

**SOUTH AFRICA  
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the

MAGAZINE

## Fit for the future

This edition of the *A Magazine* looks at what lies ahead for Anglo American South Africa. It covers leadership perspectives on the next six months, and highlights the growth projects, people, vision and ambition that will drive the way forward.

# the A MAGAZINE

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*Image: A view of Anglo Platinum's new concentrator plant,  
built as part of its capacity expansion programme.*





South Africa has much to look forward to in 2010, over and above the excitement, pride and opportunity that comes with playing host to the 2010 Soccer World Cup.

The cautious optimism being expressed by economists and business analysts suggests that a year of improvement lies ahead for companies that have used the past 18 months to restructure, redefine and reposition themselves to take advantage of the upswing.

In this third edition of the *A Magazine*, we look at some of the impacts that 2009 had on our operations both locally and throughout the Group, and we hear what Anglo American South Africa's leadership team has planned for the months ahead.

We have positive news from the company's Chief Economist, Robert Lind, who offers his insights into the expected recovery. We also share upbeat messages from Anglo Platinum and Anglo American Thermal Coal, both of which have firm plans to build on their respective production and safety successes.

We celebrate 40 years of CSI – a long-burning beacon of hope for thousands of communities around the country (see page 17). We also salute the much-deserved global recognition won by Anglo Zimele, whose model is the first such South African initiative to be recognised by the international Business Call to Action (BCtA) partnership (see page 18).

This edition wraps up with a quick look at some of the practical ways in which business units such as Anglo American Thermal Coal and Kumba Iron Ore are finding new ways to use technology and infrastructure to support their asset optimisation and production improvement efforts.

These are all strong signs of a company that is working as one, with a clear strategy, a coherent identity and a sense of purpose.

Executive Director Godfrey Gomwe couldn't have put it better when he said, during his interview for the feature on page 10, that "I have a support base of over 100,000 people, so we are going to achieve what we need to, together".

Indeed we will.

**Premilla Hamid,**

General Manager: Public Affairs  
Anglo American South Africa

# Fit for



*A view of the Polokwane Metallurgical Complex, taken at dusk.*

**Many companies have operated** on survival instincts for the past 18 months. Some have emerged wiser and fitter, and others, unfortunately, have struggled to find their feet.

Anglo American South Africa has emerged significantly changed – partly due to economic events, but mostly the result of the major reorganisation of the business. The process has been a difficult one and some tough decisions had to be made, which affected everyone. But the company is now in the best possible shape to deliver on its business strategy.

Thanks to a great deal of hard work at every level, Anglo American South Africa has good reason to look forward to the future with optimism:

- The company committed to putting the new organisation in place and giving affected people clarity on their position by Christmas. This was achieved, and the energy and enthusiasm since implementing these changes is testament to the individual spirit and commitment that fuels the organisation.

# the future

- Thanks to new safety practices, a strong safety culture and leadership at all levels, the company achieved a step change in safety performance. Focused programmes are under way to take it to the next level.
- The preparatory work to separate the businesses that were identified for divestment at the end of 2009 is under way, and the company has already had expressions of interest, particularly in the zinc business.
- Asset optimisation and procurement projects are delivering ahead of schedule.
- The procurement programme continues to deliver cost savings – last year achieving \$510 million in savings (nearly \$200 million ahead of target).
- Anglo Platinum alone has seen employee productivity increase by 21% in the past two years.
- This year will see the introduction of a new set of excellence awards called “Applaud”. These build on the Chief Executive’s Safety Awards to include achievements that reflect Group values in action – in

particular sustainability, partnership and innovation.

- A Business Integrity Policy and Performance Standards have been launched as part of the Group’s commitment to combating corruption. These reflect a core Anglo American value that we should all be very proud of – our integrity.
- There is growing consensus that economic recovery is on the way. Although it is unlikely to be entirely smooth, the company takes comfort from the strength of the long-term fundamentals in key markets such as China, India and Brazil.
- Anglo American has one of the highest quality and largest project pipelines in the mining industry, and is progressing well with its key strategic growth projects.
- The company has a clear strategy, a streamlined, efficient structure and a coherent identity and sense of purpose.

It is a business that is now fit for the future.



*Anglo American Chief Executive Cynthia Carroll, with President Jacob Zuma and Godfrey Gomwe, Anglo American South Africa Executive Director.*



# Feet still **firmly** **planted** in SA soil

**Anglo American is firmly committed** to investment, transformation and job creation in South Africa and to working closely and constructively with government. So said Chief Executive Cynthia Carroll when she met with South African President Jacob Zuma during his state visit to the United Kingdom.

During the visit, Carroll highlighted Anglo American's groundbreaking development in becoming the first mining company to have a project accepted by Business Call to Action (see full story on page 18). The project is a spin-off from the local Anglo Zimele initiative, and is expected to create 25,000 new jobs in up to 1,500 new businesses across the country over the next seven years.

## R12.5 billion **boost for** **platinum**

**"The rights offer will not detract us from delivering on our turnaround strategy. Anglo Platinum has delivered strong operational performance and we must continue to do so to achieve the tough targets we have set for 2010. "**

**Neville Nicolau**, CEO of Anglo Platinum

Anglo Platinum now has a more balanced capital structure, enabling it to focus on extracting value from its existing operations and optimising its premium assets and growth projects through disciplined investment.

**Anglo Platinum's rights offer**, which aimed to raise approximately R12.5 billion to support the company's operational flexibility and capacity for growth, was welcomed with open arms by shareholders. It was significantly oversubscribed when it closed on 26 March – a clear demonstration of confidence in Anglo Platinum's strategy as the world's leading producer of platinum.



# PERFORMANCE

Group performance highlights for the year ended 31 December 2010

**\$4.5 bill**

Operating profit earned from core operations, despite the unpredictable economic background.

**\$2.14**

Earnings per share.

**92%**

The percentage of Anglo American sites that were fatality-free in 2009.

**\$2.6 bill**

Underlying earnings.

**1.4 billion**

Asset optimisation and procurement delivered more than \$1.4 billion of benefits from core operations. A target of \$2 billion is now to be delivered from core businesses alone by 2011.

## IN BRIEF:

- Anglo American delivered on its commitment to put the new organisation in place and give everyone clarity on their positions by the end of 2009.
- The Group now has a more efficient and effective structure.
- It has made good progress on key projects.
- Asset optimisation and procurement programmes are ahead of schedule.

*These washers, struck from platinum sheet, will eventually be crafted into bridal rings.*

**COSTS** – down by \$712 million (5%) in the past year

**FATALITIES** – down by 57% since January 2007

**LTIFR** – down by 52% since January 2007

PLATINUM  
RUSTENBURG

99.99

MADE IN S.A.

Pure platinum bar product.

"While our results were unsurprisingly lower than during the previous year, our businesses have delivered strong performances in challenging circumstances. We've come out of it a significantly changed business, and one that is much better positioned to achieve our ambition of becoming the leading global mining company."

