The journey of 120

On 5 October 1889, not long after the establishment of the City of Johannesburg, the modern Chamber of Mines was founded. It was called the Witwatersrand Chamber of Mines, the first incarnation of the modern Chamber of Mines of South Africa currently in existence.

Because the prosperity of the country is so intricately linked to the well-being of the mining industry, 2009 not only marks the first 120 years of service to the mining industry, but also to the country. And the Chamber of Mines is proud to be the custodian and protector of that mutual prosperity.

This is what lies at the heart of ‘The journey of 120’: a journey taken with partners, in trust and understanding, to reach a mutual goal. A journey that has lasted for the past 120 years and will continue, not only for the next 120 years, but for many more to come.
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chamber members

financial corporations
Anglo American Corporation plc.  
Barrick Africa  
Mvelaphanda Resources  
Rio Tinto

base metals/minerals & exploration companies
ASA Metals (Pty) Limited  
Delta Mining (Pty) Limited  
G&WBase and Industrials (Pty) Limited  
Imerys South Africa (Pty) Limited  
Randgold and Exploration Limited

gold mining
African Rainbow Minerals (Gold) Limited  
AngloGold Ashanti Limited  
Gold Fields Limited  
Harmony Gold Mining Company Limited  
Pamodzi Gold

iron ore mining
Kumba Iron Ore Limited

platinum mining
Anglo American Platinum Corporation Limited  
Impala Platinum Limited  
Lonmin Platinum Limited  
Ridge Mining

chrome mining
Samancor Chrome

cor mining
Anglo Operations Limited, Anglo Coal Division  
BHP Billiton Energy Coal  
Exxaro Resources Limited  
Kangra Group (Pty) Limited  
Kuyasa Mining (Pty) Limited  
Optimum Coal  
Sasol Mining (Pty) Limited  
Siyanda Coal (Pty) Limited (t/a Koornfontein Mines)  
Total Coal South Africa  
Tweedwaters Fuel (Pty) Limited  
Umcoeb Mining (Pty) Limited  
Xetrata Coal South Africa

diamond mining
De Beers Consolidated Mines Limited  
Namakwa Diamond Company  
Trans Hex Group Limited

other members
Corobrick (Pty) Limited  
Deilmann-Haniel GmbH  
Murray and Roberts (Cementation) (Pty) Limited  
Shaft Sinkers (Pty) Limited

associations
Aggregate and Sand Producers Association of South Africa  
Clay Brick Association Limited  
SA Association of Mining Contracting Companies  
South African Diamond Producers’ Organisation

suspended operations
City Deep Limited  
Consolidated Main Reef Mines and Estates Limited  
Crown Mines Limited
since its foundation in 1889, the Chamber of Mines has played a major role in serving and promoting the interests of South African mining for, and on behalf, of its members.

The year 2009 marks the Chamber’s 120th anniversary. It is 120 years since the Witwatersrand Chamber of Mines was founded on 5 October 1989, of which the current Chamber of Mines is a direct descendent. There are few institutions that have been in existence for 120 years, and fewer still that have made such an impact in the countries in which they operate. The Chamber has succeeded, among other reasons, because of its unequivocal commitment to ‘promote, serve and protect’ the mining industry in South Africa. It is this dedication in combination with its ability to embrace change that has made it possible for the Chamber to succeed where other such affiliations have failed. The Chamber is uncompromising in its pursuit of excellence, which commitment has characterised its service to the mining industry and the country.

South Africa’s unique spirit is the product of a society that is constantly evolving and adapting to challenges and opportunities. It is this spirit that founded the Chamber of Mines and enabled it to fulfil the seemingly improbable task of serving South Africa’s private sector mining industry through both its good and challenging times. It is this spirit that we acknowledge in celebrating the 120 years of a journey well travelled. It is this same resolve that the Chamber has to draw upon in its continued efforts to identify new opportunities and transform possibilities into tangible realities, thereby maintaining its relevance as it moves forward into the next 120 years.

As we take the next step on this journey we are mindful of the fact that South Africa is changing faster than ever. Transformation in our country and our industry has been a challenging but thoroughly acceptable imperative. There will no doubt be many similar objectives that will need to be achieved in the next 120 years. We are also cognisant of the fact that global developments impact substantially on our efforts to remain relevant. This is the reason we believe that the success of the Chamber, the mining industry and the country depends on meaningful partnerships, commitments and co-operative interaction with all our stakeholders.

During the period under review, the willingness of all stakeholders to work together for the benefit of the sector was crucial in steering a course through the economic crisis that rocked global markets, and which continues to present demanding challenges for South Africa’s leading industrial sector. At the start of the global economic meltdown, production in the local mining industry was already in difficulties as a result of Eskom’s imposition of a force majeure on the industry at the beginning of 2008. The effects of this enforced slowdown were still reverberating through the industry when the global economic crisis became manifest. The
effect on the mining sector was decreased demand and falling commodity prices. In the short and medium term the mining industry was forced to review and curb capital expenditure as immediate counter measures to enable it to weather the economic downturn.

The past 12 months has been a very difficult period for all industries and especially for the mining sector. Despite good macro-economic policies that acted as a buffer against the global storm, South Africa’s economy shrank by 1.8% in the fourth quarter of 2008 and 6.4% in the first quarter of 2009. The economy was further reduced in the second quarter of 2009 by 3%. Although various industries were hit hard by the crisis, key export sectors such as mining and auto manufacturing were severely affected, with mining’s real GDP shrinking by 32.8% and that of manufacturing by 22.1% in the first quarter of 2009.

The Chamber responded to the economic crisis by partnering with its stakeholders in establishing the Mining Industry Growth, Development and Employment Task Team (MGDETT) in December 2008. The task team, comprising organised business, labour and government, focused on short-term survival strategies while also striving to reposition the industry for the next commodity demand cycle.

Amongst the strategies employed, sustainable investment in infrastructure (especially electricity, roads and rail) was identified as essential, not just as a counter-cyclical fiscal policy response by government to the global crisis, but also to ensure that constraints on the industry are reduced in the longer term.

Yet another measure to counteract the difficult circumstances is the participation of the Chamber in the Joint Presidential Working Group. The results of these engagements and cooperation by stakeholders prevented the projected 150 000 job losses as a result of the downturn. Instead the industry shed about 30 000.

The mature and responsible manner in which the 2009 wage negotiations were carried out demonstrates how partnerships and co-operation can achieve acceptable results. The Chamber worked tirelessly with labour and managed to reach agreements without strike action. The 2009 wage negotiations began in June followed by several constructive meetings before another two-year wage agreement was signed on 30 August 2009 for both the gold and the coal sectors.

The industry continues to seek ways to improve its safety record. The more than 50% improvement in the fatality rate over the past 10 years is commendable, but we believe that even this rate can and must be improved. The Chamber therefore continues to seek interventions that will enhance the working environment and the industry’s safety record.

One of these interventions is the establishment of an industry learning hub. The Chamber has already begun the process of recruiting for this enterprise. The primary objective of the learning hub is to promote learning from and with world-class performers in the industry. The learning hub will assist mining companies to acquire the relevant safety skills and build their capacity in this field. With skills shortages, rising costs and falling commodity prices the mining companies must work together to improve their health and safety performance. The main challenge is to move away from merely sharing knowledge, to adopting leading, best practices at the operational level. The learning hub will be based at the Chamber and the Chamber will provide hands-on support.

In May 2009, the Chamber welcomed the appointment of Minister Susan Shabangu as Minister responsible for mining in South Africa. Having previously served as deputy Minister of Minerals and Energy, the industry knows that Ms Shabangu is well acquainted with all the issues and challenges applicable to our country’s world-class mining industry. The Chamber has already engaged with the Minister and looks forward to working closely with her and her director-general, Adv. Sandle Nogxina, to serve the best interests of the industry and of the country.

On the same note I must point out that over the past few years, while she was the Minister of Minerals and Energy, our industry was fortunate to interact effectively with Ms Buyelwa Sonjica. Her transfer to the Department of Water and Environmental Affairs will still see the industry interacting with her on water and environmental issues, which are essential to mining operations.

The continued success of the Chamber would not have been possible without co-operative engagement with our stakeholders. The journey has benefitted through recognition that each and every stakeholder has an important role to play in transforming and augmenting the mining industry. This shared commitment has made it possible to deal successfully with a host of challenges, some of which could have adversely affected this vital economic sector.

In conclusion, I must again emphasise that the Chamber and its members remain committed to working with all stakeholders as we begin the journey into the next 120 years. We remain committed in continuing to support all initiatives that will lead to the emergence of a universally acceptable and properly transformed mining sector that will enhance its global competitiveness and enable it to partner Government in the achievement of major policy initiatives like socio-economic development and poverty alleviation. The Chamber and its members are unequivocally dedicated to the upliftment and increased prosperity of our country’s people.
Introduction

One of the factors contributing to the success of an organisation is the level of trust that exists between the organisation and its stakeholders. To foster trust, an organisation has to prioritise communication, sharing of information, best practices, viewpoints, objectives, feedback and any other intentions or developments that affect that particular organisation.

Organisational communication must be effective for a company to accomplish its objectives. Effective organisational communication makes for a better relationship with stakeholders and is critical in managing uncertainty and perceptions, at the same time as it increases commitment and loyalty.

In pursuit of its advocacy and lobbying functions with government, labour and its other stakeholders, the Chamber continues to enhance its organisational communication by developing and improving its communication systems, its networks and forums to enable it to receive and disseminate the right information at the right time to the right audiences.

The Chamber interacts with its stakeholders through the communication services department whose role is to develop and manage the implementation of well-defined communication strategies to better position the mining industry and the Chamber. The following are some of the communication channels that have been identified by communication services and are used by the Chamber in communicating its activities in terms of economic and socio-economic issues, on health and safety, environment, legislation and skills development.

Industry Promotion

Towards the end of 2009 the Chamber will be celebrating 120 years of service to the mining community. For more than a century, this organisation has provided assistance and advocacy and lobbying services on behalf of its members, and has been
instrumental in shaping and transforming the industry to the benefit of the country as a whole. It has helped to formulate policies on matters vital to the interests of the mining community and in this capacity it remains relevant and essential to the efficient functioning of the sector today and into the future.

The Chamber continues to promote a positive image of the industry, highlighting the industry’s contribution to the economy, improvements in its safety records, health programmes, etc. In an effort to identify gaps or shortcomings in the role it plays, during the year under review, the Chamber conducted an analysis on the impact of its engagement with the media. The findings indicated that there was a negative tone in the reporting of issues on mining. The report highlighted that this was mainly because of legacy issues and the fact that during the period under review, the environment was politically charged. The challenge for the industry in this regard is that it has very active, highly politicised labour movements. This, coupled with the spate of mine accidents, had forced the industry to adopt a mainly crisis induced media presence, with the result that any positive news on the sector hardly gained sufficient traction.

The Chamber engaged with the media aggressively during the 2009 wage negotiations and, based on the media monitoring and analysis during and after that period, the strategy seems to have yielded positive results.

During the year under review the Chamber continued to engage with a number of publishing companies and utilised its existing relationships with them to promote the industry nationally and internationally. Unfortunately, the global economic meltdown drastically reduced the frequency and quantity of these publications. The topics that were covered ranged from an overview of the mining industry in South Africa to matters relating to health and safety, sustainable development, the environment, the economy, labour relations, skills development, transformation and general insights into mining. Some of the publications that partnered with the Chamber and carried the story of mining in South Africa were Growth, Deep South Africa; Succeed/Essential; African Analyst Quarterly; and Mining Weekly.

Arrangements were also made to engage with the electronic media to debate and carry insightful information on the mining industry.

Publications

The Chamber publishes a range of books, reports and newsletters, which contain information related to its lobbying and advocacy role. These publications are used to inform and interact with the Chamber’s different audiences:

Mining — the Chamber’s flagship publication

Because of financial constraints brought about by the global economic situation, the Chamber had to reduce the frequency of this high quality, informative publication that represents the best thinking on mining related issues. This publication has proved to be a huge success in promoting greater global awareness of all facets of mining in South Africa. It covers a range of mining related issues and impartially analyses the state of the industry in South Africa.

During this financial year, some of the issues covered include the impact of the global meltdown on the mining industry, legislation, environmental sustainability, illegal mining, technology and transformation.

Although demand is high, the Chamber had to reduce the print run and focus only on a carefully selected local and international investment audience of analysts, financiers, and policy and decision-makers in government and elsewhere.

Mining News

The industry’s workforce is a very important Chamber stakeholder, thus communicating to mining’s labour constituency is essential. Mining News is a monthly newspaper targeting the industry’s workforce. It contains current information and news that is of interest to this audience.

Mining News focuses on engaging all levels of mine employees and their families. Miners are encouraged to contribute to the publication since
their perspective is vital to the success and future of the industry. The information contained in the newspaper empowers employees to become better informed and responsible partners in the economic prosperity of the mining sector in South Africa. The newspaper has also become a useful teaching tool in adult basic education and training (ABET) classes.

Website

The Chamber website (www.bullion.org.za or www.chamberofmines.org.za) is a highly informative user-friendly communication tool. It also provides links to a host of important sources, such as service and equipment suppliers, international and local mining houses, newspapers and the mining research community. The Chamber continues to extend the range of the website to provide up-to-date information for investors, market analysts, researchers and other interested parties. The information on the website is concise and well packaged; the pages are clearly differentiated and product focused.

Facts & Figures

Facts & Figures is a very useful booklet that provides not only statistical mining sector data, but also supporting information, comments and analyses.

This annual publication highlights data that can be used to support decision-making. It is an invaluable source of mining data and statistics on the mining industry in South Africa, bringing together general mining industry information and product-specific data from a host of sources, including Statistics South Africa, the Minerals Bureau, the South African Reserve Bank, the mining houses and government departments.

The booklet is available both in hard copy and electronically from the Chamber website.

Stakeholder engagement

Government

The Chamber continues to engage with different government departments on a wide variety of issues. In February 2009, the Chamber’s office bearers met with the former Minister of Minerals and Energy, Buyelwa Sonjica to discuss issues pertinent to the industry. Some of the issues discussed, were:

- The Mining Charter Review
- The global financial crisis
- Efficient community and land development initiatives
- Legislation – Section 86A of the Mine Health and Safety Amendment Bill, etc.

There have since been high-level meetings with the new minister of the Department of Mineral Resources, Susan Shabangu and her Director-General, Adv. Sandile Nogxina. These discussions further affirm the critical role played by all stakeholders in the mining industry and the need for the alliance partners to continue working together.

Parliamentary portfolio committees

In May 2009, the Chamber’s chief executive met with the chairperson of the Portfolio Committee on Minerals Resources, Mr Fred Gona, to discuss a range of mining industry issues. The Chamber was subsequently invited to give a presentation to the Portfolio Committee on the issue of illegal mining and other matters that the Chamber felt should be brought to the attention of this committee. The Chamber also used this opportunity to inform the committee members on how the Chamber functions and to highlight the impact of the global economic meltdown on the business of mining. The Committee also visited the industry to gain more insight into the issue of illegal mining.

Media relations

Because of the high stature of the Chamber in the South African mining industry in both local and international media, the Chamber is often used as a first point of reference on issues that have an impact, or potential impact, on the sector. A number of such issues emerged during the year under review. These include the debate on radio, television and print media on the effects of the global financial crisis and
its impact on jobs; the establishment of the Mining Industry Growth, Development and Employment Task Team (MIGDETT); legislative issues affecting the mining industry; Eskom’s tariff increase applications; issues surrounding the review of the Mining Charter; health and safety issues, including the release of the presidential audit on health and safety in the mining industry; and liaison with the media on the 2009 wage negotiations for the coal and gold sectors.

In addressing these issues in the media and other public platforms, emphasis was placed on a multi-stakeholder approach to addressing the challenges facing the industry with a focus on the issues and not the apportionment of blame. This approach highlighted the relevant topics without maligning the role played by others. Though there were some misunderstandings in the latter part of the year under review, this approach continues to be most effective in dealing with the media.

**International liaison**

During the year under review, the Chamber continued to play an important role in debates on mining issues on the African continent as well as at SADC level. Until its activities were incorporated into the African Union (AU), the Chamber influenced the policy debates of the African Mining Partnership (AMP) both as an individual Chamber and a member of the Mining Industry Associations of Southern Africa (MIASA). When the February AU meeting in Addis Ababa took a decision to integrate the activities of the AMP within the AU, the Chamber held discussions with officials of the then Department of Minerals and Energy to assist in building its engagement capacity on AMP-related initiatives.

The Chamber continues to provide secretarial services to MIASA. In this role, the Chamber and other MIASA members participated in the ongoing policy debate on the harmonisation of mining policies in the SADC region. MIASA members attended a workshop co-hosted by the United Nations Economic Commission on Africa and the SADC Secretariat on the issue of harmonisation of mining policy. MIASA representatives played a critical role by bringing institutional memory as well as a private sector perspective to a discussion dominated by government officials, some of whom were recently assigned to their positions. This participation ensured that MIASA’s views were incorporated in a report circulated to SADC mining ministers.

As a member of the Nepad Business Foundation (NBF), the Chamber continues to play a role in the activities of this body where possible. Because the focus of the NBF’s activities are more cross-border than local, the Chamber’s contribution tends to be limited.
The global economic crisis

The world is currently experiencing the worst economic crisis since the Great Depression of the 1930s and the global economy is expected to shrink by 1.4% in 2009, the first decline in global output in 61 years. Global trade volumes are expected to shrink by 12% in 2009, as the impacts of the credit freeze, the dramatic fall in consumer demand – with its commensurate impact on global industrial production and trade – hit the global economy. While the advanced economies have been at the centre of the global crisis, the emerging and developing countries also felt the impact of lower global demand. The developed economies were the hardest hit, with Germany and Japan both expected to contract by about 6% in 2009.

Although the European Union (EU) and the United States remain at the centre of the crisis, the emerging economies will probably fall to a 1.6% growth rate in 2009. However, the global economy should recover modestly in 2010 by about 1.5%. Perhaps the most striking aspect of the global economic crisis is the speed of the unravelling of the economies of the world despite the warning signs and the bubbles created by bad lending in the sub-prime market.

Just as the various economies of the world are interconnected, so too is the mining sector reliant on the prospects and vicissitudes of the global economy. The fall off in consumer demand and the freezing of credit markets resulted in a substantial fall in industrial production and global trade in late 2008 and early 2009.

The global seven year commodities boom imploded unexpectedly as the positive factors that had driven the boom changed for the worse. With few exceptions, commodity demand and prices fell precipitously in the six months to December 2008 and the global mining industry adopted survival strategies as most companies scaled back on expenditure to adapt for the lower price environment. In 2007 and early 2008 many mining companies, buoyed by rising
commodity prices and continuing strong global growth rates, had increased their borrowings to fund new projects to meet increased demand. When the global economic crisis hit, mining companies’ cash flows were substantially reduced and many companies (especially those at the upper end of the cost curve) were forced to scale back as access to capital for new projects ceased.

Commodity markets, however, are cyclical. By the middle of 2009, it appeared that the world recession had bottomed and the possibility of a recovery appeared positive. For a number of commodities the mid-2009 position looked brighter. The prices of many minerals recovered in the first half of 2009. While the short-term outlook for the global mining industry remains challenging – with companies focused on improving the health of their balance sheets – most indicators point to the beginnings of a global recovery.

Financial markets appear to have stabilised and the freeze in global credit appears to be easing. Modest improvements in stock markets, exports, in consumer spending and the probable demand-boosting impacts of fiscal stimulus packages imply the beginnings of a recovery. Global manufacturing purchasing manager’s indices are back in positive territory. China’s steel production in June 2009 is at nearly 50 million tons (50% of global production) – a new record for them, even surpassing pre-crisis levels – and its economic growth rate was back up to 8% in the second quarter of 2009. As China is a key player in the production and consumption of many minerals, there is little doubt that it has been a principle factor in stabilising many commodity markets. The hardest hit advanced economies are expected to move back into modestly positive growth (off a low base) by 2010 and this should reinforce the recovery in mineral demand.

All these factors notwithstanding, 2009 will be remembered as one of the lowest points in world economic history, with a detrimental impact on the attempts of most countries to reduce poverty and to improve living standards. For mineral markets the outlook is also modest, with a number of challenges in the short-term, but with increasingly brighter prospects as the world economy starts to recover in 2010.

It is likely, however that the underlying structural (as opposed to cyclical) nature of the previous commodity boom will return. Demand for minerals will improve as the global economy recovers. The materials intensive nature of economic growth in China (and the other BRIC – Brazil, Russia, India, and China – economies), driven by urbanisation and industrialisation, will again become key features of the minerals markets in the medium to longer term. China alone is expected to build 500 new coal-fired power stations and over 200 cities in the next decade to accommodate its high urbanisation rate. The fact that many advanced economies have infrastructure backlogs will also mean that investment in infrastructure will have to rise as a proportion of gross domestic product (GDP), which in turn will support demand. During the height of the recent commodities boom, the six “P’s” (power, people, permits, procurement, projects and politics) were constraining factors on supply. While these supply constraints have been temporarily relieved, they will again become meaningful inhibitors in the medium to longer term.

For a large mining driven economy like South Africa, the global economic crisis and commodity collapse have exacerbated the slump in mining production that the country was experiencing since...
A range of domestic issues has continued to inhibit growth in mining production and the country was unable to take proper advantage of the global commodities boom, which had a negative effect on employment, exports and economic growth.

