



Chris Griffith, CEO Anglo American Platinum, Mining Indaba 2015 Speech

Topic: “Modernisation – a vital step in building a sustainable mining industry in South Africa”

Salutation

As an ‘old timer’ with some 25-years’ experience in the industry, spending my last seven years as CEO of Kumba and now of Anglo American Platinum, I hope I can reflect with some experience and validity on the kinds of things we collectively need to do to take South Africa’s mining industry forward – and how we do so amid growing – and often conflicting – expectations from our wide range of stakeholders.

I would like to explore with you here today, how we can heed the call of our stakeholders for an improved, transformed and progressive industry to which all South Africans relate positively and without hostility.

A modern innovative industry in which South Africa’s youth can build careers, employees can provide for their families and, after each day’s work, return to home safe and sound in stable and flourishing mining towns. An industry which delivers reasonable returns to shareholders and host governments, through the commodity cycles, and in which investors have long-term confidence.

I also want to look at how modernisation of our industry here in South Africa is crucial to our global competitiveness, and how, in order to fast-track the development and deployment of innovative technologies, they are best developed in conjunction with our peers, as well as with experts from other industries and sectors.

As all of us know, over the past six years or so the global mining industry has come under extraordinary financial pressure against the background of the global economic downturn and the generally feeble economic recovery, with institutions such as the IMF continuing to lower their global growth forecasts for 2015 and beyond.

This has manifested itself in slowing demand growth and declining prices for all the major commodities– iron ore (which has declined from \$180 per tonne to around [\$63] per tonne over the past three years), metallurgical and thermal coal also a third of the price it was a

few years ago, and copper whose price has fallen by just over 10% since the beginning of the year. Then of course we have platinum, where prices have not recovered since the global financial crises in 2008, yet input costs have continued to rise well above CPI.

Much has been written and spoken about the many other problems bedeviling the mining industry in South Africa, which led to us missing out on the mining boom and continue to weigh heavily on the mining industry.

- A critical energy situation
- Adversarial labour relations, resulting in extended strikes with tens of billions of rands lost to the industry
- Labour productivity that continues to fall

Then there are often mixed signals from the political establishment, with calls for investment and growth mixed with threats or messages of interventionist practices such as strategic minerals, developmental pricing, beneficiation and indirect taxation from some political quarters.

Mining companies haven't always got it right either:

- Ill-disciplined mining production – resulting in oversupply of certain commodities
- Poor allocation of capital by mining companies – resulting in over leveraged balance sheets.

These very issues continue to pose a risk to the industry at this critical time. We have lost the confidence of not only of our shareholders, but also of the broader community.

... But positives are emerging...

I am however encouraged by the increasing willingness on the part of government to get to grips with the issues that concern the mining sector. For example, the Deputy President's initiative, which led to the establishment of the Framework Agreement on a Sustainable Mining Industry in July 2013, has started to facilitate positive discussion around the industry's future. Government and the ministry are showing a greater willingness to openly engage with the industry on a range of issues, including the MPRDA, energy strategy, employee indebtedness and basic financial training, housing, labour upskilling, safety, health, mechanisation, greater innovation in the industry, and carbon pricing.

I also wish to acknowledge what Minister Ramatlhodi has been doing about the need for certainty in the mining industry. In the words of the minister: *"Time is of the essence... The world is not waiting for us. In this climate it is so bad that we really have to provide certainty*

to the industry and to would-be investors in South Africa. Otherwise, they won't come here."; those, are the Minister's words. They demonstrate how keenly he feels that the timing of his work is critical to bringing about regulatory certainty to the MPRDA and the mining sector generally. I also find it extremely encouraging that the Minister says he hopes the mining industry would assist him to "accelerate the process" so that the MPRDA is finalised in a few months' time.