Cynthia Carroll, Chief Executive



Anglo American has been a major investor in Chile for the last 30 years and employs more than 10,000 people there in its copper operations and at Scaw Metals (Moly-Cop).

## \$10 million support for Chile reconstruction

**Anglo American has donated** US\$10 million to rebuild houses and schools and to implement emergency water and electricity services in Chile, mainly in the areas near the Group's operations that were affected by the devastating earthquake in February. The company will work with the Chilean government to formulate the aid and reconstruction plans.

"I am pleased to confirm that no Anglo American employees or contractors working at the time of the earthquake were injured," says Cynthia Carroll, Anglo American Chief Executive. "We are committed to the reconstruction of areas impacted by this tragedy, by ensuring that we can partner with government in providing relief."



*An aerial view of the Rosario open pit at Collahuasi Copper Mine in Chile.*

*Los Bronces Copper Mine plant, in Chile.*



## Anglo American takes top honours at Brazil mining awards

**Anglo American has been named** large mining company of the year 2009 by the readers of *Brazil Mineral* magazine. *Brazil Mineral* is considered the leading mining publication in the country, and has a monthly circulation of more than 15,000.

The magazine surveys its readers annually on a range of issues facing the sector. The latest survey was carried out prior to the Group restructuring, and covers the old Base Metals business unit. The company was specifically praised for its growth, innovation, environmental policy and relationships with key stakeholders. It is the first time Anglo American has triumphed at the awards.



# One million tonnes and counting ...

Anglo American Thermal Coal – which exports an average of one million tonnes of coal to Israel annually – was recognised for its contribution to bi-lateral trade at a recent trade awards ceremony hosted by the Embassy of Israel and the South Africa-Israel Chamber of Commerce. The chamber promotes commercial growth between the two countries and honours those who have made outstanding contributions in this area.

Anglo American Thermal Coal was singled out for the value and volumes of its exports to Israel, which have, over several years, played a significant role in the country's generation of electrical power. The bulk of this coal export is supplied by Goedeheop colliery, which has enjoyed a two-decade-long relationship with Israeli coal supply corporation NCSC.



**"It is nice to be recognised like this. The product we have supplied over this lengthy period has come to an end, but we look forward to providing alternative products and maintaining what has been an outstanding relationship."**  
**Clive Ritchie**, Goedeheop colliery's General Manager



## A night of networking

**Accurate, balanced reporting** in the mainstream media plays a vital role in Anglo American's communication strategy. It is how the company shares its news with the public, and how it gauges public response to its activities.

The value of this role was recognised at a special year-end event in December, where journalists were personally thanked for their support by the newly appointed Executive Director of Anglo American South Africa, Godfrey Gomwe.

Held at La Toscana, Montecasino, the event was an opportunity to introduce new Anglo American executives as well as to meet new journalists covering the mining sector.

After cocktails and snacks, the media were indulged with the gracefulness, poise and skill of the *Cinderella On Ice* skaters at the Teatro Theatre.

"The success that Anglo American has enjoyed in the media over the years is a direct result of relationships that have been built with key members of the South African press," says Pranill Ramchander, Media Relations Manager at Anglo American South Africa. "This event provided the perfect platform for a highly enjoyable and rewarding networking opportunity."

## Soccer fever's spreading ...

Few can resist the temptation to don soccer jerseys and toss a few footballs around, as the Soccer World Cup kick-off draws nearer. The people at Anglo American South Africa's Johannesburg Campus are no different, with the recent launch of a Football Friday campaign.

Any employee or contractor can now join the Anglo American South Africa "Football Fan Club", and on each Football Friday, anybody wearing a football shirt qualifies to enter a draw to win tickets to World Cup matches. The fun includes live demos from soccer tricksters and vuvuzela choirs, among others, and will last until the end of the World Cup in July 2010.



Enthusiastic fans sign up to join for the Anglo American Football Fan Club. From Left are Kirsten Randall, Thulare Bopape, Ronita Singh, Dorothy-Anne Mothoane and Virginia Sithole.



## Highlights from the keynote address

by **Cynthia Carroll**, Chief Executive

- The restructuring of Anglo American has created a much safer, more performance-oriented Group, driven by the application of value-based management. It has a more streamlined and efficient structure. "We know where we're headed. We're vigorously executing our clear strategy focused on the most attractive commodities, and we're in great shape for the upturn."
- One of the key challenges facing the mining industry is energy: global primary energy demand is forecast to rise more than 50% by 2035 and therefore reliable, abundant, cost-competitive and secure energy supplies will be crucial to long-term investment decisions. How Africa tackles the energy challenge will impact ongoing prosperity, and government, Eskom and the industry need to work together in this regard.
- Minimising water usage remains a top priority, along with broad sustainability issues, which are being tackled through initiatives like Anglo's SEAT community engagement toolbox and the Anglo Zimele small business development programme. "Mining should not just be about providing the growing volumes of commodities that the world needs."
- In terms of climate change, Carroll said, "There is an opportunity right now, post Copenhagen, to define the ways in which we will act on climate change. We have to be leaders, we have to be proactive and we have to demonstrate to the world that the mining and metals industry acts responsibly."

# Leading globally, making a difference locally

**The Mining Indaba is a major event** in the global mining industry's calendar, bringing together people from around the world to discuss how Africa can capitalise on and develop its mining interests.

In keeping with its aspiration of becoming the leading global mining company, Anglo American increased its presence at this year's conference, showcasing its diverse portfolio of core mining businesses, the many ways in which it is delivering on its strategic goals, and the value that the Group adds to its stakeholders and communities.

The integrated marketing campaign included an exhibition stand (pictured above), moving media in the form of Anglo American-branded cabs, a keynote address by the Group Chief Executive, an advertising campaign targeting business publications during the week of Mining Indaba, general marketing material and an Anglo American-sponsored Gala Dinner at the Group's Vergelegen Wine Estate.

The four-day Indaba attracts around 4,000 delegates from all over the world, and is one of the largest gatherings for analysts, fund managers, financiers, governments, companies, project developers and executives in the mining industry.

It is used as a platform to profile the Anglo American Group and its activities, thus solidifying and facilitating key partnerships while offering valuable networking and business opportunities. Based on the theme "Leading globally, making a difference locally", this year's campaign highlighted the Group's determination to challenge the way things have "always been done", to be open to learning new approaches and to encourage new ways of thinking.



# TRENDS

This year's Mining Indaba was dominated by three key topics, driven by South Africa's current mining landscape:

**Nationalisation:** The debate around nationalisation of mines continued. Overall, the call for nationalisation was not well received by the industry, with the general consensus being that it would have a crippling effect on the South African economy. Commentators noted that the impasse between the ANC Youth League and the Minister of Mineral Resources, Susan Shabangu (who voiced her views against nationalisation) speaks to the need for government to formulate a proper policy on the issue.