Emerging economies are expected to grow by only 1.5% in 2009, versus the 6.3% growth expected by the International Monetary Fund (IMF) in November 2008. However, emerging and developing economies, led by China, should recover quickly to an expected 4.7% growth rate in 2010.

The IMF has downgraded its economic forecasts no less than five times over the past year. Still, its July 2009 World Economic Outlook points to a more positive global GDP outlook for 2010 versus their April 2009 projections, which indicates that global recession is turning.

The experience of the past two decades shows that it takes some time for confidence to be restored to the global economy and for asset prices to recover. The imbalances built up in many advanced economies as a result of poor lending practices, are expected to take some time to deleverage.

While many developing countries have done much to improve macro-economic balances, no country has been immune to the crisis. South Africa, as a small, open economy, is no different. Prudent macro-economic government policies have helped cushion the country from the initial onslaught of the global crisis, but the impact is increasingly filtering through as declining demand for local exports and a large fall in commodity prices is being felt. South Africa’s economy shrank by 1.8% in the fourth quarter of 2008, and growth in 2009 is expected to be down by 2% versus the positive 5% achieved in 2007.

**Implications of the financial crisis for commodities**

The recent global commodities boom, which commenced in October 2001, propelled commodity prices upwards. Between October 2001 and mid-2007, the Economist All Metals Index rose by 384% over a period of 84 months, making it one of the longest and largest booms in recent times. Economic growth – which is traditionally driven by consumer expenditure – collapsed in the advanced economies. Given that these economies account for more than 50% of global GDP and for about 53% of total mineral demand, the recession weakened the demand for minerals, which in turn led to a build up in stockpiles of some minerals. Economic growth slowed in most emerging countries, which in turn has dampened demand for minerals. The US dollar has strengthened against the Euro as investors sought “safe haven status” in the US Treasury Bill market; in other words, capital was flowing back into an already battered economy and most emerging economy currencies weakened. This meant that from July 2008 onwards most mineral prices experienced significant price declines, with the Economist All Metals Index falling by 60% between July and December 2008.

Since February 2009, mineral prices have experienced some recovery as restocking of minerals in China – and more recently in advanced economies – has contributed to a recovery in demand for
most minerals. The rate of recovery in demand varies, depending on the degree of stocks prior to the global crisis. For example, copper prices have recovered fairly quickly in response to continued growth in demand in China, while diamond demand has remained somewhat depressed owing to the de-stocking of inventory in the diamond pipeline (and especially in the fabrication and retail sides of the diamond business).

**Structural demand factors return**

While it is probable that the current global economic crisis will undermine the commodity cycle, it does not mean that the underlying structural factors have disappeared. The materials intensive growth in the

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**Commodity price movements, six months to 31 December 2008 and six months to June 2009**

- Copper: -87 \% (2008), 60 \% (2009)
- Steel (LME billet FE): -65.3 \% (2008), 25 \% (2009)
- PGMs: 53 \% (2008), 26 \% (2009)
- Aluminium: -51 \% (2008), 8 \% (2009)
- Gold: -38 \% (2008), 8 \% (2009)

6 months to 30 June 2009 \% change  |  6 months to 31 Dec 2008 \% change
BRICs economies has not collapsed. Although these economies’ growth rates will slow, it appears that they will not go into recession. Nevertheless, the underlying structural demands will continue to impact on the materials intensive growth in the BRICs economies. The economic growth of the BRICs countries can be attributed in part to urbanisation and industrialisation and high infrastructural investment. Once the global economy starts to recover it is likely that the long-term demand factors will come back into play. Most emerging economies have relatively sound balance sheets and the IMF is expecting investment rates to rise to above 32% of GDP in these countries in 2009 and 2010.

Many fiscal stimulus programmes in advanced economies include an element of growth in infrastructure spending as a form of counter-cyclical fiscal policy response to the global crisis. This has implications for supporting mineral

![Gross fixed capital formation (investment) as a % of GDP (Source: IMF)](chart1)

![Supply delays, selected examples (Source: UNCTAD/AFR & PWC)](chart2)
demand in the short and longer term. However, when the fiscal stimulus programmes in the Asian economies come to an end, export-led growth strategies for these economies – which rely on the pace of recovery in consumer demand in advanced economies – will resume. Given the high unemployment rates in the USA and the negative effect of the global crisis on the wealth of consumers, recovery in the advanced economies will probably be weak.

Still, while the global supply of certain minerals will remain sufficient or in balance in the short-term, it is likely that the future supply of minerals will be constrained by the same factors that inhibited supply during the last commodity boom. While the procurement pipeline experienced a short reprieve during the financial crisis delays in the delivery of equipment to mining companies may become an issue when the mines have to deliver more product to customers.

**Impact on the mining industry**

Throughout the 2001 to 2008 commodities boom, the global mining industry appeared to have been consistently behind the curve in terms of providing the right levels of investment and exploration to satisfy the ever-increasing demand for minerals. While investment and exploration by mining companies rose to a peak of US$116-billion in 2008 as the world’s top 40 mining companies significantly
increased their exposure to debt to an average of 32% in 2008 from 12.5% in 2005. Following the drop in demand and price of minerals brought about by the economic meltdown, most mining companies quickly began to cut costs. Most mining companies embarked on major expenditure reviews – including capital investment and exploration – with the result that global mining investment and exploration is expected to decline to about US$62-billion in 2009, nearly half the 2008 peak.

According to the Metals Economics Group, global non-ferrous metals exploration budgets will probably be cut by 40% in 2009 to US$8-billion, when compared to 2008. All commodities, all regions and all stages of exploration have been affected.

In terms of the sales profiles of the top 40 mining companies, the advanced economies still account for just over 53% of the market for minerals, which INDICATES that the rapid decline in demand and economic deterioration was inevitably going to unsettle the commodity markets. The continued growth in demand from important mineral importing countries like China, means that it is likely to overtake the United States as the second largest mineral importer after the European Union. In the future, growth in demand for minerals from Asia, India and at a later stage, Africa, will provide fundamental growth in demand.

**Impact on South Africa**

While ranked in the top 20 economies by size, the South African economy is relatively small and accounts for less than 1% of global GDP. Because South Africa’s economy is dependent on foreign trade and attracting foreign savings to prop up domestic investment, it is not immune to the economic slowdown. Slower economic growth and recessions in key export markets, combined with lower commodity prices and a slowdown in capital flows to developing countries, have impacted on the country’s economy, especially in the automotive, mining and retail sectors.

Although South Africa’s is a small and open economy, it is intricately connected to the global economy and initially weathered the global storm relatively well. Low levels of external debt, appropriate fiscal and monetary policies (including inflation targeting) and a flexible exchange rate initially protected the economy. But eventually the effects of the crisis fed through, placing severe pressure on certain key export sectors like mining and manufacturing. The local economy entered negative growth territory in the fourth quarter of 2008 with a 1.8% decline in GDP, but after a 6.4% decline in GDP in the first quarter of 2009 the country was confirmed as being in recession.

The mining sector experienced a sharp 32.4% drop in GDP in the first quarter and manufacturing shrank by 22.1%. By the second quarter of 2009, the recession started to moderate. Even the large counter-cyclical fiscal policy expenditures on infrastructure have not been able to absorb the full shock of the crisis.

The impact of the crisis on the South African mining sector has been profound. Both demand and process fell sharply in late 2008. In the six months to 31 December 2008, global copper prices fell by 70%, iron ore prices fell by 56%, platinum group metals (pgm) declined by 58%, nickel by 50%, export
energy coals by 50%, diamonds by 40% to 50% and the gold price fell by 8%. The drop in demand for most minerals has been substantial. Vehicle sales in the USA in the first quarter were down by a third, which in turn impacted negatively on pgm demand. The effect on the South African economy has been severe as two thirds of the country's minerals are traditionally exported to the advanced economies – which are all in recession. The global credit freeze has also reduced the amount of finance available to fund capital investment and trade.

The local mining industry was already declining before the global crisis occurred. Despite large increases in fixed investment in mining in 2006/07, mining output declined by 1.6% in 2006, 0.8% in 2007, 7% in 2008 and by 9.1% in the first six months of 2009. A combination of domestic factors, including the electricity crisis, regulatory red tape, infrastructure constraints, safety-related closure of mines, rapidly rising costs and volatility in the rand/US dollar exchange rate, all affected the ability of the sector to increase output in that period. To survive the global economic crisis, companies had to review all expenditure, cut back on capital plans, pressurise suppliers to reduce costs and focus on restructuring.

The mining sector, in collaboration with tripartite stakeholders from government and organised labour, has responded to the crisis by establishing the Mining Industry Growth, Development and Employment Task Team (MIGDETT) in December 2008. The task team focuses on ways to manage the crisis in the short term, while also looking to reposition the country for the next commodity up-cycle in the long term. The team has looked at innovative ways of helping companies to survive in the short term, by making proposals on reducing cost pressures, dealing with constraints affecting the sector and avoiding retrenchments – where possible. In areas where retrenchment becomes unavoidable, measures to ameliorate the consequences of retrenchment have been proposed in MIGDETT, including more effective use of social plans.

The MIGDETT stakeholders are also looking at issues that need to be addressed to enable the mining sector to respond more positively to the next commodity up-cycle. For example,
improving critical infrastructure, developing human capital and moving from red-tape to smart-tape which are critical to unlock the country’s mineral wealth for growing investment, exports and jobs in the longer term.

**Signs of recovery**

At the global level there are signs that the worst of the recession is over and that economies are recovering. The signs that point towards a recovery include: financial markets appear to have stabilised, most banks are reporting a return to profitability and stock markets have shown modest recovery from the severe negative swing of late 2008.

- The composite leading indicators of a number of OECD (Organisation for Economic Co-operation and Development) countries and China have improved sharply over the past few months. Composite leading indicators highlight turning points in an economy in relation to that country’s potential economic growth rate (and so touches on output gaps), which helps to access prospects for future economic growth. Composite leading indicators have improved in the USA, China and the EU, while evidence of a bottoming of economic activity in Japan is apparent.

- In July 2009 the global manufacturing purchasing managers index (PMI) rose above 50 – the so-called neutral point – for the first time since May 2008. The PMI is an important economic measure and is perhaps the best indicator of factory production. The PMI is a composite index made up of five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. A PMI index over 50 indicates that manufacturing is expanding, while anything below 50 means that the industry is contracting.
External orders have improved rapidly in China and a number of advanced economies have PMIs above 50, indicating expansionary conditions in the manufacturing sector.

- Global steel production is improving, with China having produced a record 49.4 million tons of crude steel in June 2009. The pressure of the global economic crisis on steel production was mostly felt in the advanced economies in late 2008, although Chinese production also slowed. However, China’s period of restocking of steel occurred in early 2009 and it appears that advanced economy restocking has commenced.

- Commodity prices have recovered some of the losses of 2008 in US dollar nominal terms as the global recovery gains momentum.

**Contribution of mining to the South African economy**

Perhaps the best way of illustrating the role that mining plays in the economy is to temporarily “remove” the mining sector from the economy and then to reflect on the actual economic contribution. With mining temporarily removed, the economy would lose:

- about 18% of GDP
- over 50% of merchandise exports
- about 1 million jobs
- about 18% of gross investment (9% directly)

- approximately 30% of capital inflows into the economy via the financial account of the balance of payments
- about 35% of the market capitalisation of the Johannesburg Securities Exchange (JSE)
- 93% of the country’s electricity generating capacity
- about 30% of the country’s liquid fuel supply
- the largest contribution by value to black economic empowerment in the economy
- about 20% of direct corporate tax receipts (R33-billion in 2008).

Over the past 130-years the mining sector in South Africa has provided the critical mass for the development of a number of industries that either supply the mining sector or use its products. This cluster of industries includes energy, financial services, water services, engineering services, specialist seismic services, geological and metallurgical services, all of which are world class. This cluster of industries has gone on to service other parts of the economy and has provided a significant export base to service the global mining industry. The JSE was originally established on the basis of funding the mining sector in the late 19th century. The mining sector continues to act as a magnet for foreign investment to the country.

Research into the multiplier and induced effects of the mining sector, indicates that the backward linkage to side stream beneficiation adds another

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- Labour costs R61-billion
- Dividends R24-billion
- Taxation R33-billion
- Depreciation and impairments R30-billion
- Interest Paid R10-billion
- Purchases and operating costs R199-billion
- Capital expenditure R52-billion
## Mineral| Mine production (2007), sales and employment| Local sales| Local beneficiation
---|---|---|---
**PGMs** | 304 tons (R78 billion sales, 186 000 employees, etc.) | ~46 tons valued at R12.4 billion | Manufacture & export of 16.2 million platinum catalytic converters, (15% of world share), 4000-5000 jobs and R22 billion in export value
**Coal** | 248 mt (R44.2 billion sales, 60 439 workers) | 183 mt local sales valued at R20 billion 120 mt to ESKOM 43 mt Sasol 0.672 mt Steel fabrication | Final product – 201 929 GWh of electricity (86% of SA’s electricity supply), value created R40 billion, 30000 jobs (in ESKOM). Final products: - Synfuels 7.3 mt valued at R29 billion - Gas sales 112.9 MGJ at R2.7 billion - Polymers 1.73 mt at R9.4 billion - Solvents 1.72 mt at R13.8 billion - Olefins & surfactants 2.2 mt at R22.6 billion - Other (waxes, fertilizers, etc) R13 billion 31 860 jobs, R98 billion in sales, R17 billion in taxes
**Gold** | 254 tons (R38 billion in sales, 169 057 employees) | 13.2 tons valued at R2 billion | ~400 tons refined at Rand Refinery (490 jobs), 7.4 tons of jewellery fabricated employing 2800 people, 8.4 tons of coins fabricated employing 1000 people & 4500 people employed in wholesale & retail of gold jewellery.
**Iron ore** | 42.1 mt (R13.4 billion in sales, 13 858 employees) | 12.4 mt sold locally valued at R1.7 billion | ~6.4 mt of local steel production (4.2 mt flats & 2.1 mt long products), 4.4 mt local sales & 1.4 mt exported with total revenue of R29 billion and 10 000 employees.
**Diamonds** | 15.25 mc (R10 billion, 20 000 workers) | Local sales – R4.9 billion. | 1.2 mc imported (cost R14.9 billion), 13.9 mc exported (value R13.2 billion), local sales valued at R4.9 billion (value of cut diamonds valued at R6.8 billion), 2000 cutters.
**Nickel** | 37.9kt (valued at R9 billion) | 11.7kt valued at R2.8 billion. | Stainless steel production, ~650 kt stainless produced worth R12 billion. About 150kt used locally.
**Copper** | 117.1kt (valued at R5.8 billion) | 76.6kt valued at R4 billion | Tubing and wire industry
**Industrial minerals** | Total sales value of R7.5 billion | Local sales R6.7 billion | Cement industry, 14.2 million tons of local production of cement +/- R20 billion industry Fertilizer industry (600kt of fertiliser consumed locally - potash, phosphates, limestone)
**Chrome** | 9.7mt (valued at R3 billion) | 7.4mt local sales valued at R2.3 billion. | Chrome alloys – 3.5mt produced, 0.4mt sold locally, 3mt exported, total sales R17.5 billion Chemicals and refractories
**TOTALS** | About R213 billion ~about 450 000 workers | ~R58 billion local sales | Rough sales value created of about R157 billion (conservative)
2.3 percentage points to GDP. Downstream linkages add another 2.2 percentage points whereas the induced effects contribute between 5% to 6%, resulting in the overall contribution of the minerals cluster being closer to 18% of GDP. Taking into account the contribution of over 50% of merchandise exports and one million jobs (500 000 in mining alone) and the overall impact of mining on the economy is substantial.

It is estimated that the economy benefits by R157-billion in value through the intermediate and final product industries that use minerals produced by the mining sector.

An investigation into the country’s top 11 mineral sales categories by value indicates that from local sales of primary minerals of R58-billion in 2007, R157-billion was generated in downstream sales and about 60 000 to 100 000 jobs were created in that year. About 30% of the country’s liquid fuel requirements, 95% of the country’s electricity requirements, 95% of the country’s cement requirements, more than 90% of the country’s steel requirements, etc., were provided through manufacturing beneficiation of the country’s minerals.

The table on page 20 captures some of the downstream activity.

In 2008, the total income of the South African mining sector was R404-billion, up by 30% on 2007 (StatsSA). Most of the benefits of the income received by the mining companies was reinvested or spent in South Africa. In 2008, the mining sector’s total expenditure was R409-billion, comprising R199-billion spent on the procurement of goods and services, R61-billion on salaries and wages, R51-billion went into capital investment in the sector, R33-billion was paid in the form of direct taxes to government, R24-billion was paid as reward to the providers of capital (shareholders), R30-billion was used for depreciation purposes and impairments and R10-billion was paid as interest by the sector to the financial sector for loans to mining. Only a small portion of the expenditure – in the form of capital equipment and dividends – was acquired from offshore, which means most of the benefit accrues locally.

**Contribution to investment and GDP**

Notwithstanding South African mining sector real fixed investment staging a strong recovery in 2006 (up 48.2%), 2007 (up 30.8%) and 2008 (up 3.8%), mining production fell by 1.6% in 2006, 0.8% in 2007, 7% in 2008 and in the first six months of 2009 production was down 9.1%. Even if gold production is excluded from the equation, total non-gold mining mineral production declined by 0.3% in 2006, before a slight increase of 0.2% in 2007, then declines of 5.5% in 2008 and 7% in the first six months of 2009. This led to mining GDP falling by 0.3% in 2006, zero growth in 2007, a decline of 6.5% in 2008 and a decline of 8.9% in the first half of 2009. The contraction in mining GDP since 2006 has to be seen in a context of an increase of 5% real economic growth rate for the country for the five years up to 2007, a 3.1% growth rate in 2008 and a 1.3% decline in GDP in the first half of 2009.

Total mining production declined by 7% in 2008, led by declines in gold production (down 15.7%), pgm production (down 9.3%) and diamond production (down by 15.9%). The strong 17% growth in iron ore production and the modest 1.7% increase in coal production did not compensate for the declines in other areas. In the first half of 2009, mining production plunged by 9.1%. Gold output fell 7.7%, diamond production fell by 60.6% and coal production dropped by 4.7%. Pgm production was up marginally by 1.4% and iron ore volumes continued to impress with a 16.5% increase in production. The building materials category of production declined by 8.3% in the first six months of 2009.

At the investment level, mining accounted for 9% of total fixed investment in the economy and 13.3% of total private sector fixed investment. The mining sector continued to be a key component of the Johannesburg Securities Exchange and accounted for 35% or R1.5-trillion of the value of the exchange as at the end of 2008.

**Mineral sales and exports**

In 2008, the 17% depreciation in the rand exchange rate to R8.25/US$ and the further rise in US dollar commodity prices, resulted in the value of South African mineral sales rising by 33.9% to R300.3-billion in that year.

The improvement in mineral sales was driven by a 385.6% increase in the value of manganese ore.
sales to R17.3-billion, a 61.7% expansion in iron ore sales to R22.2-billion, a 16.5% increase in pgm sales to R91.4-billion and a 64.2% increase in coal sales to R72.5-billion in 2008. The top three minerals accounted for 69.4% (72% in 2007) of South Africa’s total mineral sales in 2008. In the first half of 2009, total primary mineral sales were at an annualised R230.8-billion, down on the 2008 figure of R300-billion because of lower prices and sales volumes.

Total primary mineral sales exports increased by 35.4% to a total of R219.6-billion in 2008. This accounted for 31.1% of the country’s total merchandise exports. If secondary beneficiated minerals – such as pgm catalytic converters, ferroalloys, steel, chemicals and plastics – are added to primary exports, the minerals complex accounted for just over R352-billion or about 50% of total merchandise exports in 2008.

Employment and wages

The South African mining sector employed 518 585 people in 2008 compared to 495 474 in 2007, an improvement of 4.7%. Mining accounted for 6.1% of total non-agricultural formal employment in the economy and 7.8% of total private sector non-agricultural employment. If the indirect and induced effects of mining are included, then another 500 000 jobs are estimated to exist in addition to the direct mining jobs. The wages and salaries paid to mine employees contributed substantially to the economy and to the purchasing power of workers. In 2008, R60.7-billion was paid in wages and benefits to mine employees, which accounted for about 6% of the total compensation paid to all formally employed people in South Africa. By June 2009, the impact of the global crisis affected employment levels in mining which declined to 494 291.

Chrome

Chromium is mostly used in the production of stainless steels, chromium chemicals, chromium ferroalloys and chromium metal. Production of chrome ore is driven mostly by demand for ferrochrome, which in turn is driven by the global demand for stainless. In 2008, global stainless steel production fell by 6.7% to 26.6 million tons as global economic conditions depressed demand in key markets. Similarly, global ferrochrome production fell by 9% to 7 million tons resulting from key producers cutting supply in the latter part of the year in response to the global economic crisis. Chrome ore production moved sideways in 2008 as major producers reduced supply to match demand.

South Africa is a leading producer of chrome ore and ferrochrome, with 49% and 45.8% shares respectively in terms of global production. The chrome mining sector employed 12 279 people, and paid R1.3-billion in salaries and wages. Chrome contributed 0.2% to merchandise exports and about 0.2% to GDP.