For our part, the Anglo American group continues with the transformation journey it started many years ago – also contributing to the modernisation of South Africa. As many of you are aware, at the dawn of our new democracy, 20 years ago, Anglo American embarked on the biggest black economic empowerment deal in South Africa at that time – an empowerment deal which led to the formation of Johnnic and JCI. And over the years we have continued to foster the emergence of BEE companies such as Exxaro, with which we still have a 50% joint-venture interest in the Mafube colliery; as well as BEE entities such as Anglo American Inyosi Coal; Ponahalo Holdings, which owns 26% in South Africa-based De Beers Consolidated Mines; as well as our partnerships in the platinum industry with African Rainbow Minerals and Royal Bafokeng Resources. Community participation is a key focus in our BEE ownership efforts, as our transactions are aimed at the sustainable, long-term economic upliftment of communities around our operations. The economic empowerment of our own employees is equally important, as all our employees in South Africa are members of share ownership plans (ESOPs). We are steadily trying to improve our level of dialogue with government, and are in ongoing constructive discussions with them on how to take our mining industry forward, and on improving South Africa's attractiveness as an investment destination.

Restructuring

Let me talk a little bit more about our own platinum business for a while. The journey to turn around Amplats started two years ago. We are continuing with the implementation of our value-driven strategy and our focus remains on the restructuring and repositioning of our portfolio of mines. The restructuring of the operations is now largely complete, with the consolidation of Rustenburg from five mines into three and Union Mine from two mines into one. The next phase is optimising these assets to improve profitability and sustainability, and the respective mine plans have been reviewed and refined with benefits coming through.

We are making progress towards repositioning our portfolio of assets, which includes the disposal of assets, which was communicated in mid-2014. Our objective remains to exit our Union and Rustenburg mines in the most appropriate manner, whether separately or together, through either a sale or public market exit. The exit of certain interests held in our

joint venture and associate portfolio continue to be discussed with relevant partners and interested parties. As we transition the portfolio to focus on our core assets, we have a new capital optimisation programme to ensure we allocate our scarce capital to the highest potential assets and projects.

Modernisation and the need for greater innovation in our industry

Repositioning our business by asset sales or a listing alone is not enough, we also need to modernise how we mine, process and conduct our business. Our response has to be one that is bold, far-sighted and durable. In the words of Amplats' Chairman Valli Moosa, "*It has to be fundamental – any benefits from a mere plastering over the cracks will be short-lived.*"

Our modernisation strategy has a number of elements. The first of these is the consistent generation of acceptable returns for our shareholders. Without appropriate returns – and the subsequent attraction and retention of capital – none of the aspirations of other stakeholders can be fulfilled.

The second element is the modernisation of labour relations. We need to steer away from the combative and confrontational relationship between capital and labour that had become a feature of the industry for so many decades. We must commit to never having a repeat of the tumultuous events of recent times. The 'us and them' syndrome needs to end. This requires a labour force that is given a sense of ownership and responsibility in the fortunes of the company.

Another element of modernisation is improving our relationship with the communities in which we operate. Communities must be able to see and feel a positive impact on their lives as a result of our operations. I am confident that the measures we are putting in place, including Project Alchemy which we announced a couple of years ago, will bear fruits into the future.

The final element is the mechanisation of our mining and extraction processes. Since the start of the Industrial Revolution, the debate over the introduction of mechanised and automated processes and their impact on jobs has raged. However, it is common cause that better productivity is better for the economy, and ultimately for society as a whole. Jobs don't get lost – they get created in new areas. With the current state of technology, mechanisation is both possible and affordable; but, moreover, it is a social and economic imperative.

However, given the magnitude of our extraction challenges, it is quite extraordinary that the global mining industry currently spends so little on innovation and business-improvement programmes. On a revenue-to-revenue basis, the industry spends 80% less on technology and innovation compared with the petroleum sector, for example. Yet our operating costs are increasing three times faster than consumer-inflation rates and are on their way to doubling in less than five years.

With industry margins being squeezed on all fronts, we simply have to embrace innovation if we want to find more productive, efficient and sustainable ways of extracting value from the minerals we mine. We can't rely on only small, incremental changes and a business-as-usual philosophy to get us out of this predicament. Major innovation is exactly what our industry needs to solve its critical challenges. In fact, mining needs to leap forward 20 years in the next five... For us at Amplats, that involves moving away from the past conventional labour intensive underground mining, with its high demands for people, energy and expensive infrastructure to a modern way of mining.