**Power crisis:** In addition to Eskom's proposed tariff increases, the shortage of power supply remains a major threat to the domestic mining sector. Nedbank Economist, Dennis Dykes noted that at least 40% of the mining sector would be impacted by these increases, the knock-on effect being increased job losses and shorter mine lives. In response, some global mining majors are looking to invest in Eskom's Kusile power plant.

**Mining regulation:** The conversion of mining licences to New Order Mining Rights is anticipated to be a thing of the past, as Minister Susan Shabangu was quoted as stating her commitment to shortening the approval process. With respect to transformation in the sector, she also stated that the Codes of Good Conduct would not be implemented before thorough consultation had taken place with industry stakeholders.



**"The government should amend the Minerals Act and include a clause that would compel all mining companies to enter into a partnership with the state before they were granted mining licences."**

**Julius Malema**, President, ANC Youth League

**"Nationalisation of mines is not government policy. In my lifetime there will be no nationalisation of mines."**

**Susan Shabangu**, Minister, Department of Mineral Resources

**"How we transform the mining sector should be located within such a broader discussion and not be based on one-third of a de-contextualised clause in the Freedom Charter."**

**Jeremy Cronin**, Deputy Secretary General, South African Communist Party

**"We should simultaneously pursue energy efficiencies ... and take the lead in looking at other energy alternatives."**

**Cynthia Carroll**, Chief Executive

*Guests at this year's exclusive Gala Dinner, sponsored by Anglo American and hosted at the Group's Vergelegen Wine Estate.*



Anglo American South Africa's charismatic leader talks to the *A Magazine* about cherished memories, special moments and leadership lessons.

**Despite his position as head of the largest private employer in the country, Godfrey Gomwe credits his team whenever an opportunity arises.**



# Up close and personal, with Godfrey Gomwe

**Y**ou'd be forgiven if the title "Executive Director of Anglo American South Africa" conjures up images of a demure businessman who is too pressured for a casual chitchat. Godfrey Gomwe is far removed from that imaginary depiction. His love for people and passion for life is immediately evident in his unassuming manner.

Despite his position as head of the largest private employer in the country, Gomwe is not overly interested in drawing too much attention to his own efforts, but rather credits his team whenever an opportunity arises. "I have a support base of over 100,000 people, so we are going to achieve what we need to, together," he says.

As one of ten siblings, Gomwe grew up in Gomwe Village, Zimbabwe, approximately 80km west of Harare, where he walked a 10km roundtrip to Mariga Primary School every day before herding cattle for the rest of the afternoon. "That part was not always fun," he chuckles, "but some of my fondest memories are when I could clearly hear the trains in the distance. I knew that wherever that train was going, I needed to be there."

Before Gomwe could set off on the road to his destiny, he first crossed paths with Dr Casey, the man who employed his father as an orderly to do odd jobs. Little did Gomwe know that along with his father, Dr Casey would also become one of his mentors. Dr Casey was not only the one who helped pay for his secondary school fees, but he also encouraged Gomwe to excel at his A levels – so much so, that the then Rhodesian government gave him a scholarship to go to university.

"When I went to the University of Zimbabwe on the day of registration, I had the intention of studying Geography Honours or a B.Sc. Economics. While I was standing in the queue I noticed another line that was even longer than the one I was in, so I asked one of the students what they were signing up for. He replied 'accountancy'. As I didn't have any career guidance at school and seeing that I never took accounting, I ignorantly asked him what this was, to which he responded, 'it's money stuff'. So I signed up for it! In the first term I was mesmerised by what accountancy could offer. By the end of the year I was top of my class."

Gomwe accepted his first position as a temporary teacher at a high school in Zambezi Village, Gokwe, which is not too far from the deprived rural area, Binga. Gomwe admits that Binga has always been close to his heart and when he was appointed as CEO of Anglo American Corporation Zimbabwe in 2001, he and his interior decorator wife, Hilary, used part of their salaries to send truck loads of maize and food parcels to help sustain those affected by the drought in the area. "It was not a difficult decision to make," he says, downplaying his remarkable charitable donation. "I grew up in a big family where there were more needs than resources. From a very young age, my mom taught us all to share."

Gomwe has always expressed a key interest in CSI activities and as the current Chairman

## Did you know?

Gomwe has spent the last 20 years in executive level positions in the metal and mining industry, including ten years with Anglo American. Previous positions include Head of Group Business Development for Africa, Finance Director and Chief Operating Officer of Anglo American SA, and Chairman of Anglo Zimele, the Transformation Unit of Anglo American.



## Five quick facts about Godfrey Gomwe

- Apart from a daily dose of the *Business Day* newspaper, he is currently reading *The Fat Tail*, a book on unusual events that shape the world.
- Anything goes in terms of movies but if he had to pick a favourite it would be *Butch Cassidy and the Sundance Kid*, only because of the Bob Dylan song, *Knocking on Heaven's Door*.
- He enjoys most foods but loves Penne Arrabbiata.
- In his car, he usually listens to jazz.
- If he could invite any guests for dinner, they would include Bob Dylan, for his musical talent, Bill Gates, for his humanity and of course Gomwe's wife, Hilary for the companionship.

of Tshikululu Social Investments he believes that organised charitable giving has far-reaching effects that are able to positively change the social fabric of South Africa. "I firmly believe that you can never give enough as there will always be a need," he says. "There is nothing altruistic about it, giving is merely the right thing to do. It's about sustainable development that has a visible and measurable impact."

During his second year of study Gomwe signed up at Deloitte & Touche before going on to work at PricewaterhouseCoopers (PwC) the next year. He doubles up with laughter when he recalls that a senior partner at Deloitte called him the following year to find out why he didn't report for duty. "I didn't realise that they wanted me back, so I had already signed up with PwC!"

It was at PwC where he met Senior Partner, Tom Taylor, who taught Gomwe a valuable lesson when he made what he describes as "the biggest mistake of my third year of articles". After weeks of work, Gomwe and his team had just completed an audit at the largest steel business in Zimbabwe. "It was about 7:30pm and dark when we eventually finished. Armed with a set of top end audit working papers, I placed the papers on the roof of my car while looking for my car keys. And then I drove off.

"You can imagine what went through my mind when I drove back there to find just scraps of paper all over the place!" he exclaims. "I thought this is it, I'm fired."

Fortunately for Gomwe and the two-year long relationship he had fostered with the company, the client stood up for him and asked Taylor to give Gomwe another chance. "Even though Tom had all the reason to sink me, he kept me on," he nods in affirmation. "Trust me, I learnt a precious lesson to take a bit more care. Tom also taught me that every situation is unique and you should always give people a chance for further development."

Gomwe has carried this lesson with him throughout his career. "I've always tried to instil the idea in my team that their current situation or state of affairs can be different. You don't

have to do the same job all the time; develop yourself and try something different."

Keeping his staff motivated will always be high up on Gomwe's packed agenda. "The key is to make it interesting for your team as it makes them want to do well. I love to see others succeed. It's not about me, it's about the power of working with teams and collectively feeling sufficiently empowered. I believe in sharing the load, reaching a point of consensus to walk the road together, and giving credit where credit is due."