World reserves and production

World chrome resources are estimated to exceed 12 billion tons (USGS) which is sufficient for many centuries assuming current levels of demand. About 95% of the world’s chromium resources are located in southern Africa and Kazakhstan. In terms of the world’s reserve base, South Africa has around 74% of the total global mineable reserves, followed by India at 19% and Kazakhstan with a 5.9% share.
In 2008, global chrome ore production increased by a modest 0.2% to 21.6 million tons. South Africa dominated world chrome ore production with a 44.9% share in 2008, followed by India and Kazakhstan with 15.1% and 17% respectively.

Stainless steel demand and ferrochrome production

Global crude stainless steel production declined by 6.7% in 2008 to 26.6 million tons, as demand in key markets such as Europe slowed because of the impact of the global economic crisis on stainless steel demand later in the year. The EU accounted for 29% of global production in 2008, followed by China with a 27% share.

Following the same trend as global stainless steel demand, world ferrochrome production also declined by 9% to 7 million tons in 2008. South Africa, with a global share of 45.8% of the world’s total ferrochrome production, had a 10% decline in production to 3.2 million tons, as many smelters were shut down in late 2008 owing to the global crisis.

China’s ferrochrome production declined by 21% to 970 000 tons and Kazakhstan’s production increased marginally by 1.9% to the same level as China’s.

The average benchmark price in Europe for ferro-chrome was US$1.76 per ton in 2008, up by 97% from the US$0.89 per ton average in 2007. By the first quarter of 2009, this benchmark price had fallen to early 2007 levels at US$0.79 per ton.

South African production and sales

In 2008, South African chrome ore production increased slightly by 0.2% year-on-year, from 9.66 million tons in 2007 to 9.68 million tons in 2008. Local sales accounted for 73% of total share, as most of the locally produced chrome ore is consumed in the production of ferrochrome in the domestic market. However, even though production levels remained almost unchanged, the global slowdown in the latter part of 2008 and early 2009 forced a large proportion of South Africa’s ferrochrome producers to shut down smelters, as supply had to be aligned with much lower levels of demand. Domestic sales volumes fell by 3.7% to 7.1 million tons and export sales fell by 14% to 0.8 million tons.

The relatively buoyant conditions of the first half of 2008 meant that, on average, local (up 82.4%) and export prices (up 125.5%) were strongly elevated compared to 2007. As a result, local sales increased...
by 76% year-on-year to R4.1-billion and export sales increased by 92.3% to R1.3-billion, giving a total of R5.4-billion, up by 79.6% on 2007.

Coal

Notwithstanding the global commodity boom that preceded the recession which lead to increases in demand for primary energy and rising thermal coal prices, South Africa’s coal mining sector’s exports sagged by 6.3% to 63.7 million tons. Thermal coal prices set new records in July 2008 at over $176 per ton, before a reversal to $75 per ton in December 2008 and US$56 per ton by June 2009. Relatively poor export tonnages in the early and middle part of 2008 meant that the industry missed out on the record prices by not being able to increase export volumes at the right times. The recovery in exports by the last quarter of that year was too late as prices had already fallen as a result of the unfolding global economic crisis. Total saleable coal production in South Africa grew by 1.6% to 251.7 million tons in 2008. The fall in coal exports was mainly because of lower coal railings, production shortages (permit and rain problems) and the diversion of some export quality coal to Eskom to improve power station stock levels. Local sales, on the other hand, increased by 7.9% year-on-year to 191 million tons in 2008. In the first six months of 2009, South African coal production fell by 4.7% on a year-on-year basis as depressed global markets affected demand.

While export volumes fell, the 17% depreciation in the rand/dollar exchange rate to R8.25 in 2008, combined with higher domestic and export prices – which were up 41% and 98.9% respectively – resulted in a large 62% increase in the total revenue earned by the sector to an estimated R71.6-billion in 2008 (R44-billion in 2007). However, the global economic crisis, combined with recessions in the key export markets and the recession in the domestic market, resulted in a reversion in prices in the latter part of 2008 and early 2009. With the domestic market expected to move sideways in terms of the volume of demand and exports expected to remain weak owing to the depressed European market, the combination of lower prices and limited volume increases will mean that the local coal sector will not achieve the same revenue performance in 2009 as it did in 2008.

The coal mining sector employed 65 210 (2007: 60 439) people and paid a substantial R10.9-billion (2007: R8.7-billion) in wages to employees in 2008. Declining productivity and rapidly escalating costs (for most inputs) eroded much of the gains from higher prices in 2008. Nevertheless, the industry accounted for about 1.2% of GDP directly (and closer to 3% if the indirect multiplier and induced effects are added). The coal sector accounted for R41.5-billion or 5.9% of merchandise exports in 2008.

Global primary energy trends

Between 1973 and 2008 the world’s total primary energy demand grew by 97.3% from 5 726 million tons of crude oil equivalent (Mtoe) to 11 295 Mtoe by 2008. Much of the growth in demand for primary energy was for electricity generation, which increased by 230% to 20 202 terawatt hours in the same period. Despite declines in electricity production caused by the global economic crisis in countries like the United States – where production fell by 1.1% – the strong 3.1% growth in production in the Asia-Pacific region resulted in global electricity production rising by 1.6%
in 2008.

To meet ever increasing demand, the large, populous, developing countries – like China and India – had to continue building new power stations as a result of their industrialisation and urbanisation processes. Between 1999 and 2008, China’s electricity production increased by 187% to 3 433 terawatt hours, and it will have to grow electricity production by a similar level over the next decade. In 2008, China’s growth rate in electricity production moderated to 4.6%, when compared to the 12.5 average annual growth rate achieved over the past five years. Within the next three years China is expected to overtake the USA as the world’s largest producer of electricity. India’s growth in electricity production has lagged behind China over the past five years at an average annual growth rate of 5%.

According to Goldman Sachs, a 1% increase in the number of people living in the cities leads to a 1.8% rise in the demand for electricity. As people become urbanised and their incomes increase, so does the demand for modern electrical conveniences. Given that about 1.4 billion people are expected to become urbanised over the next two decades (according to the UN), with 300 million in China alone, the strong growth in electricity demand is expected to continue. Over the next decade China is expected to build another 500 coal-fired power stations.

Coal is primarily used for electricity generation and in 2008 it accounted for 39% of the world’s electricity generation. Coal’s share of primary energy supply has increased from 24.4% in 1973 to 29.2% in 2008. According to the Energy Information Administration, coal will continue to grow its share of primary energy supply, with an average annual growth rate in consumption of 1.7% per annum through to 2030, compared to an average global growth rate of primary energy demand of 1.6% per annum in the same period. According to the Shell energy scenarios, coal’s share of primary energy production is likely to rise to 30% of the total by 2050, despite increasing renewable energy supply.

**World hardcoal reserves and production**

The USA has the largest hardcoal (i.e. anthracite and bituminous coals) reserves, followed by China, India, Russia and Australia. South Africa is the sixth largest reserve holder with a 7.4% share.

In 2008, global hardcoal production increased by 5.4% to 5.8 billion tons, driven mainly by an 8.3% increase in Chinese hard coal production (IEA). China, with 2.8 billion tons of production in 2008, accounts for 47.2% of global hardcoal production, which makes it by far the largest producer. The United States is the second largest producer with one billion tons, followed by India with 489 million tons, Australia with 325 million tons and South Africa with just over 250 million tons. At current annual production rates the world’s proven hardcoal reserves are likely to last in the region of 70 years.

According to the World Energy Council World Energy Sources 2009 update, the world’s total anthracite, bituminous, sub-bituminous and lignite proven coal reserves have fallen from 847.5 billion tons in 2007 to 826 billion tons in 2009. The world’s largest reserve holder is the United States, with a 28.9% share, followed by Russia with 19%, China with 13.9%, Australia with 9.2%, India with 7.1%, Kazakhstan with 3.8% and the Ukraine with a 4.1% share. South Africa, with total reserves of about 30.4 billion tons, has a 3.7% share ranking, making it the eighth largest holder of total coal reserves.

**World seaborne coal market**

According to the IEA, the global hard coal seaborne traded market shrunk by 13.5% to 793 million tons in 2008, versus the 917 million tons recorded in 2007. One of the key reasons for the reduction in coal demand in key markets, is the withdrawal of China from the export markets. In 2007, China exported 54 million tons of hard coal and because of rising domestic coal demand this fell to zero in 2008. Australian and Indonesian hard coal exports held up well in 2008, but Russia, South Africa and the USA all experienced declines in exports.

**Local production and sales**

South Africa's saleable coal production in 2008 increased by 1.6% to 251.7 million tons. In the first half of 2008, coal production was flat on a year-on-year basis as a result of the heavy rains experienced in January. Production then recovered and grew by more than 3% year-on-year in the second half of the
year. Domestic coal sales increased by 7.9% to 197.1 million tons in 2008, while export volumes decreased by 6.3% to 63.7 million tons. The increase in domestic coal sales was mostly as a result of Eskom procuring extra coal to replenish coal stockpiles at key power stations. Despite lower export volumes (the third year of decline) the much higher export and domestic prices for coal resulted in a 62.2% increase in coal sales to R71.6-billion, with exports accounting for 58% (2007: 55.4%) of the total share of sales for that year. Export sales increased by 69.9% to R41.5-billion, while domestic sales increased by 52.6% to R30.1-billion. The coal mining industry has now firmly entrenched itself as the second largest component of the South African mining industry by sales value at R71.6-billion, versus pgms at R91.4-billion and gold at R46-billion.

The South African coal market

In 2008, the electricity sector comprised by far the largest portion of domestic demand, accounting for 61.4% of the volume. The next largest was liquid fuels, which accounted for 24.9% of local coal demand.

Coal exports

Notwithstanding favourable international market conditions for the first eight months of 2008 and record spot prices for coal on export markets achieved in July, South Africa’s coal exports declined for the third year in a row, by 6.3% to 63.7-million tons in 2007. Lower than planned Transnet and Richards Bay Coal Terminal (RBCT) shipments in the first half of the year resulted in the industry failing to capitalise on near record prices in US$ terms in the period May to August 2008. By the time that export volumes had returned to planned levels in the last two months of 2008, the spot price had fallen to quantities last seen in 2007.

Thermal coal exports to Europe fell by 6.1% to 40.7 million tons in 2008, marking three years of declining export volumes in this important market. Given the dire economic growth outlook in Europe for 2009 (the IMF expects a GDP contraction of 3.2% in 2009), it is likely that European coal demand will decline further. With Europe accounting for 66% of South Africa’s thermal coal exports, the short-term outlook for export volumes and prices of South African coal exports remains bleak.

Asia accounted for 17.2% of South African thermal coal exports in 2008. The country’s coal exports to Asia declined by 14% to about 10.5 million tons in 2008. Exports to the Americas doubled by 117.7% to 1.7 million tons, but exports to the Middle East and Africa declined by 9.5% and 3.1% respectively.

There are some very bright spots for South African coal exports in 2009. In the first half of 2009, steam coal exports to Asia/Pacific (and India in particular) increased to an annual equivalent of 25 million tons versus the 10.6 million tons recorded in 2008. The European market weakened to the annual equivalent of 30 million tons in 2009, from 40 million tons the year before. Overall coal exports for the first half of 2009, when annualised, point to a 64.7 million ton level versus the 61.2 million tons of steam coal exports achieved in 2008.
Investment

Over the next decade Eskom is likely to require as much as 200 million tons of coal annually, which is 75 million tons up on the coal used for electricity generation by Eskom in the period 2007/8. Sasol is also considering expansions to its domestic synthetic fuel operations, which will require extra coal. The RBCT will be extended to 91 million tons by 2009, which is about 20 million tons more than the 2007 capacity. To cater for the increasing domestic and export markets, South African coal producers will need to expand production by about 90 to 100 million tons over the next decade.

The bulk of the country’s coal reserves occur in the Central Basin, which includes the Witbank, Ermelo, Highveld, South Rand and KwaZulu-Natal coalfields. The Waterberg coalfield is the next large area that has the potential to contain substantial new coal deposits. Most of South Africa’s coal is produced from the Mpumalanga/Highveld region (220 million saleable tons), with only 30 million tons of saleable coal coming from other areas. While extra focus is being placed on expanding production from areas such as the Waterberg coalfields, the existing Mpumalanga/Highveld coalfields will require huge investment to grow production to meet these extra requirements.

The South African mining sector is responding well to the need for new coal supply, by investing in new projects and in feasibility studies for new projects. The industry has currently R15.5-billion worth of projects underway, which should yield about 36 million tons of extra coal production, while also sustaining production at certain mines. Another 63 million tons worth of extra production (likely to cost about R25-billion to R30-billion) is in the final feasibility stage. Estimates suggest that between R80-billion to R100-billion will need to be invested in the industry over the next decade if targets are to be achieved. Eskom’s building programme of new power stations (mostly coal) over the next decade is likely to cost R1.2-trillion.

### Coal – Proved reserves and production, hard coals, 2008 (source WEC, BP, IEA)

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<th>2008 Reserves</th>
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<th>Rank (exports)</th>
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<td>10</td>
<td>79</td>
<td>4</td>
<td>74</td>
<td>81</td>
</tr>
<tr>
<td>10</td>
<td>Poland</td>
<td>6.0</td>
<td>9</td>
<td>84</td>
<td>-</td>
<td>-</td>
<td>71</td>
</tr>
<tr>
<td>11</td>
<td>Indonesia</td>
<td>1.7</td>
<td>6</td>
<td>246</td>
<td>2</td>
<td>203</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>12.1</td>
<td></td>
<td>252</td>
<td>55</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td>411.3</td>
<td></td>
<td>5,845</td>
<td>793</td>
<td>70</td>
<td></td>
</tr>
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</table>
Local and export coal prices

The local coal price per ton FOR (free on rail) averaged R150.4 in 2008 (a 40.5% increase on 2007), whereas the average price received for exports on a FOB (free on board) basis was R704.62 per ton, a 94.5% increase on 2007. Given that a large proportion of coal sold locally is on a cost plus basis, the rise in local prices is mainly attributable to higher mining costs as a result of higher input costs. The price of coal used in the domestic electricity sector increased by 25.7% averaging R111.82 per ton in 2008, and in the first three months of 2009, the price rose by 10.6% to R123.66 per ton FOR. The price of coal used for the production of synthetic fuels averaged R127.51 per ton in 2008 (up 15.3% year-on-year) and increased by another 15.5% to R147.25 per ton FOR in the first three months of 2009. The increases in price for metallurgical coals (half of which are imported) – which averaged R770 per ton in 2008 – and coal sold to the small consumer market (average price R341 per ton) were the other price drivers. Nevertheless, all components of the coal market – with the exception of power station and synthetic fuel coal markets – have seen a fairly steep reversion in prices in late 2008 and early 2009.

Cost pressures

Like other components of the mining sector, the coal sector has been exposed to rapidly increasing production costs. For example, the prices of reinforcing steel and structural steel increased by 56% and 44% respectively in 2008. In the first half of 2009, structural steel rose a further 29.2% year-on-year and reinforcing steel prices were down 13.4%, which means the cost pressures are not abating. Electricity prices rose by an average of 20% in 2008 (based on PPI figures) and were up 28.5% year-on-year in the first six months of 2009. With timber and transport costs up by double digit figures in 2008, the overall cost base of the industry has risen to a higher level. Declining yields, some aging mines, more difficult geology and mining conditions and rising regulatory costs are also adding to the cost base of coal mining.
There is pressure on the coal mining industry to keep costs down so that electricity prices do not escalate too rapidly. In 2008, primary energy costs for Eskom increased by 40% to R18.3-billion, which represents 44% of Eskom’s costs before capex and interest costs.

**Export facilities**

The Phase V expansion project of the RBCT was expected to be completed by end of July 2009, however, technical delays forced the target date for completion to be revised to the last quarter of 2009. The RBCT will have the capacity to export 91mt of coal a year after the completion of phase V of the project. In 2008, it had an export capacity of 76mt, although only 61.7mt of coal was exported through the terminal. This was as a result of mine production challenges and constraints by Transnet Rail Freight to deliver coal to the terminal. As a result, coal exports through the RBCT declined by 6.6% in 2008 from 66.2mt in 2007.

Durban Bulk Connection Terminal exports increased by 25% from 0.8mt in 2007 to 1mt in 2008. Exports at Matola Coal Terminal in Mozambique also increased by 28.6% to 0.9mt in 2008 from 0.7mt in 2007. Plans are in place to increase the current volumes to 4.5 million tons.

**Labour**

The local coal mining industry increased the number of workers it employed by 8.3% to 65 210 in 2008. By June 2009, the number of people employed in the coal mining sector had risen to 72 694, which is the highest number of people employed in the industry since 1992, but still nearly half that of the 136 187 workers employed at the peak of employment for coal mining in 1981. Total earnings of employees in the sector rose by 27.1% to R10.9-billion in 2008.

**Diamonds**

As a luxury product, diamonds were not immune...
to the global slowdown as consumers, cut back on expenditure. Given the fairly large amount of diamonds in the downstream pipeline (cutting, polishing, manufacturing and retail), the reduction in consumer demand had a negative impact on the diamond mining industry. Demand was reduced to practically zero at the height of the crisis, as the downstream industries tried to reduce stockpiles and service, increasing debt costs in a period of falling prices. Higher capital costs and the decline in the availability of liquidity to the downstream players, forced wholesalers and retailers to buy less stock, which further exacerbated the situation. Accordingly, mining companies drastically reduced production in the second half of 2008 and in the first half of 2009. In 2008, global diamond production at the mine level declined by 3% to 162.9 million carats.

South Africa, as the world’s sixth largest producer of diamonds by volume, was hard hit on several fronts. In the first half of 2008 the electricity supply crisis reduced mine output by 8.5%, and in the second half the global crisis hit diamond mining production. Some issues related to the application of the Diamond Amendment Act resulted in delayed sales by South African diamond miners into a weakening price environment in the second half of the year. In the first half of 2009, destocking in the downstream diamond sector resulted in a substantial number of local diamond mines closing. Production fell by 60.6% in the first half of 2009, as the diamond mining companies responded to the crisis.

Global diamond production

Total world mine production of diamonds decreased by 3% year-on-year in 2008 in volume terms, to 162.9 million carats. The Russian federation contributed most to the production of diamonds, with total share amounting to 23% and production by volume at 36.9 million carats. Botswana slipped down the production rankings to third position behind Russia and the DRC. The DRC’s production of diamonds by volume increased by 17% to 33.4 million carats in 2008, compared to 28.4 million carats in 2007. Production in Canada, South Africa and Australia fell by 12.9%, 15.1% and 19.4% respectively.

The world’s largest producer of diamonds by value remains Botswana, with a global share of 26% valued at US$3.3-billion, followed by Russia at 20% valued at US$2.5-billion. While the DRC may have overtaken Botswana in terms of the volume of production, the value of diamond sales in the DRC was only US$418-million, which ranks the country as the seventh largest. South Africa is the world’s sixth largest producer by volume at 8% of global production and fourth largest by value at 10% of global.

Global diamond demand

In the first half of 2008, global retail sales of diamonds showed steady growth, especially into the markets of China, India and the Middle East. But because the global crisis hit the United States hardest – the world’s largest diamond market –the second half of the year was extremely challenging. The luxury sector of the United States, European and Japanese markets were particularly hard hit, with jewellery retailers in the United States alone reporting double digit sales
declines between Thanksgiving and Christmas. The downstream fabrication and retail components of the diamond value chain not only faced declining sales, falling prices and rising stocks, but also increasing capital costs and waning credit lines to fund the inventory pipeline. Total debt in the downstream value chain is estimated to be about US$14-billion.

The deterioration in the pipeline in the second half of 2008 is demonstrated by the declines in the value of diamonds in retail sales by 8.9% to US$18.4-billion, and the fall in retail sales by 11.3% to US$65-billion in 2008. The sales values attributable to each component of the pipeline are expected to be materially lower in 2009, owing to the global economic crisis.

The Overarching impact of the global crisis in the diamond industry value chain is perhaps best captured in terms of retail cut diamond prices, which fell steeply in the third quarter of 2008. On a more encouraging note, there has been a modest improvement in polished prices from the base that was reached in April 2009.

**South African diamond production**

In 2008, South African diamond production fell by 15.4% year-on-year to 12.9 million carats (valued at US$1.2-billion) from 15.2 million carats (valued at US$1.4-billion) in 2007. The impacts of the domestic electricity supply crisis, coupled with the global calamity later in the year were the key drivers of this decline in production. Diamond exports fell from 13.8 million carats (valued at US$1.8-billion) in 2007 to 10 million carats (valued at US$1.4-billion) in 2008. Similarly, imports of diamonds into South Africa fell by 52.5% from 1.2 million carats in 2007 to 588 320 carats in 2008.

In 2008, employment fell by 5.3% to 18 609 workers. These workers earned R2.2-billion in the form of salaries and wages.

**Gold**

The average gold price in 2008 was US$871.96 an ounce, an all time high and around 25% higher than in the previous year. A combination of the surge in
investment demand – caused by the global economic crisis – coupled with strong producer de-hedging, declining mine supply and lower official sector sales drove the price to over US$1 000 an ounce in March 2008. Unfortunately, the higher prices had a dampening effect on jewellery demand, which fell by 10.2% to 2 159 tons. Global mine supply fell by 2.5% to 2 416 tons, as growth from the new emergent producers was insufficient to offset declines in the traditional major producers. The six “P” constraints – people, procurement, power, permits, projects and politics – together with falling grades, led to lower global gold production.

