: it does not have access to software that our competition does not: nor metallurgical processes, nor engineering and maintenance systems. Modern communications systems have meant that knowledge is available to anyone that is interested.

So if we as a company are to flourish going forward, it is to our people that we must turn.

This is the challenge for Newcrest and indeed for the entire resource sector if it is to continue to play its vital role in Australian life.