Gomwe's second and perhaps hardest business lesson learnt was as the Financial Director of a gold mining company in Zimbabwe, which he and his team had built up from scratch to a 100,000 ounces per annum gold operation. "My counterpart in London insisted that we pay dividends even though we had no cash flow to support the decision. We still had running expenses and mine maintenance was due," he says. "When my colleague realised that we were in trouble due to a bad business decision, it was too late, and he resigned. I chose to stay and fix the problems. Through pure tenacity, I turned the situation around and was appointed as CEO."

Gomwe stayed in this position for five years until the company was sold to Ashanti. "Looking back on the situation, I could have distanced myself, but I'm not one to give up. This mistake turned into a massive positive and is something that I am still proud of today."

Gomwe lists one of his top achievements as being the President of the Institute of Chartered Accountants of Zimbabwe. "Although I was a member of the council for eight years before this appointment, I was only 36 when I took on this position and held it for three years."

It is obvious that this man's strength lies in his personality and work ethic. When asked to describe himself he says, "I consider myself to be a hard worker, someone who is focussed and committed, and who is a firm believer in people and their abilities. I am patient and allow things to progress without too much interference." He adds that his weakness for



**"I am very excited about the position and the chance to team up with the Business Unit CEOs to deliver on the Group's strategy."**



procrastinating is not necessarily a negative, as he is able to perform well under pressure and then does things quickly, but properly.

Responding to what attracted him to the position of Executive Director of Anglo American South Africa, Gomwe states, "I know this company well and understand its processes, the people, what its strategy is all about, and what we need to deliver and achieve. I am very excited about the position and the chance to team up with the Business Unit CEOs to deliver on the Group's strategy."

"We now have our own South African exco to progress on decision-making processes and to get answers quicker, so that we are not bound to plc time. It's a different structure to what we had before. We have a clearer strategy and direction with the Business Unit CEOs being based in South Africa and dealing with our matters directly."

"This is not new territory for me, I have a long history with Anglo American."

Gomwe adds that being at Anglo American is phenomenal. "It is a great place for executives to thrive in, and moving up in the ranks is quite something."

When asked what he thought of the criticism that his appointment was merely to appease government, Gomwe responds without hesitation. "The appointment has a lot to do with the new Anglo American and our strategy to become the leading global mining company. With 40% of the Group's net operating assets being in South Africa, the company can't afford to employ 'token' executives."

"A core part of my role, along with the highly experienced and competent Business Unit CEOs, will be to get on with the task of reinforcing the company's relationship with all our stakeholders and contributing to the Group's successes as we continue to invest in and grow our operations in the country. This is a clear vision and it can't be delivered via remote control from head office."

Gomwe's appointment completes the restructuring and repositioning plans already announced by the Group and will

bring cohesion to South African activities while driving the One Anglo strategy. "I look forward to helping bed down these changes, which will position Anglo American for sustained, profitable growth in our key commodities and core mining activities," he says.

"South Africa is very much issues-driven, with four key delivery areas. These include repositioning Anglo American in South Africa, our zero harm approach to safety, our significant corporate social investment initiatives to create jobs and improve the lives of South Africans, and finally our goal to help the company and South Africa achieve its broader transformational objectives." He adds that other critical areas include delivering on the Mining Charter, reviewing licenses to continue with operations, and ensuring the continuity of electrical supply.

While Gomwe believes in giving 100% at work, he also believes in giving his family the same attention and respect. "When I'm at home, I'm at home and I try to separate my business life from my private life as much as possible. I must admit, I do check my Blackberry in the evenings, but unless it's extremely urgent, I don't respond until very early the next morning."

"It's not always easy to create that division, and it takes discipline to consciously separate the two. Actually, it's quite beneficial removing yourself from work situations for a while as it helps you to mull over a situation in your own time to bring about clarity. You should try it," he adds.

Gomwe and his wife have two sons and a daughter. Michael is a Grade 10 student at St Stithians, Gregory is studying Business and Marketing Management at Monash University while their daughter, Farai, is a third-year student in European Law at the University of Maastricht, in the Netherlands.

When asked where Gomwe sees himself in the next five years, he responds confidently: "Opportunities are vast and I am excited from both a corporate and a personal point of view. I just know that I will be in the right place."

Anglo Platinum operated under very challenging market conditions during 2009, precipitated by the economic crisis. However, it used the opportunity to reconfigure its cost base, improve production and take a significant step forward in safety efforts.



*An underground conveyor at Anglo Platinum.*

# On target and ready to perform

**\$1,500**  
The average  
market cost of  
an ounce of  
platinum.

## Priorities and plans for 2010 remain as follows:

### **COST MANAGEMENT:**

We must continue with our cost-saving mindset.

### **PRODUCTIVITY:**

We must continue to improve productivity and to develop the market for platinum group metals.

### **SAFETY:**

We must continue to strive for zero harm and to conduct our business safely, cost-effectively and competitively.

While financial results are significantly below those of previous years, operating performance improved and production and sales increased while keeping unit costs essentially flat. As a result, productivity improved significantly compared to 2008.

Anglo Platinum's headline earnings for the year ended 31 December 2009 decreased by 95% to R710 million. The main factors contributing to this decrease were lower US dollar prices realised on metals sold, offset by higher sales volumes and the receipt of insurance income. Headline earnings per ordinary share decreased 95% to 298 cents. Headline earnings exclude profits of R2.5 billion realised on the conclusion of Anglo Platinum's BEE transactions with Anooraq Resources Corporation and Mvelaphanda Resources Limited. Basic earnings per share, which include the profits on the transactions, amounted to 1,269 cents, down 79% on 2008.

With growth in company debt levels as a result of the global economic downturn, Anglo Platinum has chosen to raise additional equity through an approximately R12.5 billion rights offer which will provide a more balanced capital structure, to support operational flexibility and capacity for growth.

Anglo Platinum has delivered strong operational performance and will continue to do so to achieve the tough targets set for 2010.





Integrity and sound business ethics are a critical aspect of any company that is striving for long-term growth: they are good for a company's reputation and good for the bottom line. Here's how they are being implemented at Anglo American South Africa.

## Why **GOOD** business is **PROFITABLE** business

**R**ecent research by the Institute of Business Ethics<sup>1</sup> has found that companies that show a clear commitment to ethical conduct usually outperform companies that do not. In other words, not only is ethical behaviour the right thing to do, but it also pays off in financial returns.

At Anglo American South Africa, this integrity is embodied in the recently launched Business Integrity Policy. This policy provides guidelines for how and why the company works, not only supporting its values of Safety, Care and Respect, Integrity, Accountability, Collaboration and Innovation, but also providing a practical framework for Anglo American's ethical approach to doing business.

"Our stakeholders need to be sure that we will always deal with them fairly and ethically," explains Godfrey Gomwe, Anglo American South Africa's Executive Director. "Earning and retaining their trust is fundamental to our business. The new Business Integrity Policy makes it clear that we are opposed to corruption in any form, and committed to operating to the same high standard of integrity wherever we work. It sets out the standards of conduct required at every level of the business."