South Africa, after nearly a century of being the largest gold producing country, fell further down the global rankings to third position – behind China and the United States – as a combination of the domestic electricity crisis, safety related stoppages and lower grades hit production. The country’s gold production fell by a substantial 13.4% to 220.4 tons, caused by a premature downscaling owing to the electricity crisis. Without the electricity crisis, the Chamber estimates that the country could have produced at least another 13 tons, which in turn would have boosted the country’s export earnings by about R3-billion, reduced the upward pressure on production costs and kept South Africa in the second position of global production.

In the first half of 2009, the gold price consolidated to a higher trading range and averaged US$915 an ounce as the precious metal again illustrated its re-emergence as a safe haven asset in troubled times. The continued weakening in the US dollar, the global economic crisis, the positive demand and supply factors listed above, all affected the gold market. Perhaps one of the key factors was the fact that official sector sales dried up and, according to GFMS, central banks turned to net buyers of gold in the second quarter of 2009. Despite the rise of the dollar price in the first half of 2009, South African gold mining production continued to fall, with first half 2009 production of 103 tons being 5.6% lower than the corresponding period in 2008.

Nevertheless, the gold mining sector remained a key contributor to the South African economy in 2008 and early 2009. Gold mining accounted for R48.5-billion in foreign currency earnings (South African Reserve Bank), or 6.9% of total merchandise exports – about 2.4% of gross domestic product (GDP) (if the multipliers and induced effect are included) – and R16-billion earned in wages by 166 421 employees. The industry invested R8.8-billion in capital expenditure in the country, paid an estimated R3.7-billion in taxation to the state and R354-million in dividends to the providers of capital.

Prices

The gold price rose to a record average of US$872 an ounce in 2008, a substantial 25% increase on the previous year. A confluence of positive demand and supply-side effects served to provide upward momentum to the price. In particular, strong investment demand – especially in the first and last quarters of 2008 owing to a surge in crude oil prices –
the global economic crisis and the collapse of certain key banks, plus a decline in official sector sales drove the price higher. Investment demand rose by 75.6% to 288 tons, while bar hoarding rose by 62.7% to 384 tons. On the supply-side, the declining mine production (down 2.5% to 2 416 tons), combined with lower official sector sales (down 49% to 246 tons) served to offset the increase in the supply of scrap (27% up to 1 218 tons). According to GFMS, the official sector became net buyers of gold in the second quarter of 2009, which acted as a support base for the gold price. The demand for gold, created by de-hedging by mining companies, was also a large demand driver and accounted for 358 tons in 2008. The gold price improved further to an average of US$915 an ounce in the first half of 2009, as the key drivers continued to support the price rise.

Despite the continually improving dollar gold price, the volatility in the rand exchange rate caused highs and lows in the 18-month review period. At the beginning of 2008, the rand gold price was R199 663 per kg, based on an exchange rate of R7/US$ and the dollar price of US$889 an ounce. By March, the spike in the US dollar gold price – and a slightly weaker exchange rate at R7.95/US$ – enabled the rand price to rise to R247 631 per kg. By August 2008 the rand exchange rate had appreciated to R7.63/US$ and the dollar gold price had fallen to US$839, forcing the rand price down to R205 826 per kg. As the global economic crisis unfolded and there was a rush of funds from emerging markets to safe haven markets, the rand exchange rate fell precipitously to R11/US$ at one stage, but eventually averaged R9.92/US$ in December 2008. This meant that the rand gold price moved to a new record monthly average of R261 590 per kg in that month. The strong improvement in the dollar gold price to R991 an ounce in February 2009, combined with the weaker rand exchange rate – which had fallen to R10.19/US$ – resulted in the rand price increasing to R301 581 per kg in that month.
However, from February 2009 onwards the rand appreciated against the US$ reaching R8.03/US$ by June 2009, and despite the higher dollar gold price at US$947 an ounce, the rand gold price fell sharply to R244 486 per kg. Effectively, most of the benefits of the higher dollar price were eroded by the sharp appreciation in the rand exchange rate in the period February to June 2009.

Global reserves and production

The world has an estimated reserve base of about 100 000 tons (USGS) of gold, of which South Africa has a 31% share. Even when one reverts to actual mineable reserves, South Africa is still the largest with a 6 000 ton or 12.8% global share, followed very closely by Australia and Russia at 10.6% respectively. The increase in gold prices to record average levels in 2008 and 2009, has encouraged greater exploration across all minerals to an estimated level of US$12.6-billion in 2008 (MEG). Gold is estimated to account for 39% of the total, which is now second to base minerals at 40% of the total.

In 2008, total world gold production declined by 2.5% to 2 415.6 tons on the back of production declines in most of the established producers, with South African production down by 13.4%, the USA down 1.5%, Canada down by 5.7% and Australia down by 12.7% (GFMS). Indonesia also experienced a sharp decline of 35.4% in 2008. Production in China – the world’s largest producer – grew by 4.1% to 292 tons, while strong growth was also recorded in Russia – up by 11.5% to 189 tons – and Papua New Guinea, which grew production by 13.9% to 70.3 tons. Key reasons for the declines in the established producing countries include electricity related problems in South Africa, the rapid escalation in costs and declines in the grades mined by the established producers. The decline can be attributed to the gold price rising at a slightly faster rate than costs, thus enabling average cut-off grades to fall (average grade that has to be mined to break even with costs) and enabling the miners to mine lower grades. Over the past five years production has declined in the established producer regions (USA, Australia, Canada and South Africa), while production has increased in China, Russia, Peru, Indonesia, Papua New Guinea, Ghana and Brazil.

China consolidated its position as the world’s largest producer with a 12.1% share of global production, followed by the USA at 9.7% and South Africa at 9.7%. In the first half of 2009, global gold production – according to GFMS – increased by 7% despite the large fall of 5.6% in South African production.

The global gold market

Total supply to the gold market has declined by 1.6% a year over the past five years, driven by the fall in new mine supply of 1.6% per annum. Scrap recovery and official sector sales have made up the supply balance. Official sector sales fell by a 9.2% per annum, while the volume of scrap recovery recorded a 5.8% per annum increase during this
period. Overall, new mine supply constitutes 62.3% of total supply, with scrap contributing 31.4% and official sector sales providing 6.3% of the total. As mentioned earlier, new mine supply was up by 7% year-on-year in the first half of 2009 and appears to have responded to the higher gold price. According to GFMS, net official sector sales plummeted by 75% in the first half of 2009 to around 40 tons, with scrap recovery estimated to have risen to a record 900 tons in the same period. Scrap recovery was influenced by price, with higher prices leading to increased product. Neither net producer hedging nor implied disinvestment have been features of the gold market over the past five years.

At a macro level, total demand for gold fell by 1% to 3 880 tons in 2008. However, the macro numbers fail to capture the major issues of the demand drivers. The 75.6% increase in investment demand to 288 tons, the 62.7% increase in bar demand to 384 tons and the 39.6% increase in coin demand to 191 tons were collectively almost enough to offset the 10.2% decline in jewellery demand, which fell to 2 159 tons. The impact of high gold prices, the effect of the global economic crisis and the downturn in consumer expenditures at the global level, all impacted negatively on jewellery demand and fabrication. Although the worst of the global economic recession appeared to be over by the third quarter of 2009, many investors continue to seek safe haven products to protect against the possible inflationary effects of the massive fiscal and monetary policy stimulus provided by most governments around the world. Massive fiscal deficits and ballooning public debt levels have raised the spectre of the possible monetisation of debts, which may have inflationary consequences down the line.

While the decline in jewellery demand is noteworthy, it is perhaps important to highlight the changing structure of the gold market. In 1999, jewellery accounted for 75% of demand, with other fabrication making up 14% of the total, and implied investment and bar hoarding 11% of the total. In that year there was no producer demand in the form of de-hedging. By 2008, jewellery demand had fallen to 56% of the total, while fabrication demand had risen to 18%, investment demand had increased to 17% and demand for gold by mining companies for de-hedging purposes increased to reach 9% of demand.

In the first half of 2009 – according to GFMS – the 2008 trends of falling demand for gold for jewellery fabrication and the rise in investment demand continued. GFMS estimates that in the first half of 2009 jewellery demand fell by 25% year-on-year and other fabrication demand dropped by a similar margin. However, implied net investment rose to reach over 990 tons, an increase of more than five times compared to the same six months in 2008.

Global pressures on gold mining

The one area not included in the pressures faced by the sector is the issue of rapidly escalating costs. The costs of diesel fuel, electricity, skilled people, steel, explosives, capital equipment, etc., all increased at materially higher rates in the period up to the end of 2008. In dollar terms, total production costs – including capital – increased by 19% to US$633
an ounce for Australia, Canada, South Africa and the USA and by 19% to US$534 per ounce for emergent producing countries in 2008.

**South African production**

South African gold production – as recorded by the Chamber– fell by 13.4% to 220 tons in 2008, the lowest level since the 1922 strike. The decline in production was mainly because of the electricity supply crisis – closing the industry from 24 to 31 January 2008 – which then forced the industry to accept a 90% electricity supply level for an extended period. Mining companies were thus forced to close higher cost/lower grade shafts, resulting in a premature downscaling of the South African gold mining industry.

The Chamber estimates that, had production declined by an average rate of decline in the five years leading up to 2008, i.e. 8.4% per annum, production would have fallen to 233 tons – 13 tons higher than the actual level produced. With strong growth in real capital expenditure and with a slightly lower grade, the prognosis for gold production prior to the electricity crisis was for a slower than average rate of decline, which means the 13 tons difference is probably conservative. Effectively, Eskom made an industrial policy decision that prematurely downscaled the local gold mining industry. Safety related closures also had a large impact on production. Many of the closures were necessary, but some could have been avoided.

Iron Ore

The global iron ore industry’s fortunes are inextricably linked to the fortunes of the global steel industry, which in turn is dependent on spending on infrastructure, consumer markets, the transport industry and GDP growth – all of which have been seriously affected by the global economic crisis. The steel industry is facing the largest downturn since the oil crisis of the early 1970s. Steel producers responded to the crisis in the second half of 2008 and early 2009 with production cuts to ensure that supply more correctly matched demand. In 2008, global steel production fell by 1.8% to 1 322 million tons. Iron ore, which is the key ingredient of pig iron and directly reduced iron – both used in the production of crude steel along with coke – were also affected by the global slowdown in the final quarter of 2009. Global pig iron production fell by 2.1% to 930 million tons. However, buoyant demand and production conditions in the earlier part of the year meant that overall iron ore production actually increased by 3.6% to 1.7 billion tons.

With growing capacity in rail, ports and on the mines, South African iron ore production has surged, despite the global economic crisis. In 2008, South African iron ore production increased by 16.4% year-on-year to 48.9mt from 42mt in 2007. In the first half of 2009, the country’s iron ore production increased by 16.5% as steel makers continued to demand the high quality South African product. Total iron ore production
sales grew by 61.7% in 2008 to R22.2-billion, making iron ore the fourth largest component of the South African mining industry. Iron ore mining contributed about 1% to GDP and accounted for 2.9% of total merchandise exports. The sector employed 13 256 people and paid R1.7-billion in salaries and wages in 2008.

Global reserves and production

The global reserve base for iron ore is estimated to be about 160 billion tons, of which 73 billion tons are classified as known mineable reserves (USGS). Russia is the largest holder of reserves and constitutes 19.2% of the total share, followed by Australia at 13.7, Ukraine at 12.3%, Brazil at 12.2% and China at 9.6%. South Africa accounts for about 1% of the total and is ranked 12th in the world.

World iron ore production increased year-on-year by 3.6% to 1 725 million tons. This was another record year despite the slump late in the year, and represented the seventh consecutive year of growth. China is the world’s largest producer (on an Fe content basis), with a global share of 21.2% (366 million tons), followed by Australia with a 20.3% share (349.8 million tons) and Brazil with a 20% share (346 million tons). Big increases in production came from Australia (up 17% to 350 million tons) and South Africa (up 17.8% to 49 million tons). South Africa has a 2.8% share of global iron ore production, which therefore ranks the country eighth in the global standings.

In the first half of 2009, the global economic crisis forced a curtailment in steel production and thus in iron ore production. China and India’s iron ore production was cut sharply in early 2009, mainly because these countries have higher costs than their international competitors. The decline in international freight rates and lower cost production from Australia and Brazil into China and India, forced a curtailment in local iron ore production.

Global steel market

While global steel production fell 1.6% year-on-year to 1 329 million tons in 2008 from 1 351 million tons in 2007, China’s steel production increased by 1.4% year-on-year to 498.6 million tons. Other large steel fabricators that managed to increase production in 2008 included South Korea, up 4.5% to 53.9 million tons and India up 3.7% to 55.1 million tons. Japan, as the world’s second largest steel producer, recorded a modest 1.6% decline in production in 2008. However, large declines in production were recorded for Europe (down 5.7% to 197.7 million tons), the CIS (down 8.1% to 114 million tons) and North America (down 5.4% to 124 million tons).

The first half of 2009 – on an annualised basis – shows the impact of the global economic crisis on the advanced economies and other emerging producers, with big declines in production for Europe (down 37.7% to an annualised 127 million tons), North America (down 43.7% to 125 million tons), Japan (down 38.2% to 73.4 million tons) and the CIS (down 22.7% to 88.2 million tons). A combination of domestic fiscal stimulus combined with large infrastructure expenditure resulted in China’s steel
production rising by 6.7% to an annualised equivalent of 532 million tons. In June 2009, China produced 49.4 million tons of steel, equivalent to 50% of global steel output.

Iron ore trade

Global exports of iron ore increased by 7% year-on-year to 887 million tons in 2008, the seventh consecutive year of growth (ABARE). The seaborne trade in iron ore is estimated to have risen by 7.4% to 845 million tons. Again, the first three quarters of the year were characterised by strong growth in iron ore exports and then a sharp decline in the final quarter of 2008, as steel producers cut back and reduced iron ore stocks. Australia emerged as the largest iron ore exporter in 2008, with growth of 15.7% to 309 million tons, which represents a 34.8% share of the total. Because of Brazil’s greater exposure to the European market, its exports rose by a more modest 4.8% to 282 million tons, which accounted for 31.8% of the global market. India, as the third largest world exporter, experienced a 13.8% drop in exports to 91 million tons. South Africa was the fourth largest exporter and grew exports by 6.5% to 32.8 million tons in 2008.

Iron ore prices

Benchmark iron-ore prices are set in annual negotiations between steel producers and major ore suppliers such as Rio Tinto, BHP Billiton and Vale SA of Brazil. The individual pricing of iron ore products differentiates chiefly between lump and fines, with lump trading at a premium to fines. In 2008, Rio Tinto announced that annual contract iron ore fines prices had been raised by 79.9% year-on-year to US$1.4466/dmtu (dry metric ton unit), while its lumps price was hiked up by 96.5% to US dollars 2.069/dmtu. However, in 2009 contract prices have been cut and China’s steel mills have agreed to a 33% cut in iron ore prices for a six-month period. China had agreed to pay $0.97 per dmtu for Pilbara blend fines and $1.12 per dmtu for Pilbara Blend lump.

In South Africa the average iron ore sales price for 2008 in the domestic market was R175 a ton FOR, an increase of 24% year-on-year from R141 in 2007, while export prices increased by 58.7% to R619 a ton FOB from R390 a ton.

South African production, exports and employment

South African iron ore production increased by 16.4% to 49 million tons in 2008, of which 11.3 million tons were sold locally and 32.8 million tons were exported. Export sales increased by 68.8% to 32.7 million tons and local sales increased by 12.9% to 11.2 million tons, resulting in total sales value increase of 65.6% to R22.2-billion. The continued growth in the local iron ore mining sector has helped to establish the industry as the fourth largest component of the mining sector by sale value after pgms, coal and gold. In the first half of 2009, iron ore production was up by 16.5%, as extra mine and export capacity contributed to increased exports. The total value of iron ore exports in the first half of 2009 was an annualised R29.6-billion.

South African export infrastructure
The initial agreement reached between Spoornet, Kumba Iron Ore and Assmang to upgrade the Sishen-Saldanha railway line, will increase capacity by an extra 20 million tons for export purposes by 2010, which in turn will provide a total capacity of about 47 million tons by that time. However, in late 2008 Kumba Iron Ore and Transnet Freight Rail announced that the Sishen-Saldanha iron ore export channel’s capacity would be increased from 47 million tons a year to 60 million tons a year, at a capital investment of R4-billion. The producer would be allocated nine million tons a year capacity out of the additional 13 million tons a year capacity to be created by the expansion, while Assmang would be allocated the remaining four million tons a year.

**Manganese**

2008 was a year of significant contrast for the manganese industry. In the first three quarters of the year, buoyed by strong steel production – which was up 4.6% on the same period in 2007 – demand, production and prices increased. By the last quarter of 2009, the flagging global economy and the reduction in steel demand and production led to lower prices, and steel producers had to cut back substantially on manganese purchases.

For 2008 as a whole – and despite continued growth in China’s steel production – the impact of the economic crisis resulted in global steel production declining by 1.2% to 1.329 billion tons. Manganese ore production increased by an estimated 11.1% to 43 million tons, with an actual manganese content of about 13.6 million tons, which was up 6% on a year-on-year basis.

South African manganese production grew by 13.5% to 6.8 million tons in 2008. Record manganese prices in the first half of the year resulted in local manganese sales rising by 385.6% to R17.3-billion. This propelled the manganese mining sector to become the fifth largest component of South Africa’s mining industry when ranked by sales value. Manganese mining employed 3 934 workers, paid R666-million in salaries and wages and accounted for 2.2% or R15.6-billion of merchandise exports in 2008.

**Global reserves and production**

The total global reserve base for manganese is estimated to be about 5.2 billion tons, of which 500 million tons are known as mineable reserves. South Africa dominates the global reserve base, with a 77.6% share, followed by Australia with a 3.1% share. However, in terms of known mineable reserves, South Africa has a 19% global share after the Ukraine with a 28% share. Manganese reserves are irregularly distributed in the key reserve and production countries and a high degree of grade variability exists between countries.

Global manganese ore production rose by 11.1% to 42.7 million tons and actual manganese metal production increased by 6% to 13.6 million tons. The difference between tons of ore produced and actual manganese metal, is attributable to the mining of lower grade ores, especially in China. South Africa was the largest producer of manganese in 2008 with a 21% global share, followed by China and Australia.

The impact of lower steel demand in key consumer...
markets in areas such as construction and automobiles, forced steel fabricators to consume their ferroalloy inventories and to restock when necessary. Overall ferromanganese production rose by just 1.5% in 2008, as the impact of the global crisis in the latter part of the year was insufficient to dampen consumption in the first half of the year. By the fourth quarter of 2008, most large ferroalloy producers had shut down or idled production capacity owing to reduced demand.

### Demand driven by alloy and steel production

About 90% of all manganese consumed annually goes into steel as an alloying element. As more than 90% of manganese ore is consumed in ferroalloy production, the performance of the manganese alloy industry is a key determinant of ore demand. Ferromanganese production is driven by global steel production, which has been growing at a healthy pace for most of the past decade. In 2008, about 13.6 million tons of manganese alloys were produced, which fed through into about 13.5 million tons of apparent consumption in terms of the global production of 1.327 billion tons of crude steel. Fabrication facilities for ferromanganese are generally located in the large steel fabrication countries, such as China, or in countries where the manganese ore is of high quality or where the cost of electricity is competitive (Australia, South Africa and Brazil). The 21.4% decline in global crude steel production in the first half of 2009 to 548 million tons, has meant similar declines in manganese ore mining and manganese alloy production.

### Steel and manganese production

In essence, about 57% of ferromanganese production is used in construction quality steels (which can use lower grade manganese ores), while 43% of ferromanganese is used in flat steel products or in higher quality steels, where higher-grade manganese ores are required. While China dominates global manganese production, the quality of that country’s ore is generally below 30% manganese and these ores are used locally for fabricating construction quality steel. Australia and South Africa are not only big manganese producing countries in their own right, but also produce higher quality manganese ores with a manganese content greater than 43%. The high quality ore producers like Australia and South Africa dominate the export markets. Low grade ores tend to push up the fabrication costs for the ferroalloy producers, as more electricity, more reductants and more flux is required to produce a slightly inferior product than higher grade manganese ores can achieve. This results in higher grade manganese ores having a higher value in use.

### Prices

The relatively robust first half of 2008 resulted in ferromanganese prices reaching record levels in the first and second quarters of the year. MC-FeMn alloy achieved prices of over $5 000 per ton FOB, while HC-FeMn alloys achieved prices of about US$3 250 per ton in the first half of 2008 (Metals Bulletin). In the second half of the year weak demand and poor market conditions resulted in the price falling back to 2006 and 2007 levels.

### South African production

In 2008, South Africa’s primary manganese ore production increased by 13.5% to 6.8 million tons; 4.7 million tons of the manganese ore was exported, while about 2.1 million tons was consumed locally. South African producers were able to take advantage of record prices by increasing the volume of exports. The average unit value of manganese exported from South African shores rose by 365.4% to R3 323 per ton, up from R714 per ton in 2007. In the first half of 2009, manganese ore production was down 37.9% in response to the global crisis and retraction in demand.