This is the section where we can start a picture loop

We are no longer sitting back and waiting for someone else to innovate and modernise our business, although that has certainly been the case for many decades in South Africa's narrow reef, conventional mining. Almost all the miners in South Africa have announced plans to develop more mechanised mining techniques to access their orebodies. When one reflects we, at Amplats have already, for a number of years, been on a modernisation journey within the company with game changing technological advances such as:

- the Anglo American Platinum converting process which was commissioned at Waterval smelter a decade ago to greatly reduce our sulphur dioxide emissions by some 95%;
- the full mechanisation of our Bathopele mine. A bord and pillar operation utilising low profile equipment and operating at three times the productivity of our conventional mines. Recently we have introduced the next generation of equipment and approximately 10% of the production is delivered by extra-low profile machines. The technology drive continues with the expansion of extra low profile equipment and testing of ultra-low profile mechanised remote controlled mining equipment.

To name a few of the innovations:

- We are presently replanning our Twickenham mine to be the first hard rock mechanised mine to operate with extra-low and ultra-low profile mining technology.

The trial project we have in place at Bathopele mine currently show promising results for application at Twickenham.

- Our Unki Mines, and Joint Ventures of Mototolo and Kroondal also already operate trackless bord and pillar mines.
- Installation of the new nickel tank-house technology at our base metal refinery in Rustenburg that has improved the work environment by reducing ambient tank house acid mist emissions.
- We were the first company to use large scale 3 MW ISAMill™ technology which is a fine-grinding technology to improve PGM liberation and downstream extraction resulting in 3% additional recovery.
- The use of proximity devices to control the safe movement of locomotives, personnel sensors, other sensory and lighting technology and in-stope netting are all technologies that have already greatly improved safety.
- Although a much more difficult nut to crack, is the hard rock cutting projects currently under way at our operations. A number of these are collaboration projects between Amplats, Impala and Joy Global for activated disk cutting in stoping, and Amplats and Atlas Copco for a reef borer, and Amplats and Sandvik for compression cutting in stoping. These projects are all underground and on trial. Also with Atlas Copco we are developing a machine that uses disk cutting, for high rate access tunnels. This trial machine will be available for testing at Twickenham mine in the latter party of 2015.

Furthermore, many influential people in the mining industry now also believe we are on the cusp of an explosion of further game-changing technology. That explosion hinges on having a vision of what a modern mining company should look like – and then on our willingness and ability to collaborate with a broad range of partners to embrace transformational technologies and create win-win solutions for all. Among the front-running technologies are lasers that can cut rock or soften rock to allow cutting of hard rock – to replace drilling and blasting –, 3D point-cloud geo-spatial technology for real-time profiling of excavations, automated robotic equipment that can remotely detect geological structures, and 3D printing to manufacture tailored equipment. Such technologies will further change the way we mine, making mining safer and more efficient, with less environmental impact.

At Anglo American, we call our approach to innovation 'FutureSmart' and it is our response to the industry's global drive for a more sustainable approach to mining. It will accelerate our ability to use innovation and technology to address our critical challenges and find safer, more efficient, environmentally friendly and sustainable ways to unlock mineral value; but no

company can keep pace with today's advances on its own. As part of FutureSmart we're bringing in people with different skills sets and fresh perspectives from other industries. We will also need a different approach to how we train our own employees, and as a colleague often reminds me, our employees will all need to be "Xbox proficient".

Having said this... not all mines in South Africa will be able to attain the modern mine 'vision' in the short term. But that should not deter us from fast-tracking the application of new technologies, even at conventional underground mines.

In closing, for the South African mining industry to deliver on its huge potential will require political will, social cohesion and industrial and commercial pragmatism - Modernisation is key to this – indeed it's a prerequisite for the industry's survival. The mining industry must have the boldness and vision to grasp the nettle of game-changing innovation and start to collaborate with each other to close the technology gap in order to deliver step-changes in performance, particularly in the areas of productivity and safety, thereby creating a modern working environment for our employees and an industry that can deliver returns through the cycles.

But modernisation is also not just about innovation, new technologies, mechanisation and automated processes. We will only attain our vision of a modern mine if we work in partnership with our employees, government, unions and NGOs. This is particularly the case in how we go about upskilling and improving the lives of our current and future workforce. The industry will have fewer direct jobs, but more skilled and better-paid ones affording employees the opportunity to live with their families adjacent to the mine in towns that have decent infrastructure such as schools, roads, water and medical facilities. This modernisation drive will create jobs in non-traditional areas such as the service industry related to equipment manufacture and servicing.

For South Africa's mining industry, taking the path of modernisation may be a tough decision... but it's the only choice we have in a globalised world.