Gomwe emphasises that the policy is not designed to govern or chastise employees, but rather to inform and support them. "We believe that our people have integrity, but individual interpretations and behaviours may vary throughout the organisation. Having such clear, detailed guidelines will now make it much easier to quickly and transparently address any concerns over certain business dealings. It also protects employees against potential problems. By clarifying what is and isn't acceptable, and by ensuring that everyone is properly informed, the Business Integrity Policy will help to prevent employees from engaging in activities that might be construed as unethical or bad practice."

### Think about it

**"When business integrity is present throughout the deepest layers of a company and not just at its surface, it becomes the heart and soul of the company's culture and can mean the difference between a company that succeeds and a company that falters."**

**Robert Moment**, author of best-selling book, *It Only Takes a Moment to Score*.

<sup>1</sup>An organisation that is among the world's leaders in promoting corporate ethical best practices

# Economic recovery: we're along for the ride

The world's economies are emerging from what Anglo American's Chief Economist Robert Lind calls an "unprecedented period" for the global economy. He is cautiously optimistic, though, and offers his insights into the expected recovery and what it means for the group.

The global economic downturn witnessed at the end of 2008 and 2009 was the most severe since the Great Depression of the late 1920s and early 1930s. Massive policy stimulus has helped to stabilise the world's leading economies and there are growing signs of a recovery spreading across the world's major economies.

Following the collapse at the end of 2008 and early 2009, world trade and industrial production have bounced. But there is a clear divide between the advanced and the emerging economies. The emerging economies, particularly China, India and Brazil, are enjoying a stronger resurgence compared with their more established counterparts in the US and Western Europe. Despite the disparity, the two are still inextricably linked, most notably the major players, China and the US.

Inevitably, this means there are still some question marks over the sustainability of the recovery. In the advanced economies there are sizeable problems to overcome. The financial system is still fragile and companies and consumers are rebuilding savings and paying down debt, which will probably restrain the upturn.

In the emerging economies, growth is more solidly based and China, India and Brazil grew more strongly than expected in 2009. In these economies, policymakers are worried that growth is too strong, which is fuelling inflationary pressures. In China, there is already a discussion about when to tighten and how to rebalance the economy. Policymakers are trying to head off the threat of a housing bubble. While this is unlikely to choke off China's growth in the short term, there are risks of slower growth in the medium term.

There are important trade and financial links between the US and China, which means that the two won't de-couple completely.

China is still hugely dependent on exports to the US. The fact remains: if the US has a problem, it is very difficult for emerging economies – no matter how big they are – to escape from that pressure. Over the course of the next four or five years, the US is likely to undergo a modest recovery, and this will prove to be an overall constraint on global economic growth.

There is good news on the horizon, however, and Robert predicts a supportive economic environment for Anglo American and the commodities industry in the future. While there are risks to worry about, economic and financial conditions should remain broadly supportive of the commodity markets that matter to the Group. Robust growth in emerging economies, low US interest rates and a weak dollar will help to support prices for metals and bulk commodities.



**"South Africa is coming out of its first recession in almost two decades reasonably quickly."**

**Gill Marcus,**  
Governor of the  
Reserve Bank,  
23 Feb 2010.

**"The onset of recovery should confirm our growth forecast at a rate of between 2% and 2.3%."**

**Monde Mnyande,**  
Chief Economist  
at the Reserve  
Bank,  
23 Feb 2010.





Harry Oppenheimer and MC O'Dowd at the construction site of the Soweto Teachers Training College in 1977 – one of the Anglo American Chairman's Fund's early projects.

**Anglo American**  
**spent**  
**R693.9**  
**million**  
**on social**  
**investment**  
**in 2009**

"There is nothing altruistic about giving, it is merely the right thing to do. It's about sustainable development that has a visible and memorable impact."

*Godfrey Gomwe, Executive Director of Anglo American South Africa.*

# 40 years of giving

**For over 40 years**, a thoughtful approach and deep understanding of the developmental realities in a changing South Africa has singled out the Corporate Social Investment (CSI) initiatives of the Anglo American Group from others in the field.

The company implemented CSI initiatives long before any other mining company deemed it necessary, appropriate or fashionable, with its initiatives predating any enforced current day legislation. Today, Anglo American is still South Africa's largest supporter of sustainable development projects, working closely with government, communities, and NGOs to create a better present and a sustainable future.

Central to this CSI framework has been the Anglo American Chairman's Fund, which has emerged as the first professionally managed CSI fund in South Africa. While the current Chairman's Fund was formalised as a Section 21 company in 1974, there has been a Chairman's Fund for social investment in the group since 1917.

Over the years, the group's CSI investment initiatives have been structured around long-term development. This is accomplished through recognising potential and talent in select individuals and community champions, listening to them, and then creating partnerships that will offer the most effect. The Fund supports innovative interventions that create sustainable social upliftment.

The Fund has been recognised by the annual Trialogue survey for eighth years running as South Africa's best grant maker, topping the list of more than 70 of the country's most successful corporate companies. Key evaluation factors in the survey include the competency of the Fund's management, the manner in which it engages with beneficiaries, and the way it interacts with the communities it supports.

However, the Chairman's Fund is not the only body through which the group participates in CSI projects. For example, in 2009, Anglo American extended the world's largest workplace programme for HIV/AIDS to dependents of employees and contractors, with approximately 64 000 people taking up voluntary counselling and testing in that year.



*Rampal Dhewchand of Awesome Snacks, based in Mpumalanga, shows off the flavouring machine that the Anglo Zimele Community Fund helped him buy.*

*Photo: Lorin Kavanaugh-Ulku, BCtA*

BCtA is a multi-stakeholder partnership involving the United Nations Development Programme, the UN Global Compact, the British and Australian governments, the International Business Leaders Forum and the Clinton Global Initiative. The partnership is a global initiative that seeks to harness the power of business investments to reduce extreme poverty and improve lives. The BCtA is active in more than 20 countries.

# Anglo Zimele goes global

Anglo American's long-established Anglo Zimele programme is the first such South African initiative to be recognised by Business Call to Action (BCtA), an international partnership focused on small business development.

**BCtA has accepted a commitment** by Anglo Zimele to create inclusive business models to develop the communities near Anglo American's commercial operations. This will extend the economic growth of the areas around mining operations, creating business and employment opportunities for those who don't work for the mining operations, but who live close to them.

Anglo American's commitment to the BCtA will be realised through the Anglo Zimele Community Fund (previously known as the Small Business Start-up Fund), which will complement the company's award-winning enterprise development projects: Anglo Zimele Supply Chain Fund, the Anglo Khula Mining Fund, the Anglo Zimele Entrepreneurial Training and Development Fund, and the Emerge programme in Chile.