### Infrastructure

Because rail capacity to Port Elizabeth is not sufficient to transport manganese, road trucks are being used as an alternative. Unfortunately this exposes the industry to fluctuation in diesel prices, which has led to escalated transport costs. Damage to roads, accidents and traffic congestion also burden the transport and delivery of the manganese ore. The
preferred mode is rail, but delivery is not guaranteed owing to limited availability of slots emanating from shortage of wagons. Port Elizabeth and Durban harbours handle about 4.2 million tons/annum and 0.5 million tons/annum of manganese respectively. By 2012/13, exports are expected to grow to 6 million tons/annum and 3 million tons/annum for Port Elizabeth and Durban respectively. In the long term, the Department of Transport and Transnet envisage that the Coega/Ngqura Port will be the port of choice for manganese ore and will be able to export 10 million tons/annum in 2015/16, with a future capacity build up to 12 million tons/annum.

Platinum

Despite the impact of the global economic crisis on key areas of platinum group metal (pgm) demand, such as autocatalytic converters, and the large decline in primary mine supply, the surplus of supply over demand for the three main pgms – platinum, palladium and rhodium – fell from 51.2 tons in 2007 to a mere 2.8 tons in 2008.

Total primary supply of the three main pgms fell by 12.7% to 434.7 tons, while scrap recovery grew by 11.1% to reach 74 tons. The primary reasons for the decline in production can be attributed to factors affecting South African mine production as a whole: the electricity supply crisis, mine closures for safety

PGM demand by use (platinum, palladium & rhodium)
related reasons, bad weather and skills constraints. On the demand side, the substantial reduction in the sales of new vehicles in key markets such as Europe, the USA and Japan, resulted in demand for pgms for the fabrication of autocatalytic converters falling by 6.6% to 278.2 tons. However, investment demand surged by 91.9% to 25.7 tons, while other key areas of demand, such as jewellery, showed modest gains (up 2.3% to 69 tons).

Nevertheless, 2008 can be characterised as a year of two halves: in the first half the pgm market, shaken by the electricity supply crisis and a weak US dollar, pushed the pgm production weighted basket price up to a record US$1 592 per 3E ounce in March 2008; in the second half of the year the strengthening US dollar, combined with concerns over the deteriorating global economic situation, prompted many funds to liquidate long positions and the production weighted pgm price crashed to US$516 per 3E ounce by December. In the first half of 2009, the production weighted basket price gradually recovered to US$765 per 3E ounce by June as the global economy started its recovery phase.

In 2008, South Africa – blessed with around 87% of the world’s pgm reserves – accounted for 82.6% of primary rhodium production, 75.9% of primary platinum production and 33.2% of primary palladium production. However, total pgm production from the country fell by 15.4% to 275.8. Nevertheless, the pgm sector – by now firmly established as the largest component of the South African mining industry – saw sales increase by 16.5% to R91.4-billion in 2008. In early 2008, there was an upsurge in investment into the pgm sector, mainly owing to mining companies seeking to increase production for the expanding global market. Although, by the second half of the year, the fall in demand and prices had materially impacted on the sector, with most companies cutting costs and capital expenditure to mitigate the impact of lower prices.

In the first six months of 2009, South African pgm production increased 1.4% year-on-year as the industry responded to new market conditions. If one includes the sale of R13.4-billion worth of pgms locally to the catalytic converter industry (which are then exported), pgm’s accounted for 13% of the country’s merchandise exports in 2008, slightly down on the 14.6% level achieved in 2007. Pgm’s accounted for about 2.0% of GDP directly (about 5.3% of GDP if the indirect and induced effects are added), employed 199 948 workers and paid around R23.3-billion in wages in that year. Given that the local pgm mining sector was hard hit by falling prices and demand, by June 2009 employment levels in this sector had fallen to about 185 000 employees.

**Global reserves and production**

South Africa has about 87% of the world’s known pgm reserves, with Russia second at 8.3% and the USA third at 2.5%.

In 2008, global supplies of the main three pgms – including scrap recovery – decreased by 9.9% to
508.7 tons, as lower primary mine production rates from South Africa (down 11.7% to 234.3 tons) and Russia (down 17.7% to 142 tons) were not offset by the 11.1% increases in scrap recovery to 74 tons. South African pgm production and expansion were materially affected by the domestic electricity supply crisis, mine closures for safety related purposes and shortages of skilled labour.

South Africa accounted for 53.9% of global new mine supply of the three largest pgms in 2008, up from 53.3% in 2007. Russia was second with 32.7% of the total. South Africa is the dominant global producer of platinum (75.9%) and rhodium (82.6%), while Russia is the dominant supplier of palladium (50.1%). Scrap recovery is the third largest source of supply to the market, accounting for 74 tons in 2008. Supplies of pgms from other producing regions like North America and Zimbabwe remained flat.

**Global demand**

In the first half of 2008 overall demand remained stable despite higher prices, however, in the second half of the year – despite rising investment and jewellery demand for pgms – the impact of the global economic crisis on vehicle sales resulted in overall pgm demand falling sharply. With catalytic converter demand making up 278.2 tons of the total pgm market of 505.9 tons, the fall of vehicles sales of 20% in the USA and 6% in Europe was telling.

Global markets began to recover gradually in the first half of 2009. Tightening emission standards in developed countries, combined with positive growth in certain industrial applications such as chemical and electrical applications, will underpin the pgm market going forward. In the face of increasing prices, demand for pgms for jewellery purposes initially decreased in the first half of 2008, but then increased in the second half as jewellers restocked because of lower prices in the second half of the year. Perhaps the key feature of the overall pgm market has been the 91.9% jump in investment demand to 25.7 tons in 2008.

**PGM prices**

In the first half of 2008 the production weighted pgm price for local production rose by 48% year-on-year to US$1 996 per 3E ounce, driven by constrained supply, fund demand and continued reasonable demand for catalytic converters, industrial applications and jewellery. In the first half of 2008, the platinum price rose by 57.6% to US$1 957 an ounce, the palladium price rose by 24.8% to US$446.50 an ounce and the rhodium price increased by 46.6% to US$8 866 per ounce.
However, during the second half of 2008 the production-weighted price fell to an average of US$1,136 per 3E ounce produced, as market fundamentals driven by the strengthening dollar and global economic crisis deteriorated. The platinum price fell to US$1,211 an ounce, the palladium price averaged US$262.50 an ounce and the rhodium price had nearly halved to US$4,246 an ounce.

South Africa produces more platinum and rhodium than any other pgm producer, which resulted in a higher production weighted basket price for the country. In 2008, the local production weighted basket price of US$1,648.60 per 3E ounce produced was 38.8% higher than the average global production weighted price of US$1,188 per 3E ounce. The depreciation in the rand exchange rate by 17% to R8.25/US$ resulted in the rand basket price for pgms rising by 21.1% to R3,759.937 per 3E kilogram of pgms produced. In the first half of 2009, despite a 20% weaker rand exchange rate as a result of a drop in dollar prices, the country’s production weighted basket price fell by 35.3% to R2,453,109 per 3E kilograms – when compared to the first half of 2008.

**South African production, sales and exports**

During the course of 2008, South African pgm production was negatively affected by the domestic electricity supply crisis, smelter shutdowns, safety related work stoppages and industrial action at some mines. In 2008, total pgm production from South Africa fell by 9.3% to 275.8 tons. The electricity crisis of January 2008 effectively shut down the South African pgm mines between 25 and 31 January 2008. Most mines were then only allowed a constrained 90% level of normal electricity supply. Mines could apply for extra electricity in extenuating circumstances. While many of the pgm mining companies used this period to undertake maintenance on plant, the electricity crisis had a major negative impact on production, which fell by 14.6% on a year-on-year basis in the first half of 2008. By the second half of 2008, the year-on-year rate of decline in production had slowed to 3.9%. In the first half of 2009, pgm production was up a modest 1.4%.

Despite the decline in production, the overall value of pgm sales rose by 16.5% to R91.4-billion as the weaker rand in 2008 helped the rand price. However, in the first half of 2009, the stronger rand exchange rate and lower dollar pgm price resulted in total pgm sales falling by 45.3% to R27.4-billion. Local sales of pgms to the domestic catalytic converter fabrication industry grew by 8.9% to R13.4-billion, while export sales increased by 17.9% to R77.9-billion. Catalytic converters are fabricated locally and then exported to key vehicle fabrication facilities around the world.

**Platinum**

The platinum market went from a modest 2.5 ton deficit in 2007 to an 11.7 ton deficit in 2008 as the 9.5% decline in total supply – excluding scrap – was not offset by the same level of decline in demand. New mine supply fell by 9.5% to 185.7 tons, while total supply – including scrap – dropped by 7.4% to 216.9 tons. Both Russia and South Africa experienced production declines greater than 10% in 2008, while the only improvement was that of scrap recovery, which increased by 7.5% to 31.3 tons.

Total demand fell by 5% to 197.4 tons, as the
150% increase in investment demand for platinum to 13.2 helped cushion the 8.2% decline in demand for catalytic converters to 118.3 tons and the 4.9% drop in demand for platinum for industrial applications to 54.6 tons. The 20% decline in new vehicle production in the USA in late 2008, combined with more modest declines in the diesel intensive European market, meant that demand for platinum for automotive purposes fell by 8.2%. Nevertheless, continued tightening of emission standards in Europe and continued growth in the Chinese vehicle market provided support for platinum. The global economic crisis hit this sector of demand in late 2008 on the industrial side, when economic conditions were weak, but the prognosis beyond June 2009 looks promising.

Platinum started 2008 at US$1,530 an ounce and then increased to a record of US$2,276 in early March 2008 on the back of the electricity crisis, the weakening US dollar and stable demand. The price then drifted sideways to June 2008, before the impact of the global economic crisis fed through and the price fell to US$756 an ounce by October 2008, before ending the year at US$899 an ounce. The price averaged US$1,576.20 an ounce in 2008, a 21% improvement on the 2007 average. The 17% depreciation in the rand/dollar exchange rate to R8.25/US$ and the slightly higher dollar price, resulted in the average rand price rising by 45.6% to R417,632 per kilogram in 2008. However, the stronger exchange rate and lower dollar price resulted in the platinum price falling to R325,466 per kilogram in the first half of 2009.

Palladium

The palladium market remained oversupplied in 2008 with 14.3 tons added to stocks. While supply fell sharply by 14.8%, the marginal improvement in demand for palladium helped reduce the annual surplus from 54.3 tons in 2007 to 14.3 tons in 2008. Unlike the declines in demand experienced in the platinum and rhodium markets, the demand for palladium increased by 0.2% to 213.1 tons in 2008. The 3.6% decline to 136.2 tons by vehicle fabricators, attributable mostly to the 20% decline in USA vehicle production, was offset by a 19.6% rise in palladium demand for jewellery fabrication to 26.6 tons, a 53.8% rise to 12.4 tons in palladium demand for investment purposes and a 3.2% rise to 54.6 tons in demand for industrial applications (chemical and electronic).

The supply of palladium was negatively hit by the production disruptions in South Africa and lower Russian output, resulting in a decline in primary supply of 14.8% to 227.4 tons in 2008. When scrap recovery is included, total supply decreased by 11.6% to 263.8 tons in 2008. South African palladium production declined by 12.1% to 75.6 tons as a result of the domestic production disruptions while Russian sales fell by 19.4% to 113.8 tons. Scrap recovery grew by 15.3% to 36.4 tons.

According to Johnson Matthey, the palladium price mirrored the movements in the platinum price during 2008. The price reached a peak of US$488 an ounce in early March 2008, before settling at about US$450 an ounce by mid-2008. In the second half of the year, the strengthening US dollar, combined with weakening market fundamentals and large sales by investors, resulted in the palladium price falling to a low of US$164 an ounce in early December 2008. By June 2009, the price had recovered to about US$249 an ounce. In rand terms the palladium price averaged R93,790 per kilogram in 2008, but fell back to average R64,241 per kilogram in the first half of 2009.

Rhodium

While rhodium is traditionally seen as the smallest pgm in terms of volume – accounting for about 5% of the volume of the three main pgms – it accounts for about 28% of the total value of pgm production, or about double the value of the world’s palladium production. Given the dominance of automotive uses of rhodium – which account for about 80% of demand – it was clear that the rhodium market would be hit hard by the impact of the global economic crisis on new car production. Gross demand for rhodium for the automotive sector fell by 14.3% to 23.6 tons, while demand for industrial purposes fell by 10.2% to 4.2 tons.

Primary supply of rhodium fell by 15.7% to 21.6 tons. Scrap recovery rose by 6.8% to 6.4 tons, which
Introduction

The world is currently experiencing the worst economic crisis since the 1930s. South Africa, as a small open trading economy, was not immune from the crisis. Initially the country weathered the storm better than many other emerging economies, however, by the fourth quarter of 2008 the local economy was already experiencing negative growth, caused by the retraction in demand for manufactured and mining exports, combined with a consumer economy that was weakening prior to the global crisis.

Defining the global financial crisis

During 1999, the Clinton administration in the United States placed political pressure on Fannie Mae and Freddie Mac (two quasi public sector mortgage lending institutions) to start lending to low and moderate-income households. The administration’s objective was to expand access to housing for poorer households, although this pressure implied that financial institutions would assume greater levels of risk. During “flush” economic periods – when asset prices (such as housing and equity prices) are rising – the risks to the lending banks are more limited. During periods of “bear” market conditions, declining asset values would significantly elevate the risk to banks. In particular, when property prices fall below the value of the mortgage loan provided to the poorer household (i.e. a move into negative equity), the likelihood of that poorer family sustaining debt repayments diminishes significantly, resulting in rising foreclosure rates. Under normal financial and prudential regulation, banks are generally required to sustain a portion of depositors’ capital to loans. Financial institutions went into “innovation overdrive” to try to mitigate the risks of lending to low-income households. The loans to low income households – the so-called “sub-prime” mortgages – were then securitised, packaged as collateralised debt obligations (CDOs) and were then on-sold to various investors. This was another way of taking the loans off the balance sheets of banks, to ensure that they remained within the prudential.
requirements, although the underlying debt remained with the banks.

During 2004 to 2006 US interest rates rose from 1% to 5.4% and the US housing market started to take strain. Falling house prices and rising interest rates led to increasing numbers of people who could not repay their mortgages. Investors suffered losses, making them reluctant to take on more CDOs. Credit markets froze as banks became reluctant to lend to each other, not knowing how many bad loans could be on their rivals’ books. Interbank lending rates spiked. Investors in banks withdrew their equity and depositors tried to withdraw their cash deposits, resulting in significant solvency and liquidity problems for the exposed banks. These problems fast spiralled out of control into a crisis of confidence in the banks and in the credit markets. Consumers in the USA, hard hit by rapidly escalating fuel and food prices, the higher cost of debt and the inability to obtain credit, started to retreat from the consumer markets, forcing a significant slowdown in the US economy (two thirds of which is driven by household expenditure).

The impact of the sub-prime mortgage crisis quickly spread beyond the borders of the United States. Investment banks felt losses as far afield as Australia and Europe. Firms cancelled sales of bonds worth billions of dollars and consumers followed the US example. By April 2008 the US Treasury and Federal Reserve had to bail out two financial institutions as the “credit freeze” gripped their financial system. Most banks with large sub-prime exposures joined the solvency and liquidity fracas. As liquidity issues became more challenging, investors started withdrawing funds from emerging markets in a so-called “flight to quality” as risk aversion set in. This further exacerbated the freeze in global credit markets and resulted in significant declines in all stock markets. The freezing of global credit markets and the sudden slowdown in the large industrialised economies, quickly translated into a number of country specific rescue packages being announced as governments attempted to restore some confidence back into the financial system by helping with solvency (cash injections and the purchase of equity) and liquidity (by reducing interest rates and guaranteeing deposits).

Impact of the global financial crisis

As a result of the sub-prime crisis, the world’s 15 top banks have seen their market capitalisations fall from US$1.7-trillion in the second quarter of 2007 to US$500-billion by 20 of January 2009, a decline of two thirds. Current estimates suggest that US$50-trillion in asset values (share prices and property values) have been wiped out at the global level owing to the unwinding of the leverage created by the global sub-prime financial crisis. This means that the approximate GDP of both the EU and the USA have been erased in one year. This, together with declining purchases from consumers and rapidly rising unemployment rates in key markets such as the United States, also contributed to the consumer spending freeze. By the end of 2009, the United States is expected to have an unemployment rate approaching 10%, which is very high by American standards and implies that the speed of the recovery may be somewhat slower than most commentators believe.

The unwinding of the sub-prime mortgage market and the impact on household and corporate wealth has affected the demand side of many of the world’s largest economies. The result has been that the IMF and the World Bank (WB) have downgraded their economic growth forecasts no less than five times during the review period. The Global Economic Outlook published by the WB in July 2009, predicts that the world’s economic growth rate is expected to decline by 1.4% in 2009 and world trade growth is expected to decline by 12%. The situation is likely to remain volatile in the short-term, but indications are that the bottom of the recession has been reached.

Likely duration of the financial crisis

How long will this financial crisis last? While there has already been a speedy response in the developed world to restoring confidence in the system, many emerging economies have also responded with lower interest rates and fiscal stimulus programmes. At this stage, most economists are expecting a weak global growth performance in 2009, with some recovery in the global economy towards 2010. The amount of liquidity available to emerging market economies in 2009 is expected to be half of that made available in 2008. This means that less funding opportunity and that the costs of accessing capital will be higher.

Nevertheless, the speed of response from most governments and central banks around the world has
managed to stem the tide and prevent the world from sliding into a second great economic depression. Risks do remain in that a double dip recession could occur if the fiscal and monetary stimulus programmes in the USA, Europe and Japan are prematurely curtailed. Many of the leading indicators show that a turning point has already been reached.

Possible elements of short-term support package

The Chamber was involved in the Joint Presidential Working Group task team, established to develop a package of measures that could help chart a course through the global economic crisis. The Chamber also played a role in the business task team dealing with the matter. In the business discussions, it was agreed that the South African response “needs to be timely, targeted, and temporary for it to be effective”. It was thus crucial to focus on alleviating short-term societal pressures like unemployment and poverty, whilst supporting private sector stability and simultaneously charting a path for sustained future economic growth. In this regard, it was agreed that it was important that the leadership of all stakeholders communicated appropriate messages. Such messages should reinforce South Africa’s commitment to achieving stated socio-economic objectives and prudent macro-economic management.

In the business discussions it was agreed that perhaps the most important component of any short-term package of measures to help ameliorate the impact of the global crisis, has to ensure that the confidence of investors, the business sector and consumers is not further undermined. A central theme of any short-term package should be the maintenance and improvement in confidence in dealing with the economy. This requires a focus on predictability and stability of economic policies.

To support economic and employment growth, the country needs higher rates of fixed investment. It is estimated that over the longer-term, for any economy to grow sustainably at a rate of over 5% per annum, an investment rate of 25% of GDP is required. South Africa’s investment rate is currently about 22% of GDP. Owing to the country’s low savings rate of only 14% of GDP, it has to borrow the balance from savings rich countries, which results in a 7% to 8% current account deficit (also known as our savings-investment gap). To attract foreign capital and to promote business and consumer confidence, there has to be stability and predictability in economic policy making. The recent decline in the South African Business Confidence Index to the lowest level in a decade, highlights the risk of any sudden policy changes.

Economic growth is a key factor in reducing unemployment and poverty.
It is apparent from the discussions in the JPWG that short-term measures to reduce retrenchments and to protect the vulnerable are important. The necessity of getting the country’s economic growth rate back on course to ensure higher growth has not been explored fully. High levels of economic growth are required to reduce unemployment and poverty. An economy growing at 5% per annum will double in size in approximately 14 years. An economy growing at 7% per annum will double in size in one decade. Creating a bigger economy for all South Africans to share in will go a long way towards addressing poverty and inequality and meeting the government’s 2014 target. While it has taken some time to get the macro-economic balances right in South Africa, the benefits of doing so have resulted in rising investment, declining unemployment and the creation of the space for dealing with apartheid legacies such as poor education and economic transformation.

There are a number of examples of countries that have elected to highlight growth to solve their domestic poverty and unemployment problems. Perhaps the best examples are those of Ireland, Malaysia, South Korea, Japan and China. These countries pursued continued high levels of economic growth, which had a huge impact on unemployment and poverty.

South Africa has failed to outperform the global economy in the past decade. The country’s economic reforms at the macro level have enabled it to take advantage of the favourable global circumstances over the past five years, but to grow as did the Asian countries mentioned, it will have to do much more.

**Global financial conditions**

The global economic crisis has forced a curtailment in the amount of credit available at the global level. Emerging economies like South Africa are also not immune to global forces as the pool of global liquidity has narrowed and the world economy slowed. Given the country’s very low domestic savings rate, the country will need to continue to borrow from foreign markets to fund the massive investment programmes for companies like Transnet and Eskom, in addition to the private sector’s investment plans. However, access to foreign borrowings and macro-economic policy choices have narrowed for South Africa.

South Africa has to use the lull created by the global economic crisis to focus on issues that will help the country raise its economic growth rate when global economic conditions again become more favourable. The essential macro-economic building blocks have been put in place. What is now required is to deal with the infrastructural and human capital constraints in a manner that will overcome these barriers to higher growth. This will require innovative thinking by all parties, given that the state does not have the internal capacity to deliver the necessary outcomes. Public-private partnerships are the only way South Africa can effectively deal with its infrastructure constraints and its human capital development backlogs.

**Investment is rising**

In the period 2002 to 2007, South Africa grew at a higher pace than the country’s actual economic growth potential (5% versus 4%). This resulted in increased capacity utilisation in most industries, to the extent that some industries are now short of sufficient spare capacity to guarantee reliable supply. Key constraints include electricity supply, railways, ports, road networks, cement and steel fabrication and liquid fuels refining capacity. The only solution to capacity constraints is increased investment to generate the needed capacity. The infrastructure programme for the 2010 world cup and the Gautrain project are also large contributors to rising fixed investment.

Real fixed investment in the economy grew by 10.3% in 2008, before a slowdown in the first half of 2009 to 6.8%. While real fixed investment by parastatals grew by 30.8% in 2008 and 50% in the first half of 2009, this sector only accounted for 21.5% of total fixed investment in the economy, and the strong growth is off a low base. The private sector grew real fixed investment by 6.6% in 2008, before contracting investment spending by 2.5% in the first half of 2009. The private sector accounted for 64% of total gross investment in the economy in the first half of 2009, despite the global crisis. A large portion of fixed investment by parastatals is going into areas that have traditionally had capital expenditure deficits. Growth in real fixed investment by government (especially municipalities) was 9.9% in 2008 and 2.7% in 2009, which accounted for 14.6% of total investment. The fact that government capital spending has stalled in the face of sizeable infrastructure needs, such as...
While the improvement in gross and net investment is welcome, there are a number of constraints that must be dealt with if investment is to grow faster. In particular, regulatory red tape – such as the delays in the issuance of water use licences or in the processes surrounding environmental impact assessments – have affected the building of power stations and delayed mining projects. Despite several commitments by government to reduce red tape and lower the costs of doing business, the actual progress has been slow. According to the World Bank publication Doing Business 2010, South Africa in 2009 ranked 34 out of 181 countries in terms of ease of doing business. This places it in the top quartile of this category. However, hidden in the numbers are some areas where definite improvements are required. For example, while the country is highly rated in terms of protecting investors (world rank of 10), it scores poorly in a number of areas that are also critical to investment: trading across borders (world rank 148), the ease of employing workers (rank 102), registering a property (rank 90 and costing 8.8% of the property value), closing a business (rank 76), starting a business (rank 67), dealing with construction permits (rank 52) and enforcing contracts (rank 85).

South African policy makers and regulators need to build on the country’s strengths and aim for key “Costs of doing business criteria” to be in the top quartile of the global rankings. Issues such as the high costs of registering a property or high costs of starting a business, must be confronted to provide an enabling environment for investment.

The National Energy Act

While the White Paper on Energy Policy of 1998 formulated policies on energy planning, energy statistics and energy efficiency, there was no legislative framework for the implementation of these policies. The Chamber has advocated the introduction of such legislation and the situation was rectified in November 2008 when the National Energy Act was formulated.

The minister of energy is mandated to collect and keep energy statistics and implement integrated energy planning measures. The South African National Energy Development Institute is appointed to undertake energy efficiency measures as directed by the minister and to direct, monitor, conduct and implement energy research.

To ensure security of energy supply, the Act gives the minister of energy the authority to direct any
A state-owned entity is required to acquire, maintain, monitor and manage national strategic energy feedstock and carrier stockpiles. The nominated state-owned entity must perform these functions in accordance with a published security of supply strategy or policy. In terms of the Act, such strategy or policy may contain, but is not limited to, the minimum level of energy carrier or energy feedstock for the production of an energy carrier, the conditions under which stockpiles may be built and withdrawals be made from, the funding mechanism for such stockpiles and the obligations imposed on producers to supply feedstock.

Of critical importance – while South Africa is experiencing a shortage of electricity generation capacity – is the provision that the minister may prescribe energy conservation measures that may include, but are not limited to, the amount of energy to be saved, the duration for such measures and penalties associated with non-compliance to such measures.

Electricity supply

Although Eskom generation capacity remains constrained, there was no need to implement demand reduction measures during the period under review. This was mainly because of the reduced demand from the platinum, diamond and base metal sectors, as a result of the global economic downturn. The average reserve margin remained well below 10%. This situation is expected to prevail until at least 2015, when additional generation capacity will come on line.

The Chamber continued to participate in the Eskom Key Customer Task Team, to ensure that the concerns of the mining industry received due attention, and to monitor Eskom’s operations.

The Chamber – through Business Unity South Africa (BUSA) – also participated in the National Energy Response Team, which was established to co-ordinate and facilitate the implementation activities taking place as part of the response to the shortage of electricity supply, to prevent load shedding and to put South Africa on a more sustainable path.

Energy efficiency

The first Energy Efficiency Strategy for South Africa was published in 2005. Since there was no legal framework to enforce the Strategy at the time, the measures contained therein were mainly implemented on a voluntary basis through the Energy Efficiency Accord. The Chamber and some of its members signed the Accord and participated in its implementation.
Mines also participated in Eskom’s Demand Side Management Programme and have collectively saved about 441 MW in electricity demand since 2005.

A revised Energy Efficiency Strategy was published for comment in May 2009. By this time the National Energy Act – which has been agreed upon – provided the legal framework for the mandatory implementation of the strategy.

The Chamber noted with concern that the revised strategy proposed a legislative approach to the implementation of energy efficiency measures through mandatory standards and obligatory energy audits. It argues that industries are compelled to implement energy efficiency measures by market forces and proposes that government’s role be supportive of industry, rather than coercive.

The revised strategy states that there was agreement to implement sub-sectoral energy efficiency targets. In the case of the mining industry the sub-sectoral target is 10%, using an adjustable baseline. The document further states that, while these targets are voluntary, it could become compulsory at a later stage.

The National Energy Act clearly states that, while the minister may make regulations regarding minimum levels of energy efficiency in each sector of the economy, the minister must invite public comments on the regulations and duly consider such comments before promulgating the regulations. The mining industry has so far not been asked to comment on the 10% target envisaged by the revised strategy.

Given the diverse nature of the mining industry, not all operations will be able to achieve any given energy savings target. The Chamber therefore recommended that a process of consultation with the mining industry take place to determine feasible targets.

The revised strategy correctly identifies the transport sector as the second largest energy consumer. The best approach to energy savings in this sector is to increase the volume of freight transported by rail. The current market share for road and rail by tons transported is 87/13. The reason for this unsustainable situation is the poor quality of the freight rail service. The Chamber expressed the view that considerable energy savings could be achieved by improving the freight rail service.

The Chamber noted that the authors of the revised strategy believe that government subsidies for energy efficiency cannot be justified while there are many other pressing needs, and recommended that other incentives – such as the elimination of import duties on energy efficient equipment – be considered for inclusion in the strategy.

Electricity pricing

On 15 May 2009, the National Energy Regulator (NERSA) published an application by Eskom for a 34% interim increase in the price of electricity for comment. The Chamber submitted written comment to NERSA and presented its comment at the subsequent public hearings.

Eskom applied for an interim increase in the price of electricity while it was formulating an application for a new multi-year price determination (MYPD) for the period 2009/2010 - 2011/2012. The MYPD will be implemented in April 2010.

In a practical sense, the electricity price does not reflect the true economic cost of producing electricity in the country. All stakeholders recognise that, to ensure the sustainability and viability of the electricity supply industry, prices will have to increase to more realistic levels. However, it takes time for businesses and households to adjust their behaviour to be more energy efficient and it takes time to conduct research on applicable energy efficient technologies, ordering the appropriate equipment, importing the product, installing the equipment and learning how to use it. This creates an untenable situation between the amount of time that business needs to adjust and more realistic electricity prices. To overcome this difficulty, the Nedlac social partners agreed in 2008 that prices would have to increase, but over a period of three to five years to allow businesses and households to adjust. Large upfront increases in the electricity price have the same economic impact as curtailing electricity supply.

Eskom experienced massive increases in its operating costs, which threatened their financial viability. The Chamber accepted that there appeared to be justification for the requested interim price increase.

However, the Chamber had some concerns regarding the application submitted by Eskom. In the application the cost of road construction and maintenance, non-Eskom generation and open cycle gas turbines were not included in the 34% increase applied for. The application envisaged that these costs would be recovered through a separate, yet unspecified, mechanism.

While road building and maintenance is not Eskom’s
responsibility, passable roads are essential to ensure delivery of coal to power stations. It is known that Eskom is currently spending around R10-million a month on road maintenance.

Eskom is dependent on non-Eskom generation for 4.5% of its output, not an insignificant number given Eskom’s current reserve margin. The forecast costs for non-Eskom generation indicate an increase of 45% in the cost of non-Eskom generation.

The open cycle gas turbines form an integral part of Eskom’s generation system. Given the low reserve margin, they are essential a backup in case of outages in the system or excessive demand. The forecast cost of liquid fuel for the open cycle gas turbines indicated a possible increase of 43%.

The mechanism envisaged to fund the above mentioned costs was not detailed. Should this mechanism not be realised, Eskom would be forced to continue the funding of these items without the required income. The Chamber recommended that the envisaged funding mechanism be described in detail.

The unpredictable and varying cost of primary energy remained an issue. It was accepted that Eskom could not revert to long-term contracts for its total coal supply, which means that, for the foreseeable future, Eskom will probably still have to obtain some coal on short-term contracts.

In June 2008, NERSA decided that it would develop a mechanism to take into account unforeseen changes in primary energy and other costs. The mechanism should take into account the efficiency of costs, the prudence with which the costs are incurred, Eskom’s measures to control these costs and its ability to predict such costs. To date, this mechanism has not been developed and the Chamber recommended that it be developed as a matter of urgency.

Eskom could not properly motivate the envisaged 34% increase applied for and acknowledged that their approach relied on the 2008 NERSA projections of price increases ranging between 20% and 25% a year for the next three years.

The Chamber noted that the envisaged funding model and consequent MYPD would not be finalised in time, and that the interim increase granted would fall short of the required increase. In both cases another interim price increase would be required.

Such ad hoc price increases frustrate the planning and financial management in electricity intensive industries and undermine investor confidence. The Chamber urged Eskom and NERSA to cooperate to ensure that the funding model and consequent MYPD were finalised in time for implementation by April 2010 and that the interim increase be sufficient to provide adequately for the period until April 2010.

Given that mining projects operate for decades after several years of design and construction, the planning and management of projects require some indication of future cost trends of critical inputs such as electricity. In this regard the Chamber recommended that Eskom develop and publish a long-term pricing plan.

On 25 June 2009, NERSA announced that Eskom had been granted an interim price increase of 31.3% on the average standard tariff for the period from 1 July 2009 to 31 March 2010. This resulted in an increase in the average standard tariff from 25.24c/kWh to 33.14c/kWh. The increase included the 2c/kWh environmental levy on the sale of electricity generated from non-renewable sources.

During its presentation at the public hearings into Eskom’s application for the interim price increase, the trade union Solidarity accused the coal mining industry of extracting excessive profits from the sale of coal to Eskom and demanded an investigation into the coal mining industry. In its announcement, NERSA undertook to conduct an investigation into primary energy costs – specifically coal – to establish the prudence of the costs.

Coaltech Research Association

At the beginning of 2009 it became clear that the South African coal mining industry needed to confront a number of challenges if it was to remain economically sustainable and retain its social licence to operate. These challenges include increased resistance to coal mining from environmental civil society, an escalating water scarcity, global climate change, constrained coal transport capacity, a diminishing resource in Mpumalanga and the need to open up a new coal field in the Waterberg.

Consequently, Coaltech developed a strategy to address these challenges for the next five years. Included in the strategy is the waterless beneficiation of coal, improving the utilisation of coal resources, environmental conservation and rehabilitation, infrastructure development, the development of the Waterberg coalfield and clean coal technology. In addition, energy efficiency was to be an aspect of all projects.

In accordance with the strategy, Coaltech embarked
upon a number of new projects on dry dense medium separation and dry screening of coal, more efficient water treatment technologies, the mitigation of spontaneous combustion, the improved utilisation of rehabilitated mine land and coal transport.

**Energy Coal Forum**

In February 2009, Eskom convened a meeting consisting of representatives from coal producers, government and labour to discuss the establishment of a National Energy Coal Forum. The purpose of the envisaged Forum is to ensure that the energy coal requirements for the next 10 to 15 years are met and to develop an understanding of the role of coal in the economy. The Chamber supported the concept of cooperation between local coal producers, consumers and providers of services to the coal industry to maximise the benefits of the national coal resource to the country. In this regard the envisaged National Energy Coal Forum will play a pivotal role.

There were, however, concerns in the coal mining industry that the activities envisaged for the Forum could result in contraventions of competition legislation. The Chamber recommended that:

- the customer (coal consumer) membership of the forum be expanded to include Richards Bay Coal Terminal and Arcelor Mittal
- smaller coal producers be invited to join the forum
- the terms of reference clearly state that coal pricing will not be discussed in the forum
- a legal adviser is engaged to monitor the proceedings and caution participants when discussions are likely to infringe on competition legislation.

On receipt of comments from stakeholders, Eskom sought further legal advice on the concerns around competition legislation. This process is still in progress.

**Rail transport**

A workshop on the reform of the South African railway system took place in October 2008 under the auspices of the Department of Transport. After presentations made by the Department of Transport and Transnet Freight Rail (TFR), it became clear that their positions were incompatible. The department proposed separating operations from infrastructure, the establishment of infrastructure utilities, introducing options for private sector funding and participation with competition in operations.

TFR expressed the view that systemic integration is the key to keeping South Africa’s commodity export competitive. Commodity export lines were therefore not candidates for vertical separation.

To exploit density potential and offer reliable hub-to-hub services with optimal port and regional connectivity major investment is needed. Revenues from operations are vital to leverage debt and reinvest in the network. Vertical separation would undermine this imperative.

Rural areas require an extensive network of low-density services. These are well suited to vertical separation, where smaller operators with low overheads could provide a better service at a lower price. Third party access arrangements are being investigated in this area.

Both TFR and the department recognised the need to move bulk freight transport from roads to rail. While mention was made of increasing costs of road transport, the improvement of railway services to attract freight was not mentioned.

Another matter not addressed by the department or TFR is the expansion of services for inland coal transport, i.e. the transport of coal to inland consumers and the provision of a heavy haul line for the Waterberg Coalfield. This issue was raised by the Chamber.

The department will evaluate issues identified in the workshop and determine how these fit into existing processes at strategic and operational levels. To date the department has not released any results.

Transnet has formulated a National Infrastructure Plan (NIP) that was approved by Cabinet for stakeholder engagement in 2009. Transnet has embarked on a national stakeholder engagement process to obtain views on the NIP. This process involves presentations to stakeholder groupings and a call for comment.

The principal objective of the NIP is to provide Transnet and the broader stakeholder community with a framework for the planning and development of port, rail and pipeline infrastructure, in such a way as to ensure that appropriate capacity is created ahead of demand. The NIP also wants Transnet to understand, and be able to plan for, its medium to long-term requirements for expansion capital. The Chamber is currently formulating comment on the NIP.

**Road transport**

During 2007, the Chamber expressed support for road transport contractors to implement a road transport management system (RTMS) for the coal
mining industry. Subsequently, the RTMS Coal Committee – consisting of representatives from collieries, the Chamber, transporters and Eskom – was established to manage the implementation of RTMS. Eskom is working towards full RTMS implementation and has indicated that contractors would in future be required to comply with RTMS before they can be contracted to deliver coal. Some improvements in the statistics on overloading and compliance with the RTMS have emerged, but more intervention is needed for continuous improvement.

Performance-based vehicles – developed according to terrain and types of load – could be one of the solutions. Currently vehicles are developed according to rigid, legislated specifications. Using performance-based vehicles results in considerable fuel savings and reductions in fleet size, as can be seen in the South African pulp industry and in other countries where these vehicles are used. The Department of Transport is also reviewing road transport rules and intends to be stricter on trucks that currently do not comply.

As part of the RTMS implementation plan, a Contractors Pack has been prepared. The purpose of the pack is to detail the minimum requirements of a standardised protocol for coal transport contractors working for Eskom, and to ensure that an effective contractor management control system is implemented and maintained.

**North South Corridor High Level Conference**

The Chamber participated in the North-South Corridor High Level Conference on 6 and 7 April 2009 in Lusaka, Zambia.

The conference was a tripartite meeting of the Common Market for Eastern and Southern Africa (COMESA), the Economic Community for East Africa (EAC) and the Southern African Development Community (SADC). The purpose of the meeting was to facilitate the implementation of the North-South Corridor Pilot Aid for Trade Programme.

The North-South Corridor Aid for Trade Programme is a joint COMESA-EAC-SADC initiative that aims to reduce the costs of surface transport (road and rail). High costs and above average transit delays lead to lower production and trading levels, which in turn limits the potential to raise GDP growth rates.

The North-South Corridor comprises two priority NEPAD Corridors, namely the Dar es Salaam Corridor – linking the port of Dar es Salaam with the Zambian Copperbelt – and the North-South Corridor linking the Zambian Copperbelt to ports in South Africa.

The Corridor, together with its adjacent spurs, serves eight countries – Tanzania, the DRC, Zambia, Malawi, Botswana, Zimbabwe, Mozambique and South Africa. It is the busiest corridor in the region in terms of values and volumes of freight and it is expected to become even busier in the years to come. If the volumes of imports and exports through the North-South Corridor continue to grow at the current rate, the infrastructure will collapse unless remedial actions are taken.

Acting on behalf of the COMESA-EAC-SADC Tripartite Task Force, the Regional Trade Facilitation Programme is currently working to identify ways in which to upgrade infrastructure along the North South Corridor. The planned work includes the maintenance and upgrading of roads, the rehabilitation of railway lines, improved load control and the reduction of delays at border posts.

Power generation and transmission in the region will be improved to allow better management of peak loads and increased power trading, and will provide employment opportunities for large sections of the region’s populations that live in areas with inadequate power supply. The North-South Corridor Programme will add an additional 35 GW of electricity to the grid of the Southern African Power Pool by 2015.

A variety of mechanisms will allow funds to be matched appropriately with different projects. Donors pledged US$1.2-billion for the North-South Corridor’s infrastructure and trade facilitation programme. The World Bank committed US$500-million to projects along the North-South Corridor, and an additional US$500-million to projects that are complementary to the North-South Corridor.

The European Commission pledged US$150-million and the African Development Bank pledged US$380-million for projects on the North-South Corridor, in addition to US$160-million for sections of the Ncala Corridor. The latter is complementary to the North-South Corridor and provides an alternative route to the sea.

The UK’s Department for International Development committed £100-million over the next five years for projects on the North-South Corridor, aligned to the priorities of the regional economic communities.

COMESA, EAC and SADC undertook to implement an extensive aid-for-trade programme, encompassing transport, power and trade facilitation projects along the North-South Corridor. In addition, the regional communities have pledged to work together to create a free trade area across their 26 member states.
The most challenging issues for the period under review were the finalisation of the fundamental changes to the regulatory framework for environmental management in the mining industry and the continued duplication of regulatory requirements. Furthermore, the continuous adverse media reports on the environmental legacies of the past century, has resuscitated a tendency among non-governmental environmental organisations to measure the commitment of current and future mining operations in terms of these legacies.

The issues around acid mine drainage and its impact on the country’s water resources and other economic sectors such as agriculture (stock farming, grain farming, mushroom farming, food processing) and tourism, have been topical and have resulted in the questioning of the mining industry’s social licence to operate, whilst undermining the legitimacy and the adequacy of the Department of Mineral Resources’ decision making process. This has led to public outcries wherever there is a mining application where there are competing land uses or prospecting/mining right applications (not mining operations) in areas that non-governmental organisations (NGOs) regard as environmentally sensitive or no-go areas for mining.

Sustainable development approaches still provide a framework for the Chamber’s input on environmental policy and the legislative process. The Chamber recognises and promotes the pursuit of a balance between the four pillars of sustainable development, namely, social equity, environmental protection, economic development and an effective governance framework.

The environmental adviser’s office participated in most environmental issues of concern to the mining industry, and provided expert and specialist input (verbal and written) to many legislation and policy initiatives undertaken in the year under review. The main vehicle for considering the mining industry’s environmental policy options and generating policy positions and specialist input is the Chamber’s Environmental Policy Committee (EPC). The EPC is made up of environmental specialists from the various mining groups, which collectively represent the single most senior environmental management grouping in the mining industry in South Africa.

In addition to engaging government on public policy in environmental management, the Chamber continues to liaise with a wide range of stakeholders, from community organisations concerned about the environmental impacts of mining, to specialist groups undertaking studies on various aspects of environmental management in the industry.

Policy, legislation development and engagement with stakeholders

The Chamber continues to engage government and provides specialist input through its participation on
task teams, general and project steering committees of projects initiated by the (Department of Mineral Resources (DMR), the Department of Water Affairs, the Department of Environmental Affairs and Tourism (DEAT), the National Nuclear Regulator (NNR), Business Unity South Africa (BUSA), NEDLAC, NBI as well as public hearings by portfolio committees on environment related legislative proposals in the National Assembly and the National Council of Provinces.

Furthermore, the Chamber provided expert opinion in connection with some of the contentious issues in the public media, particularly the interface between mining developments and the need to protect biodiversity, and the historical impacts of mining activities on the country’s limited water resources.