This initiative will see Anglo American create up to 25,000 new jobs in up to 1,500 new businesses over seven years, through 24 enterprise development hubs (12 existing and 12 in progress) in its major mining operations and labour-sending areas. Entrepreneurs will also benefit from mentoring and training provided by Anglo American teams and partners.



*The Enzani Technologies "winning team" are, from left, Lerato Mosiane, Tlaleng Moabi, John Moalusi (Chairman) and Landiwe Nene (Managing Director).*





The Black Wattle coal reclamation initiative is one of AKMF's flagship projects. Managed by Zingaro Trade 51 (Pty) Ltd, a black-empowered joint venture between Eyethu Coal and Geovicon, this operation reclaims coal from discard dumps at the Black Wattle colliery in Witbank and sells it for re-use in power stations. It also takes up discard material, thus reducing the colliery's environmental footprint. The project beneficiates the reclaimed coal, the majority of which is supplied to Eskom's Duvha Power Station.

**To date the AKMF has invested R132 million in 11 projects, which turn over R786 million and employ 810 people.**

# Partnering to promote mining

## Girl power makes it happen

When two female engineers and a colleague launched Enzani Technologies in 2005, they were determined to secure a foothold in the mining industry. Five years later, they have done that and more: following a successful partnership with Anglo Zimele to fund its growth path, Enzani Technologies has just added another award to its growing trophy cabinet.

The team was announced as the winning medium-sized company, and the overall winner of the Department of Trade and Industry's Technology for Women in Business (TWIB) Awards. These awards emphasise the application of science and technology to achieve business growth in women-led enterprises, particularly in small, medium and micro enterprises.

Enzani, which now employs 17 engineers, technicians, drawing office personnel and site managers, is an electrical engineering, procurement and construction contractor that offers turnkey solutions from substations to energy management and low voltage panels.

This is not the first time that the company has featured in the TWIB Awards – in 2008 it was named second runner-up. It was also a finalist in the 2009 BBQ SMME and Businesswomen Awards.

## DID YOU KNOW?

**Enzani is derived from the Zulu word "yenzani", which means "make it happen".**

**Smaller mining companies** face significant barriers, including the approval of prospecting permits, a lack of investment capital, and the absence of sound advisors to offer appropriate guidance. This is precisely the challenge that the Anglo Khula Mining Fund (AKMF) addresses.

AKMF is a R200 million joint initiative between Anglo American and Khula Enterprise Finance Limited, a government-owned entity that promotes small and medium enterprise development.

Managed by Anglo Zimele, AKMF aims to boost the South African economy and support empowerment initiatives by helping black-owned mining operations to become commercially viable prospects.

The fund assists junior empowered mining companies with equity and loan finance at prime interest rates, complemented with technical support during the exploration phase. This includes hands-on support and guidance in areas such as corporate governance, legal, accounting, company secretarial aspects and public relations.

This helps the small companies to bring their businesses to a bankable position, at which point a formal financial institution would offer them the appropriate finance to commence mining operations.

"Without the fund, many black-owned junior companies would not have the opportunity to operate in the formal mining sector," notes AKMF Manager Mxolisi Kota.

The AKMF insists, however, that partnered BEE skills are part of the funding model, along with day-to-day involvement and an equity contribution from the partner company, to ensure the success of each project.

Teachers and members of the Edward Matyeka Primary School governing body celebrate the official hand-over of a fully equipped kitchen that will provide meals for several hundred orphaned children.



# Food for thought

**Greenside colliery in Witbank has donated** a fully equipped kitchen to the Edward Matyeka Primary School in the nearby Kwaguqa township, enabling the school to provide daily meals for several hundred orphan children.

According to Mine Community Development Superintendent Glanrose Shimusi, over 700 of the school's 1,200 pupils are orphans, and the school had been operating a feeding scheme for the children's benefit under the most difficult conditions.

"Their only facilities were a small room without electricity and running water," says Shimusi, adding that while the government provides soup powder, the school often supplements this with meat bought at its own expense. In addition, it grows its own vegetables in the garden tended by members of the school's environmental club.

Inspired by this demonstration of leadership, the colliery built a new kitchen for the school. The kitchen, which cost nearly R600,000, was completed in December 2009 and boasts two gas stoves, a refrigerator, stainless steel cupboards and sinks.

The mine's relationship with the school began last year, when Greenside instigated a recycling project among local schools. The enthusiastic attitude of pupils and staff alike, in spite of their lack of facilities, saw the school being adopted by the mine.

Now that the new kitchen is up and running, the next stage will be the construction of a hall that can be used as a dining room and made available for use by the local community.

## DID YOU KNOW?

A simple peanut butter sandwich can provide an average 20% of a child's daily nutrition requirements.

# 100%

The matric pass rate at the Middelburg Muslim School and the Hendrina Combined School.

Grade 11 PROTEC  
students at the  
KwaMashu viaduct,  
on a civil engineering  
site visit.

# Bright sparks prove the point

With a **100% matric pass rate in 2009**, the Programme for Technological Careers (PROTEC) Pietermaritzburg Academy has proved that the Anglo American Chairman's Fund's long-term vision of backing champions is yielding results for young South Africans.

PROTEC is one of the many organisations with which the Fund has enjoyed a long-term relationship. It is one of the Fund's best practice organisations in education, and sources learners who show academic potential in mathematics and science from 34 schools in the Pietermaritzburg and Midlands areas.

Established in 1989 to improve the quality of mathematics and science education for Grades 10, 11 and 12 learners in KwaZulu-Natal, PROTEC is based on the premise that academic support alone is not enough to ensure a student's successful career development. The programme therefore emphasises learner-centred development of practical and application skills, work experience programmes within local companies, and the development of soft skills such as team dynamics and emotional intelligence.

## GOEDEHOOP REWARDS ACADEMIC EXCELLENCE

Craig Zimba from Tsiki Naledi Secondary School is just one example of a student who will go on to great things, after participating in Goedehoop colliery's Education Flagship Programme during 2009. Winning the Goedehoop General Manager's Award in recognition of his four distinctions and two meritorious levels, Craig is now in his first year of studying metallurgy at the University of Pretoria.

Craig received the award at a ceremony in March, which recognised the successes of the programme's first year and highlighted the achievements of learners, educators and schools.

The function was attended by representatives from the local Department of Education, a large contingent of teachers, principals, top learners and their parents, as well as members of school governing bodies and student councils.

"Being here today reminds me of our President Jacob Zuma's clarion call in 2008, when he said that education must be uplifted from being governmental to societal as it is the only effective tool to erase poverty," said Maureen Mahlwele, the local school circuit manager.

**"Anglo's Chairman's Fund ... [is] a rare treasure, leaving a modest plaque on the walls of umpteen thousand crèches and clinics and community centres, and silently enriching arts and culture and philosophy and enquiry and research. If every company, on its own scale, merely took an interest in the country around it like Anglo did, we'd be a very healthy country."**

**Denis Beckett**, writing in *The Good Company* magazine (December 2009)

## 19.9%

The average rate of university exemption matric passes in KZN in 2009.