Alignment of the regulatory framework in environmental management

The amendments to the Minerals and Petroleum Resources Development Act (MPRDA) and the National Environmental Management Act were meant to streamline and align environmental management in mining. In terms of the agreement between the two departments, the DMR and the DEAT, there should be one environmental management system in South Africa that is prescribed by the National Environmental Management Act. As a result of that agreement, NEMA and EIA regulations were amended to include some definitions and environmental sections that were contained in the MPRDA. The Chamber, through EPC, actively participated in the revision process and made submissions to DEAT on key issues for consideration and the Chamber’s president Mr Sipho Nkosi, also met with the then Minister of Environment Affairs and Tourism, Martinus van Schalkwyk and the then chairperson of the Portfolio Committee on Environment and Tourism, Mr Langa Zitha to progress this process.

On 24 April 2009, the South African President, in terms of section 14 of the National Environmental Management Amendment Act, 2008 (Act 62 of 2008), announced in the Government Gazette that the Act would come into effect on 1 May 2009. However, the amended MPRDA has not yet come into effect, which means that the provisions of NEMA are not yet applicable to mining and the pre-amendment provisions prevail until the MPRDA comes into force and the transitional mechanisms take effect. This has not prevented the departments of the environment in the provinces from insisting that mining companies comply with the provisions of NEMA. This has resulted in a simple amendment to the MPRDA to include some definitions and environmental sections that were contained in the MPRDA. The Chamber is engaging the DMR on these and other related matters.

Implementation of the national environmental management: air quality act

The National Environmental Management: Air Quality Act 39 of 2004, is expected to come into force on 11 September 2009, with the repeal of the Atmospheric Pollution Prevention Act 45 of 1965 anticipated to occur on the same date. Despite the fundamental revision of the legislation regulating air quality and emissions standards, aspects of the Atmospheric Pollution Prevention Act 45 of 1965 remain relevant for the foreseeable future. These developments, coupled with recent and pending developments with regards to those provisions of the National Environmental Management Act 107 of 1998, deal with environmental impact assessments (EIA) and will become increasingly relevant for many activities that give rise to air emissions.

It is important for industries with substantial air quality impact to be aware of these imminent changes in the air quality regime for South Africa and the consequences to their operations and the anticipated time frames. This will allow industry to plan for and accommodate the changes in their operations and ensure compliance with the complex transitional provisions in the National Environmental Management: Air Quality Act 39 of 2004.

According to this Act, municipalities will be responsible for issuing Air Emission Licences. The question is whether or not the municipalities are ready to take on that function. Most municipalities do not have the capacity or skills to handle the licensing function. The other issue of concern is that the different tools required to enable the implementation of the Act – such as the emission standards – are not ready yet. Another major concern is the issuing of emission licences in terms of the Act, because it requires licences to be issued in line with EIA regulations thus EIA time frames will apply. Most municipalities do not have the capacity to deal with applications and therefore will have difficulty in issuing emission licence within the prescribed 60 days. This will cause delays in project approvals. The Chamber is engaging with the authorities to ensure alignment between all regulatory requirements after 12 September 2009.

Implementation of the national environmental management: waste act


The act inter alia:

• Creates a general duty on the state to put in place uniform measures that seek to reduce the amount of waste generated and to ensure that where waste is generated, waste is reduced, recycled and recovered in an environmentally sound manner prior to it being treated and disposed of in a safe manner.

• Facilitates the establishment of a National Waste Management Strategy (NWMS) as well as national and
provincial norms and standards for the management of waste, including those relating to the classification of waste, waste management services and storage, treatment and disposal of waste (including the planning and operation of waste treatment and waste disposal facilities)

- Provides for various specific waste management measures, including:

  1. The declaration of priority waste by the minister by notice in the Gazette and the waste management measures to be taken in relation to declared priority wastes

  2. The creation of various general duties on a holder of waste to not only take reasonable measures to reduce, re-use, recycle and recover waste, to dispose of waste in an environmentally friendly manner and to manage the waste so that it does not endanger health or the environment, but also to avoid the generation of waste

  3. Stipulating that where reduction, re-use, recycling and recovery of waste is undertaken – unless otherwise provided for in the Act – it must be ensured that such activities use fewer natural resources than the disposal of the waste and, to the extent that it is possible, are less harmful to the environment than the disposal of such waste

  4. The declaration of certain wastes, which will be subject to extended producer responsibility and the specification of certain extended producer responsibility that must be taken

  5. The declaration of certain listed waste management activities that cannot be commenced with, undertaken or conducted without complying with the requirements or standards to be determined, or without a waste management license – if such a license is required – pending publication of such list(s), schedule 1 of the Act is applicable ("Waste Management activities in respect of which a waste management licence is required")

  6. Setting specific requirements for storage, collection and transportation of waste

  7. Setting specific requirements for the treatment, processing and disposal of waste, including a prohibition against the disposal of waste at an unauthorised facility

  8. Requirements regarding the preparation of Industry Waste Management Plans (IWMP's) by individuals and organs of state

  9. Provision regarding contaminated land, including:

     a) The application of the Act to land that was contaminated prior to the commencement of the Act

     b) The identification and notification of investigation areas – such as land where high-risk activities have taken place or are taking place – that are likely to cause contamination, including the consequences associated with such identification and notification, like the remediation of the land after consideration of the requisite site report, as well as a limitation on the transfer of remediation sites

  10. Provide for the licensing and control of waste management activities, including

      a) The procedure for application for a licence, including the factors to be taken into account by the licensing authority, as well as the criteria for a fit and proper person which must be taken into account when considering an application

      b) Provisions regarding the decision of licensing authorities on applications, the issuing of waste management licenses, the contents of the licence and the transfer of licences

      c) The Act also makes provision for the review, variation, renewal, revocation, suspension and surrender of licence

  11. The Act further makes provision for compliance issues, including penalties and offences, regulations, the consultative process that must be followed by the minister or the MEC before exercising a power in terms of the Act, and the procedures to be followed for appeals and exemptions.
The Act repealed the relevant provisions of ECA (Act 73 of 1989), including section 20 of the Act dealing with waste disposal site permitting. The Act also provides for transitional provisions in respect of permits issued in terms of ECA and other transitional provisions, including Schedule 1 listed waste management activities.

Greenhouse gas industry reporting

South Africa, being part of the United Nations Framework Convention on Climate Change (UNFCCC), is required to report on its greenhouse gas (GHG) emissions periodically to the latter’s secretariat. This report takes the form of national communication and consists of consolidated GHG information from various economic sectors that, as a consequence of their activities, emit greenhouse gases. South Africa’s private sector industries – through BUSA – signed a memorandum of understanding with the DEAT committing themselves to report GHG emissions to the department. The Chamber engaged with the representatives of the DEAT to discuss the practical implementation of this memorandum of understanding, with specific focus on the mining industry. The two major issues for consideration were:

- The updating of the national inventory by the Energy Research Council (ERC)
- The long-term establishment of a GHG corporate reporting system.

The ERC was appointed by the DEAT to update the national GHG emissions inventory, which was to be submitted to the UNFCCC as the third national communication by July 2008. The mining sector was to submit its GHG data on a predetermined template using the timelines as indicated on the template.

South African mining and biodiversity guidelines

Economic and social development and environmental protection are the essential elements of sustainable development. The nexus between economic development and the conservation of natural resources has been a recurrent subject of debate. One of the more visible and controversial discussions centres on the impacts of the mining industry on the environment – an industry that not only produces goods essential to society’s development needs, but also makes a substantial contribution to the economy of the country. Reconciling economic and social development opportunities with the need for biodiversity conservation and environmental protection requires the development of strategic and integrated approaches to land use planning and management to assist societies in making informed decisions. The mining and metals industries’ biodiversity conservation performance is under increasing scrutiny from regulators, NGOs, special interest groups, commentators and financial analysts. Demonstrating a commitment to biodiversity conservation is now an essential
element of sustainable development for the mining and metals industry.

South Africa is very proud of its rich biodiversity. However, this biodiversity is under threat from climate change, agriculture and industrial development, including mining. The mining industry is under pressure to reduce and report its impacts on biodiversity. Mines themselves have an opportunity to contribute to biodiversity conservation and management by gaining a better understanding of the ecosystems on their sites, and often through even small changes in the way land is managed.

Established in 2005, initially under a co-ordinating committee and later under a formal steering committee, the South African Mining and Biodiversity Forum (SAMBF) brings together stakeholders from industry, conservation bodies and government. The aim of the forum is to provide an opportunity for cross-sectoral interaction and co-operation aimed at improving biodiversity conservation, management and performance in the mining industry within the South African legislative framework. The forum recently published a review of the status of biodiversity management in the mining industry, which identified, amongst others, a need for guidelines in this area.

As part of its dialogue with the International Union for the Conservation of Nature (IUCN), the International Council on Mining and Metals (ICMM) published Good Practice Guidance for Mining and Biodiversity (GPG) in 2006, aimed at encouraging and guiding ICMM members to become positive contributors to biodiversity conservation. The SAMBF has built on this effort and developed guidelines that focus specifically on the South African situation. These guidelines are nearing completion.

**Water sector leadership group**

The then Department of Water Affairs and Forestry (now the Department of Water Affairs and Environment) established a multi-stakeholder forum called the Water Sector Leadership Group (WSLG) under its leadership. The WSLG is the highest non-statutory strategic sector partnership forum for the South African water sector. The body provides a platform for dialogue, planning, reflection and monitoring of water sector policy, legislation, strategies and programmes aimed at improving sector performance and directly contributing towards improved co-ordination of planning. The WSLG is a framework for ensuring a strategic, continuous and adaptive approach for water sector goals. It assists stakeholders to build on lessons learned from the past and to work in a targeted way to ensure the achievement of national development goals through collaborative efforts and strong sector institutions. The role of the WSLG has changed over time; after initially serving as a strategic forum for water services practitioners at various levels, it is now positioned to perform the following functions:

- To serve as a think tank for the water sector and to prepare an overarching national action agenda and to ensure that sound policies, laws, strategies, programmes and institutions are developed to achieve the goals outlined in the Water for Growth and Development framework document
- To facilitate dialogue between the Department of Water...
Affairs, other government departments, civil society and the private sector for input, support and contributions to joint strategic and co-ordinated actions to improve the implementation of water sector policies, strategies and programmes.

The WSLG advises the Department of Water Affairs, but does not take executive decisions. It provides recommendations on policies, legislation, programmes and strategies and serves as a credible forum for stakeholder consultation and involvement in the development of sector policies, legislation, programmes and strategies. Recommendations are given to senior management of government departments for further review, endorsement and implementation. There is currently no direct link between the WSLG and the minister of Water Affairs. However there is recognition of the value and status of the WSLG as a platform for high-level strategic discussion within the sector. The Chamber is a member of the WSLG executive committee.

**Generic water conservation and water demand management: guideline for the mining sector in south africa**

The Department of Water Affairs focuses on integrated water resource management (WRM) to ensure environmental sustainability, socio-economic equity and efficiency in water use. The Directorate: Water Use and Efficiency (D:WUE) (formerly known as Water Conservation) was created as a result of the new approach to the management of the nation’s water resources. As one of its major objectives, the D:WUE must develop policies and regulations to give effect to water conservation/water demand management (WC/WDM).

As an outcome of this responsibility, the D:WUE initiated the development in 2005 of a ‘Generic Water Conservation and Water Demand Management (WC/WDM) Framework Guideline for the South African Mining sector’. This guideline is based on the details and objectives set out in the National Water Conservation/Water Demand Management Strategy, together with the Industry, Power and Mining Sector strategy. The Generic WC/WDM Framework Guideline focuses on water conservation and water demand management within the mining sector.

The overall purpose of the guideline is to provide assistance to both departmental and mining sector personnel in the assessment, planning and management of WC/WDM, and to enable improvements in water use efficiency within the sector. The specific outputs for the department are to provide WC/WDM information, to assist in the development of benchmarks and good management practices within the mining sector and to create awareness and knowledge within the mining sector and the wider public on the role of WC/WDM in promoting improvements in water use efficiency. The specific outputs for the mining sector are to provide a process for the assessment, planning and management of WC/WDM on mines and to assist in defining the use of benchmarks and good management practices in WC/WDM.

**Vaal River Reconciliation Study**

The Department of Water Affairs established the Vaal River System Strategy Steering Committee of which the Chamber is a member, and recently developed the Integrated Vaal River Reconciliation Study to ensure that the water resources in the Vaal River system will be adequate to meet future water requirements. Although the study refers to the Vaal River system, it should be noted that the water supply area of the Vaal River stretches far beyond the catchment boundaries of the Vaal River and includes most of Gauteng, Eskom’s power stations and Sasol’s petro-chemical plants on the Mpumalanga Highveld, the North-West and Free State goldfields, iron and manganese mines in the Northern Cape, and will be extended to supply the new developments in the Waterberg coalfields.

Briefly, the recommendation state that the department should:

- apply all the necessary resources to eradicate unlawful water use as a national priority by 2011
- implement WC/WDM measures to reduce losses by at least 15% by 2014
- undertake a feasibility study to impose measures for the re-use of mine water effluent, with the priority being the water pumped out of the gold mines in the Witwatersrand basin
- negotiate with the government of Lesotho for the implementation of Phase 2 of the Lesotho Highlands Water Project.

The Chamber will keep its members informed about project developments.

**Nedlac: Stakeholder Accord On Water Conservation**

The Chamber, as part of BUSA, is participating in a Nedlac Fridge study: “Development of Quantitative Measures of Performance for a Proposed Stakeholder Accord on Water Conservation and Implementation of Recommendations from Studies of Water Quality”. The project reviewed site-level baseline determination, target-setting guidelines, and institutional options and management.

In terms of the study, the following sectors were selected to be party to the proposed stakeholder accord on water conservation (it specifically excludes the municipal and local government sector):

- the commercial sector (with focus on buildings)
- irrigated agriculture
• manufacturing (and all its sub-sectors)
• mining

The desired outcome of the site-level baseline determination is to enable individual water users (and their sectors) to establish a water use baseline in volume terms \((m^3/a)\) and water intensity terms \([m^3/\text{unit of activity, over a short term (one year) and long term (five years)}]\), with an envisaged annual review. The key performance indicators for mining are \(m^3/\text{annum}\), \(m^3/\text{ton ore mined OR m}^3/\text{ounce produced}\).

There was debate around the fact that the proposed stakeholder accord, as currently structured, focused mainly on water intensity, i.e., the amount of water used per unit of production, which is unrelated to social consequences, whereas water efficiency (which relates to improved returns on investment, poverty alleviation and economic competitiveness) is not considered. This was a major problem for the mining and other economic sectors. The project is due to be completed at the end of 2009.

**Nedlac: fridge study to investigate the viability of using economic instruments to achieve greenhouse gas emission reductions**

The aim of this Fridge project is to gain a better understanding of the actual policy mechanisms required to achieve emission reductions and their potential impacts on different sectors within the context of South Africa’s industrial policy framework. The findings of the study will contribute to the national discourse around GHG emission reduction regulations, and empower industry to engage with government to develop the most efficient and effective policy mechanisms to move the country to a low-carbon economy in the long term. In addition, the project will highlight the options available to individual sectors.

In terms of UNFCCC, South Africa is a non-annex 1 party, and as such there are currently no firm obligatory targets for GHG emission reductions. Any targets set and the form they take (i.e. national versus sectoral targets) are likely to be the result of multilateral GHG reduction commitments. To facilitate analysis, however, the project assumes that government is committed to meeting the GHG mitigation target set for the ‘required by science’ scenario in the long-term mitigation scenarios, namely to reduce current emissions by 30% – 40% by 2050. The project considers Scope 1 (direct emissions) and Scope 2 (indirect emissions from electricity) emissions only. Scope 3 emissions (non-electricity indirect emissions) are excluded from the analysis.

The first report provided an overview of the economic instruments available to mitigate climate change. It starts by providing a theoretical overview of the different economic instruments and highlights important features of each with respect to their design and implementation. The following section provides a more practical analysis of the different instruments by evaluating the environmental, economic and fiscal efficiency of each instrument with respect to the South African economy. The third section considers the interaction between climate change mitigation and industrial policy, by evaluating the impact costing carbon will have on the policy objectives identified in the National Industrial Policy Framework. The report ends by providing preliminary recommendations on the most suitable sub-set of GHG mitigation policy approaches. The findings of this report are preliminary and will be re-evaluated in light of the analysis of the impact of the suggested policy measures on the six selected industrial sectors (including mining).

**NNR/IFR**

The National Nuclear Regulator (NNR) was established to protect the public, property and environment against nuclear damage. The regulator is governed and controlled by a board of directors and is operated by an executive comprising the chief executive officer (CEO) and the staff of the NNR. The minister of mineral resources is the executive authority responsible for the NNR and appoints the NNR board.
The functions of the NNR include the following:

- Nuclear authorisation, whereby the NNR gives permission – by means of a written approval – to applicants or/and operating organisations to perform nuclear related activities as detailed in the scope of the authorisation.
- Compliance assurance, which is the regulatory process used by the NNR to provide assurance of holders’ compliance with the conditions of nuclear authorisations, through the implementation of compliance inspections.
- Interaction with international organisations associated with nuclear regulations and related matters, e.g. the International Atomic Energy Agency.

A few years ago, the Minerals, Energy and Allied Industries Forum on Radiation (IFR) was formed to address the sensitive issues of radiation in South Africa. One of the main aims of the IFR is to discuss and resolve all radiation-related issues, cooperate and negotiate with the NNR and advise all stakeholders on radiation matters. There is continuous interaction with the NNR on mutual concerns and current initiatives around the management and prevention of radiation contamination in the Wonderfonteinspruit catchment area. The mining companies in the area have grouped themselves into a mining interest group, and the Chamber assists in the interaction of the group with the NNR and other stakeholders.

**National Business Initiative**

Launched by former president Mandela in 1995, the National Business Initiative (NBI) is a leading business coalition focusing on the broader role of business in sustainable. The NBI is an alliance of forward-thinking South African and overseas companies committed to realising the NBI’s vision of a thriving South African society, with a market economy that functions for the benefit of all. The Chamber cooperates with the NBI on the implementation of the Energy Efficiency (EE) Accord. An Energy Efficiency Technical Committee oversees the EE process and is developing a monitoring and reporting guideline. Other issues under discussion with NBI are climate change, sustainable development, and the UN Global Compact.

**Water Institute of Southern Africa (WISA)**

The Water Institute of Southern Africa provides a forum for the exchange of information and views to improve water resources management in southern Africa. The objectives of the institute are the promotion and application of scientific and engineering knowledge and management skills in the planning, design, construction, operation, maintenance, investigation, research and education of the natural and controlled water cycle. This will include, but will not be limited to, the application of scientific, engineering and management skills to all or any hydrology, water resources, river management and flood alleviation, recreation, water supply and distribution, sewerage, sewage and industrial waste treatment, disposal and water pollution control. The Chamber participates in most WISA divisions and sits on the management committee of the Mine Water Division.

**International Council for Mining and Minerals (ICMM): participation in task forces**

The Chamber is one of 27 national and commodity association members of the ICMM. (An overview of ICMM and its task forces is provided elsewhere in the Annual Report). The environmental adviser’s office participates in the Associations Coordination Group, Environmental Stewardship and Biodiversity Task Force, and is a correspondence member of Integrated Materials Management Task Force and the Community Development Task Force.
In the year under review, the Health Services Unit prioritised a number of initiatives: the control of noise and dust, the adoption of leading practices on noise and dust under the Mine Occupational Health and Safety (MOSH), piloting of the Nongoma site under the Ex-Mineworker Project, prevention and treatment of tuberculosis (TB), Mine Health and Safety Council (MHSC) committees and the compensation system under the Occupational Diseases in Mines and Health Act (ODMWA).

State of health in South Africa

The state of health of the general population has a significant influence on health in the mining industry. Apart from HIV/AIDS, which is still the biggest challenge for the country, it is also leading to a massive TB epidemic. According to UNAIDS, South Africa had an adult HIV prevalence of 18.1% in 2007, which is higher than other countries with substantial mining activities: Botswana (23.9%), Ghana (1.9%) and Brazil (0.6%). HIV and AIDS not only have a major impact on the overall working population of the country, but also on the mining industry.

The 2009 World Health Organisation (WHO) led review of the South Africa National TB programme, found that the current HIV/AIDS epidemic is driving the TB epidemic. New cases of TB in South Africa in 2007 was 948 cases/100 000 population. In the past 10 years the incidence of TB has increased in parallel to the HIV epidemic.

It is difficult to quantify HIV prevalence in the mining industry without a scientific survey. Currently most companies only offer voluntary, confidential testing, making it impossible to determine prevalence. Prevalence depends on a variety of factors such as HIV frequency in the area from which mineworkers are recruited; the prevalence in the area surrounding the mine; types of housing and family structures. Estimates of HIV incidence undertaken by companies range across the commodities, from 16% in coal to just below 30% in gold. It must also be noted that HIV prevalence is expected to

TB incidence and HIV prevalence rates: 1990 -2006

Source: TB Strategic Plan for South Africa: 2007-2011

- **TB Incidence**
- **HIV Prevalence**

![Graph showing TB incidence and HIV prevalence rates from 1990 to 2006](image)
sir as employees on antiretrovirals (ARVs) continue to live longer.

TB is the most prevalent occupational disease in the mining industry. A recent report from the Department of Mineral Resources indicates that 4,639 cases of HIV were reported in 2008.