## 96%

The number of PROTEC students that achieved university exemption in 2009.



# Getting **personal** about **safety**



**Anglo American – both globally and in South Africa – is seeing great progress in its commitment to zero harm: the Group reported a 57% decrease in the number of fatalities over the last three years, from 44 in 2006 to 19 in 2009. However, achieving zero harm is only possible if everyone in the group is committed to changing their behaviours in order to create a safe environment.**

#### **“Anglo American’s impressive figures**

demonstrate what can be achieved, and employees are now starting to believe that we can work together to get fatalities down to zero – the only acceptable number,” says Anglo American Chief Executive, Cynthia Carroll.

Carroll’s top priority since joining the Group has been the safety of its employees. Determined to address the “simply unacceptable” rates of injuries and fatalities in Anglo American’s history, she initiated a series of internal safety summits in 2007. While this resulted in good progress, she says she soon realised that true success would only come with collaboration between partners in the mining industry.

“It was clear to me that we were not going to be able to achieve our safety goal alone – to really change the culture and achieve substantially different results – until we collaborated with all of those who had a vested interest in protecting lives and who could influence a change in behaviours,” she explains.

“In April 2008 we established the Tripartite safety initiative, in conjunction with the South African Government and local trade unions. With our common commitment, we could start to do things differently. This collaboration initially focused on safety, but we are now looking at other areas, such as occupational health, in which we can work

together to make a real difference.”

She notes that the company’s safety record has improved considerably in partnership with the Department of Mineral Resources and the National Union of Mineworkers (NUM), and adds that in 2009 there were many examples of exceptional safety performance on the company’s part. “Last year, our copper, nickel, metallurgical coal and exploration business units remained fatality-free. Further, Kumba Iron Ore’s Thabazimbi mine, which employs close to 1,400 people, achieved two LTI-free years, and fatalities at Thermal Coal dropped by 50% year-on-year.”

On 20 January this year, Anglo Platinum announced its achievement of a four-month fatality-free period, a first for the company; and Iron Ore Brazil has seen a 98% drop in LTIs since acquisition. However, Carroll acknowledges that while great strides have been made, 19 people still died at Anglo American operations in 2009. “The company is therefore concentrating its efforts in 2010 on the top five safety risks across the business. It will start with a transportation safety campaign, as this will really make a difference to the company’s people on the front line.”

# 170

**The number of fatalities in the South African mining industry in 2009**

# 855

**The number of fatalities in the South African mining industry in 1986**

## 52%

The decrease in lost-time injuries across the Group.

## Q4 of 2009

The first quarter in which there were no fatalities at Anglo Platinum.

## 92%

The company sites that operated in 2009 without a major safety incident.

## 54 days

The longest fatality-free period since listing on the LSE (between September and November 2009).

### Leading the way

Despite the fact that there is still much work needed in order to improve safety, Carroll maintains that Anglo American has helped set a new safety standard for mining in South Africa.

“Fatalities in the country’s mining industry have fallen sharply over the past two years, with around a 25% improvement year on year.”

Anglo American South Africa’s Executive Director Godfrey Gomwe confirms that the company’s safety statistics reveal a much improved performance.

“There were five instances of fatality-free operation for 30 days or longer during 2009,” he says. “Last year, one of Anglo Platinum’s operations had in excess of six million fatality-free shifts and, for the first time ever, managed to operate for a whole calendar year without a fatality. Overall, fatalities in South Africa have seen a 47% improvement from 2007 to 2009.”

Anglo American’s safety statistics back up its commitment to zero harm, and its long-term commitment of optimising the performance of its business by operating safely and sustainably. Its safety measures are leading the way in South Africa, and will continue to do so well into the future.







*Isibonelo colliery's safety efforts are supported by top-end technology: a high tech camera mounted on the dragline has been specifically developed to aid dragline operators at Isibonelo to see any vehicles and people in the vicinity of the machine. The camera is able to "see" through dust and mist.*

# 868 days of zero harm – and counting

Situated just 13km east of Secunda, Isibonelo colliery recorded its last lost-time injury (LTI) more than 24 months ago. This record was made possible by the combined efforts of management, the workforce and unions, who strive to not only achieve zero harm, but also to sustain it.

The team at the mine maintains that working safely is a bit like "sweeping water uphill" – you have to keep working at it all the time. The team also believes that it is essential to lead by example in order to demonstrate that safety really is the responsibility of every individual.

According to Mining Manager Tony Strachan and Chief Safety Officer Willem Coetzer, this belief is firmly entrenched in the workforce. Visible felt leadership (VFL) is key to the colliery's success, and no meetings are held before 11am. This means that managers and supervisors are out in the field, assessing conditions, interacting with staff and ensuring that they know exactly what is happening at the coalface, every single day.

In addition, at least one of the mine's Target Zero Action Plan (TZAP) teams moves across the operation to identify potential risks and commend safe behaviour. Working on both weekends and public holidays, these teams made 285 visits to the operations in 2008, 320 visits in 2009, and a non-negotiable target of 365 has been set for 2010.

Apart from these all-important daily safety routines, Isibonelo introduces innovative interventions to increase awareness at critical times of the year. During last year's typically high-risk fourth quarter, the "Adopt an Op" initiative saw team members each adopt two operators, meeting them on a daily basis to offer encouragement and guidance on working safely through to the end of the year.

The mine has also introduced its own driver training programme and test track, which simulates conditions that might be encountered on site. This must be completed before an employee is deemed fit to drive one of the colliery's light delivery vehicles.

Having reached this level of excellence, the operation is ready to raise the bar even further in 2010 by concentrating on the reduction of medical treatment and first aid cases.

**"We are fortunate to have a sharp team of people who have worked together for over five years. At Isibonelo, people understand each other and we can communicate freely without the problem of language barriers."**

**Willem Coetzer**, Chief Safety Officer at Isibonelo colliery





*Initially developed for surface use, pilot tests with the Prodmate have revealed a number of opportunities for process improvement in underground sections.*

# Productivity and technology go hand-in-hand

**Anglo American Thermal Coal** has begun field tests on a hand-held data-logging device to assist in the division's drive for asset optimisation.

According to Derek Laing, Asset Optimisation Manager for Thermal Coal's Continuous Miner Improvement Group (CMIG), the use of this technology is seen as a management tool that could provide one of the keys to increasing the efficiencies of underground sections across the division.

Known as the "Prodmate", the device is a multi-programmable personal digital assistant that is able to perform a wide variety of functions. For example, a face boss can use it to measure the real-time performance of a continuous miner while underground, or conduct planned task observations to identify training needs and ensure that all necessary safety measures are in place.

Developed by Mining Consultancy Services (MCS), Prodmate has successfully been used in surface industries for some time.

MCS Operations Director, Zaais van Zyl, explains that the Prodmate has the ability to integrate the data being collected by the supervisor with electronic information already captured by the continuous miner.

"The combination of these two data sources will increase the quality of management information available to sections and enable them to optimise their productivity," he says.

Laing adds that the technology's versatility can be employed still further. Information can be stored as a guide for pre-shift checklists and there is sufficient capacity for data to be stored as a miner's reference handbook – all of this readily available in the palm of the supervisor's hand.

The Prodmate keeps the section in full contact with surface computers and control rooms, providing a continuous update on the progress of operations at the face.

"We are pioneering its use as a means of improving process management, particularly with multi-task operations," says Laing, adding that a recent pilot study of roof-bolting activities using the Prodmate revealed a number of opportunities for process improvement.

The trial is part of Anglo American Thermal Coal's ongoing drive to improve productivity and efficiency in its continuous miner sections, and it complements the company's CMIG programme.

**"We are pioneering the use of the Prodmate as a means of improving process management, particularly with multi-task operations."**

**Derek Laing**, Asset Optimisation Manager for Anglo American Thermal Coal's Continuous Miner Improvement Group.



## NEW DENMARK COMMISSIONS NEW LONGWALL

**It's all systems go, for the new longwall miner at New Denmark colliery (pictured left), with the mine successfully installing the longwall ten weeks ahead of schedule. This involved moving 4,000 tonnes of equipment over long distances and difficult terrain 200m underground – all of which was achieved without a single safety incident.**

# A treasure trove hidden in plain sight



*A new day dawns at Sishen Mine. In the foreground is the world's largest jig plant that is turning low-grade material, previously discarded as waste, into export-quality iron ore at a rate of 13Mtpa.*

**Standing on the towering B-grade material dump at Sishen Mine, it is hard to see it for the treasure trove it is. This mountain of waste is now being turned into export-quality iron ore thanks to the world's largest jig plant.**

**The plant was developed** as part of the R5.1 billion Sishen Expansion Project (SEP) that was approved in 2005 following extensive research into the beneficiation of low-grade ore. This proved that jigging technology could be used to commercially beneficiate certain previously discarded material into saleable products with an iron content of 64%.

The jig plant continues to ramp up, ahead of schedule, and has more than doubled production to 10.4Mt (from 4.7Mt in 2008) in 2009, contributing 26% of Sishen Mine's production for the year. It achieved its nameplate capacity run rate towards the end of last year and is on track to produce between 12.5 and 13Mt in 2010.

However, it has not been all smooth sailing, says Kumba's Executive Head of Technical Services, Christo van Loggerenberg. "While jigging is a proven technology and had been used successfully elsewhere, the scale and complexity of the

**450**  
permanent  
jobs  
created

## BUT WAIT, THERE'S MORE ...

Having proven that this jigging technology works for low-grade ore beneficiation, Kumba is already investigating several further projects.

One of these aims to beneficiate the -1+0.2mm fraction of the jig plant run-of-mine feed that is currently being discarded to produce 0.75Mtpa additional fines. The project has the potential to increase the jig plant product yield by about 3%.

Also under investigation is SEP2, which will utilise additional B grade material from Sishen and could add up to 10Mtpa, as well as jigging beneficiation at the new Kolomela Mine at Postmasburg.

operation meant that significant technical challenges had to be overcome during the ramp up," he says.

"It required a lot of cooperation across business units and out-of-the-box thinking to make things work."

But it has all been worth it. "This is a win-win situation," says Van Loggerenberg.

"By lowering the Fe (iron) cut-off point for useable material in the pit from 60% to 55%, the jig plant will deliver an extra 300Mt of saleable product over its life of more than 20 years. Material that for many years has been consigned to the waste dumps is now being transformed into sought-after products. What's more, the mine's remaining reserves will be better utilised."

SEP took 13 million man-hours to complete, and created about 3,800 construction jobs, and approximately 450 permanent jobs.

The jig plant is at the heart of the production process. It is home to 24 jigs located in eight modules that each beneficiate the material in three different size fractions to enhance selectivity in the separation process and increase the final yield. For 2009 an average yield of 57% was achieved, compared to 43% in 2008.

While the end products have a slightly lower iron content than other Kumba products, they share their excellent physical properties and are ideally suited for blast furnaces as direct charge material or sinter feed material.

The final product is transported via the 861km Sishen-Saldanha iron ore export channel to Saldanha harbour on the west coast where it is loaded for the export market.

### FAST FACTS

13 million  
man-hours to complete

3,800  
construction jobs created

450  
permanent jobs created





Meet Sishen's new supertruck – the Komatsu 860E. Jointly developed by Kumba Iron Ore and Komatsu, the truck uses electricity from overhead power cables like a train, has a loading height of more than 6.3m, and handles better than most cars.

## QUICK FACTS

- The trucks are currently fitted with dual-purpose dump bodies and are used for hauling both waste and iron ore.
- The trucks are also a good match for Sishen's shovel fleet and can handle a 10% incline versus the 8% incline that is the current standard. This has a significant impact on the life of mine plan.

# LARGER LOAD, better handling, less emissions

The Komatsu 860E took four years to develop, can carry around 250 tonnes, and is one of the world's largest trucks. To date, 17 vehicles are in service at Kumba's Sishen mine, with the 28-strong fleet due to be fully operational by December.

Werner Badenhorst, Senior Engineer, Planning and Development at Kumba Iron Ore, explains that the company approached Komatsu in 2005 to develop a new truck that would take bigger loads, have improved handling characteristics and even better safety features than its predecessors.

Komatsu worked closely with Kumba to create a "wish-list" for a vehicle that would slot into the existing infrastructure of roads and workshops at the Sishen mine, while being more productive. Prototype trials in 2007 led to a year of fine-tuning and the second prototype was tested at Sishen in 2008 before production started early in 2009.

One clever piece of onboard kit is an anti-rollback system that holds the vehicle stationary on inclines when the driver takes his foot off the brake.

"When he accelerates again, the system calculates the power needed to overcome the vehicle's resistance and releases the brakes when the vehicle has developed enough torque to move the truck forward," explains Badenhorst.

When the truck enters a ramp the driver switches to "trolley assist" and a pantograph above the cab draws power from overhead cables while cutting out the diesel engine. There are clear environmental benefits because this eliminates exhaust emissions from what would otherwise be a power plant hauling the heavily-loaded truck up the incline. It also reduces fuel consumption and engine wear – and improves productivity as the truck climbs the mine ramps faster electrically than by diesel.



*Meet the monster ... the  
Komatsu 860E can carry around  
250 tonnes, and is one of the  
world's largest trucks. To date,  
17 vehicles are in service at  
Kumba's Sishen mine, with the  
28-strong fleet due to be fully  
operational by December.*

## **BIGGER TRUCK, SMALLER FOOTPRINT**

Anglo American benchmarking has confirmed that diesel/ electric trucks are more cost effective than mechanical drive trucks. Furthermore, because the Komatsu 860E draws power from overhead cables, this eliminates exhaust emissions, making it friendlier to the environment. The truck is also able to climb steep grades at an efficient speed while maintaining low engine rpm, thus saving fuel and prolonging engine life.





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