The policy environment

The mining industry in South Africa offers considerable health services to its employees and the communities in which the industry operates. These consist of primary healthcare, occupational health and hospital services offered on managed care models and on medical aid where applicable. A number of mining companies also provide private healthcare services on a cash or medical aid basis.

Developments in the South African legislative and policy environment are paramount to the industry. The two key developments that impact on mining’s health services, are the proposed National Health System (NHI) and legislative and regulatory transformation from the Department of Mineral Resources.

National Health System (NHI)

At the Polokwane Conference in 2007, the ANC committed itself to the introduction of a National Health System (NHI). This was a major shift from the previous government’s policy of introducing a Social Health Insurance (SHI). The key difference between the two is that with the NHI, all citizens in the country benefit from the contributions of employers, employees and government, while with a SHI, only those who contribute benefit. The NHI is therefore seen as more equitable.

Broadly speaking, two sources of funding are envisioned: compulsory contributions from employers and employees in the formal sector (and input from a general tax revenue. The funds will be pooled and medical services will be purchased from accredited service providers in both the public and private sectors. The status of medical aid schemes as financing intermediaries and the latitude this affords people who can afford to buy health insurance is unclear. What is evident is that tax incentives for medical aid contributions are likely to fall away.

This will have major implications for the delivery of health services by the mining industry. The industry is not only a financing source – as most other industries are – but is also a service provider. Changes to financing options will especially affect the current managed care options offered by a number of mining companies. Any changes should still ensure adequate funding for legally prescribed occupational and emergency health services. Opportunities exist in that the industry has massive infrastructure that can be accredited for service provision to the NHI. Options available to the industry will become clearer once an official policy document is made available for public comment. The Chamber is participating in preliminary discussions on the NHI through BUSA.

Department of Mineral Resources regulations

The Mine Health and Safety Amendment Act of 2008 was promulgated in 2009. The amended Act provides for stricter reporting requirements for serious health and life threatening events. It also emphasises the role of the Occupational Medical Practitioner (OMP) and might have higher financial consequences for mining health services as OMPs hold a specialised qualification. The Act also requires that medical exit examinations are undertaken within 30 days. This is not always possible, such as where an employee has absconded.

Another problematic amendment concerns section 20, which states that an employee lodging an appeal may not be dismissed on grounds of unfitness to work until the appeal has been heard. No time frames are set for the appeal process and it is likely that problems might arise with implementation. The Chamber is engaging the department to find ways to resolve these issues.

The Housing and Living Conditions Standard for the South African Minerals Industry was gazetted in April 2009. An important principle in the standard is that mining companies should ensure proper healthcare services for mineworkers and their families living within and around the mining area. It is also unclear how this would align with the proposed NHI.

Review of strategic focus areas for 2008/9

Mining Industry Occupational Safety and Health (MOSH)/Learning Hub. Following the piloting of the Chamber’s Leading Practice Adoption system during 2008, the noise and dust teams successfully held workshops in March and April 2009. The dust team presented results from its demonstration mine – Goldfield’s South Deep Mine –
where a dust suppression fogging system for eliminating silica dust in underground mining areas was used. This followed the testing of the leading practice at AngloGold Ashanti’s Great Noligwa Mine where a reduction of silica dust levels of up to 90% was achieved.

The noise team demonstrated an electric rock drill at AngloGold Ashanti’s Moab Khotso mine, which is five times quieter than conventional pneumatic rock drills.

The teams are currently preparing for the next leading practices, which emanate from the comprehensive five-year plans. The noise team will be concentrating on hydropower drills and silenced pneumatic rock drills; the dust team will be concentrating on controls at ore pass systems in intake airways. Whilst promoting the adoption of leading practices, the teams are making substantial contributions to meeting the industry milestones on noise and dust.

More information on MOSH – and its successor, the Learning Hub – can be found under the sustainable development section.

**Ex-mineworker Project**

The Former Mineworker and Making ODMWA Work Project was conceived in 2004 as a strategy for improving the lives of former mineworkers in rural areas. This tripartite project covers the following broad areas:

- the establishment of occupational health centres at identified government hospitals that provide benefit medical examinations to former mineworkers
- the strengthening of the certification and compensation claims process
- the promotion of sustainable economic projects.

Year 1 of the project ended in June 2009. The project’s pilot year established services for benefit medical examinations in St Benedict’s Hospital, Nongoma, KwaZulu-Natal. The capacity of the pilot was for 30 ex-mineworkers to be examined in a day. The board – which oversees the project – evaluated the pilot in Nongoma and noted certain problems in the establishment of the benefit examination centre in Nongoma, but the board felt that these could be overcome and the project should be rolled out to two more sites. Discussions and visits are now underway with a view to identifying the two sites.

The project has the potential to improve access by ex-mineworkers to benefit examinations and compensation. It will also strengthen occupational health services in general in the participating provinces.

Progress with support to the certification and compensation claims process offered by the Medical Bureau for Occupational Diseases (MBOD) and the Compensation Commissioner for Occupational Diseases (CCOD) has been very slow and awaits approvals from the National Department of Health.

The promotion of socio-economic projects has been a great success, with almost 1,000 farmers reached through the project. The support provided includes increasing agricultural production, the creation of market linkages, capacity building and technical training, the extension of credit facilities and the introduction of a land rental programme.

**Chamber activities on TB**

As a result of concerns around the control of TB in the mining industry, the Health Policy Committee (HPC) established a TB Task Team in March 2009. Some of the activities identified by the task team were the need to consult with the Department of Health – particularly concerning the referral of patients from SADC countries – building relations with SADC countries and sharing of best practices in the industry.

The task team organised a workshop on the TB Review Tool attended by the majority of health officials from mining companies. Other stakeholders, such as government departments (health and mining), MHSC and unions, were also represented. The workshop concluded that the TB Review Tool is a valuable tool and should be adopted widely. Refinements were proposed and later submitted to the MHSC.

In line with the resolution on improving the referral of patients between mining houses and SADC countries, the task team proposed a referral form for TB, which was approved by HPC and which will be discussed with the Department of Health. It also initiated the compilation of a list of TB managers in mining companies, which will form the nucleus for a list of SADC TB managers.

Preliminary discussions on TB between the national Department of Health and the Chamber were held. It was agreed that a task team on TB in the mining industry should be established and that all stakeholders will have representation. Hopefully, this will lead to a better understanding of the management of TB and facilitate the management and referral of patients between mining companies, the provinces and the rest of SADC countries.

**MHSC committees**

The Health Services Unit participates in a number of committees under the MHSC. These include the Mine Occupational Health Advisory Committee (MOHAC), its technical advisory task teams, the Occupational Medicine and Hygiene Technical Task Teams (OMTTT and OHTTT) and the Safety in Mines Research Advisory Council (SIMRAC).

During 2008, four guidelines were considered for review at MHSC.

1. The Guideline for a Mandatory Code of Practice for Flammable Gas in Mines other than Coal Mines was reviewed by the OHTTT and approved by the Legal Drafting Committee
2. The Guideline for a Mandatory Code of Practice for Flammable Gas Coal Mines is currently under review by the OHTTT
3. The review process for a Guideline for a Mandatory Code of Practice for an Occupational Health Programme – Airborne Pollutants, has begun. This review was necessitated by recent research findings that show the current measurement strategy for silica dust to be inadequate. The findings of the research will be taken into consideration during the review. The statistics on new silicosis cases indicate that an adequate measurement strategy and proper control of silica dust are needed.

4. The Guideline for a Mandatory Code of Practice for an Occupational Health Programme – Hearing Conservation will soon commence. The current Homogeneous Exposure Group classification will be reviewed and the new legislation promulgated since the drafting of the current guideline will be incorporated.

Although there is a positive downward trend in the number of noise induced hearing loss (NIHL) cases over the past three years, 1,563 people were compensated for hearing loss during 2008.

**Compensation for occupational diseases**

The amended Occupational Diseases in Mines and Works Act, No. 78 of 1973 (ODMWA), governs the compensation for occupational diseases contracted while in the employ of controlled mines and controlled works. Compensatable occupational diseases in non-controlled mines are compensated under the Compensation for Occupational Injuries and Diseases Act, No 130 of 1993 (COIDA).

An important compensation development under ODMWA in 2008/9, was the decision by the Compensation Commissioner – supported by the Compensation Advisory Committee – to adjust the maximum earnings allowable for calculating benefit payments by CPIX from 2003 to 2009. Once gazetted, this will have the effect of improving benefits paid to those working in controlled mines and works. The previous adjustment was made in 2003 and the commissioner plans to amend legislation to ensure that CPIX adjustments are done annually. This would be in line with current practices under COIDA.

**Group Environmental Engineers Committee (GEE)**

A strategic workshop was held for GEE members during July 2009 and the way forward in the ventilation/hygiene field was determined. Topics highlighted at the workshop include issues such as qualifications, the link between hygiene and ventilation, silica dust, vibration and the availability of data.

**Qualifications in mine environmental control**

There are still major challenges within the ventilation/hygiene discipline with regards to the qualifying and retaining of skilled personnel.

Fewer than 10 Chamber Certificates in Mine Environmental Control (CMEC) a year have been handed out over the last 10 years and in 2008 only seven certificates were issued. To satisfy the need for skilled ventilation/hygiene officers, a minimum of 15 certificates should be obtained each year. This is one of the few qualifications written into the Mine Health and Safety Act. This is a priority of the GEE committee and the Mine Ventilation Society of South Africa (MVS) Council. The MVS, in consultation with the Mines Professional Association (MPA) and the Chamber, is moving towards a formal qualification through the MQA and/or tertiary institutions. In the meanwhile the MVS education committee has enhanced its website so that students can download previous examination scripts with model answers to assist their study.
Collective bargaining

2009 Wage Review

The Chamber conducts wage negotiations on behalf of its members in the gold and coal mining sectors. In respect of gold, the Chamber negotiates on behalf of AngloGold Ashanti, Gold Fields, Harmony and Rand Uranium. The coal companies represented by the Chamber are Anglo Coal, Delmas Coal, Exxaro Coal Mpumalanga, Kangra Coal, Optimum Coal, Siyanda Coal, Springlake Colliery and Xstrata Coal SA. The three unions involved in the negotiations are the the National Union of Mineworkers (NUM), the United Association of South Africa (UASA), The Union and Solidarity.

In the year under review, the unions presented a wide range of demands to the Chamber, including demands for wages to be increased by 15%. Many of these demands had significant cost implications, including a minimum wage for both underground and surface employees, an increase in the minimum medical incapacity benefit, increased employer medical aid contributions, a roll-up of job categories, employee share ownership plans, improvements to the service increment and numerous other special allowances. There were also demands relating to specific categories of employees such as winding engine drivers.

In keeping with the increasing focus on issues relating to women in mining, a number of the demands related directly to female employees on both the gold mines and the collieries. These included a demand for an investigation into suitable protective clothing for women working underground – this will get underway shortly – and also demands relating to maternity provision. The latter issue presents serious challenges since women working underground, or in risk work must be moved from these areas as soon as they realise that they are pregnant. The mines then have to try to find these employees alternative work, something that is not always possible. In the past such employees have been given unpaid leave until their maternity leave becomes effective. In this round of negotiations, the companies have agreed that, in future, underground and risk work employees who fall...
pregnant will be guaranteed alternative employment until embarking on maternity leave.

2009 Gold wage negotiations

The negotiations began on 21 May, somewhat earlier than in previous years. While substantial progress was made on a number of issues, wage increases and some of the other issues remained in contention. The unions declared a dispute on 11 June and intervention by the CCMA was sought. As a parallel process, independent facilitation took place on those issues relating to specific job categories, particularly winding engine drivers. After a few lengthy sessions, the unions ultimately accepted that sufficient progress had been made for them to take the Chamber’s offers back to their members. An agreement was signed on 28 July 2009.

Amongst other items, the final agreement covered:

- wage increases of between 10.5% and 9% for various categories of employees, with a guaranteed entry level wage for underground employees of R3 647 in July 2009 and of R4 000 in July 2010
- increased living out and home ownership allowances
- an immediate increase of the medical incapacity minimum benefit to R15 000, rising to R20 000 in July 2010
- the removal of the caps on the service increment.

Certain issues were to be dealt with within specific timeframes, either at Chamber or company level. These include:

- employee share ownership plans
- scarce technical skills
- protective clothing for female underground employees
- freedom of choice of medical aid schemes
- miners’ contracts.

The wage agreement is for two-years, with the 2010 increases being calculated in accordance with a CPI-based formula and a guaranteed minimum of 7.5%.

2009 Coal wage negotiations

The demands submitted by NUM in respect of the coal sector were identical to those for gold, though there were some minor differences in the gold and coal demands of the other two unions. Again, an increase of 15% on wages was sought, together with increases to several other allowances. Negotiations commenced on 20 May and an agreement was signed on 28 July.

Both the employers and the unions approached the negotiations in a professional and constructive manner, and, for the first time, the wage negotiations were settled without being referred to the CCMA.

The agreement for Anglo Coal, Xstrata, Exxaro Coal Mpumalanga, Delmas Coal and Kangra Coal is to increase the salaries of miners, artisans and officials by 9%. For all other employees, except for entry-level employees, the increase is 10%. Salaries for entry-level employees were increased by 11%. The living out allowance paid to employees was increased by the same percentage as the salary increase.

Optimum Coal and Siyanda Coal do not have different categories of employees and the salaries of their employees, therefore, increased by 9.5% across the board. The salaries of the lower category employees at Springlake were increased by between 9.5% and 10%, whilst those of their miners, artisans and officials were increased by 9%.

Regarding the second year, the salaries of all employees on coalmines will improve by an average CPI (based on a formula) plus 1%, with a guaranteed minimum increase of 7.5%.

Other issues on which agreement was reached, include the following:

- the establishment of an industry-level working group to develop a framework of principles on appropriate entry levels for the coal industry
- an investigation into protective clothing for female underground employees
- addressing the affordability of medical aid contributions
- increasing the medical incapacity benefit to R20 000 by July 2010
guaranteed employment for employees who cannot perform risk work while pregnant
six days paid family responsibility leave a year
the appointment of a multi-party task team to investigate effective ways to promote home ownership.

Implementation of the 2007 agreements

Good progress was made to implement the large number of agreements emanating from the 2007 negotiations for gold and coal. The provisions relating to salaries and conditions were implemented. Other issues, however, require longer-term processes before being brought into effect. A good deal of preparatory work on the issue of a mining museum and monuments to recognise the contribution of mineworkers to the South African economy was undertaken, including a scoping exercise by international experts. A joint task team with the unions was established and has met on two occasions.

Similarly, much work was done on the integration of the Mineworkers Development Agency (MDA) and TEBA Development. Both organisations have expressed a desire to merge and have concluded a memorandum of understanding in this regard. A large number of engagements took place between the two organisations to prepare a detailed business plan for a single developmental agency in the mining industry. IRS is providing support for the facilitator appointed to take the merger process forward.

Attention was given to updating both the gold and coal Core Conditions Codes for Miners and Artisans.

Bargaining council

The issue of a bargaining council for the industry remains on the table. Important issues that still need to be resolved include the recognition criteria for trade unions to become party to the council, the position of small mining companies and the procedures for exemption from council agreements.

Discussions are also taking place on the role of contracting companies in a bargaining council. IRS met with the Association of Mining Contracting Companies (AMCC) on 3 February and 30 March 2009 to discuss the issue of representivity of contractors for purposes of establishing a contractor sub-council in a bargaining council and the extension of agreements concluded in such a sub-council to contractors that are not members of the bargaining council.

After noteworthy progress with gold, coal and mining contractors, the discussions will now be extended to other commodities. Once agreement has been reached on a constitution, the parties will apply to the Department of Labour’s registrar of labour relations to register the council. The registrar considers whether or not the applicants are sufficiently representative of a sector to establish a bargaining council. If the registration process is successful, a bargaining council will be established.

MIGDETT was appointed at a mining meeting held on 1 December 2008 as an industry response to the global economic crisis. It comprises representatives from the Department of Mineral Resources, the unions, the Chamber and the South African Mining
Development Association (SAMDA). The task team has two main mandates: to make recommendations in the short-term on ways to mitigate the impact of the economic crisis on the mining industry and to identify all the issues that need to be addressed to position the industry to benefit from the next economic upturn.

Emphasis has been placed on reducing cost pressures on mining to keep mines viable and to preserve employment. It has been agreed that the stakeholders will:

- work together on innovative mechanisms to reduce costs, including encouraging the establishment of local industries to reduce import dependence on various products
- encourage the mining companies to continue to improve energy efficiency (taking into account the fact that Chamber members have signed the Energy Efficiency Accord and are making progress with its implementation)
- encourage suppliers to the mining sector to keep price pressures to a minimum, particularly administered costs
- propose to the National Treasury that the application of the 2c/kWh special electricity levy be held in abeyance for a few years and that the minimum royalty rate for mines whose viability is threatened be held in abeyance in the short-term (in his budget speech on 11 February 2009 the minister of finance indicated that the implementation of the new Royalties Act would be postponed by 12 months).

MIGDETT has also dealt with ways of promoting mining production, local developmental funding and guidelines on fair retrenchment. These guidelines are to be followed by mining companies to ensure that retrenchment is a last resort.

A number of alternative measures to retrenchments have also been explored, including:

- internal company transfers and redeployment
- temporary layoffs with built-in conditions for timeframes for re-employment;
- an extended Christmas break
- short-timing (shorter working week)
- cutting costs where possible, such as constraining bonuses across the board (including executives’ bonuses)
- ascertaining whether or not the parties could agree on mechanisms to address cost pressures
- setting up mine-specific task teams to engage on issues as quickly as possible. These task teams could ultimately be integrated into the future forums that would need to be established.

Discussion has taken place on medium to long term issues, but MIGDETT has not yet concluded its consideration of these matters. However, some issues have been raised as possible future agenda items, particularly factors that are constraining growth in the industry, and the enabling factors that can be explored to make the industry thrive and employ more people.

It is recognised that there should be some permanency to MIDGETT to enable a longer-term strategic approach to managing commodity cycles and to ensure that growth in the industry benefits the country.

**Joint Presidential Working Group**

In December 2008, the social partners that comprise the Presidential Economic Joint Working Group met to consider how South Africa should respond collectively to the difficult economic conditions in the country, largely as a result of the international economic crisis. A task team was convened under the auspices of Nedlac to develop a South African response. On 19 February 2009 the task team endorsed a framework for such a response. The broad principles underpinning the response include:

- protection for low income workers, the unemployed and vulnerable so that they do not bear the brunt of the downturn, and to ensure that inequality and poverty are not increased
- strengthening the capacity of the economy to grow and create decent jobs
- increased public investment in infrastructure
- a joint commitment to skills development
- the introduction of effective industrial or sector
strategies

- higher levels of private sector investment
- the integration of the informal economy into the formal economy
- improved government delivery and regulation
- improved economic efficiency.

A number of teams were established to give effect to the issues contained in the framework. These include teams on investment and financing, social interventions, employment and distressed sectors. They operate under the auspices of a leadership team that is charged with the overall coordination and evaluation of the action plan. Representatives of the Chamber, including IRS, are involved in all the teams, the meetings of which are convened by the Presidency, in conjunction with Nedlac.

The employment, social measures and distressed sector task teams are the most relevant to the industrial relations arena. The employment task team focuses on minimising retrenchments and developing proposals on various alternatives to achieve this. It is working with the CCMA, Productivity South Africa and the UMSOBOMVU Fund. A National Jobs Fund was established to finance a training layoff scheme. The scheme entails enrolling workers on training programmes for a period of up to three months. During this period the employment relationship with the company is retained and a training allowance is paid to workers, together with other social benefits. Attention is also given to fast-tracking the second phase of the expanded public works programme.

The social measures task team focuses on the possibility of increasing UIF benefits, the finalisation of the Nedlac process to amend the Department of Labour’s Social Plan that deals with various aspects pertaining to companies in financial distress and retrenchment. The task team also deals with the improvement and extension of various government and private food programmes.

The task team that deals with distressed industries has identified industries such as mining, clothing and textiles and the automotive industry as requiring special interventions to prevent large-scale job losses.

Another very important issue dealt with in 2009 is the review of the Mining Charter. The commitments outlined in the Charter are in pursuit of a shared vision of a globally competitive mining industry that draws on the human and financial resources of all South Africans and offers real benefits to all. The review of the Charter will assess how much progress the mining industry has made in meeting the Charter’s commitments. It was agreed that a special task team, operating under the auspices of the Minerals and Mining Development Board, will conduct the review. IRS has been responsible for gathering and assessing information on housing and living standards, employment equity and mine community and rural development.

**Broad-Based Socio-Economic Empowerment Charter**

In terms of section 100 of the Mineral and Petroleum Resources Development Act 28 of 2002, the minister had to develop a Housing and Living Conditions’ Standard for the minerals industry by 30 April 2009.

The then Department of Minerals and Energy
drafted a standard late in 2008 that was subsequently debated in a sub-committee of the Transformation Committee of the Minerals and Mining Development Board, specially created for that purpose. The Board thereafter also debated it. During these engagements the Chamber expressed serious concerns about a number of the provisions of the draft standard. Notwithstanding this, the minister published the standard in the Government Gazette on 29 April 2009.

The Chamber continues to express its concerns regarding the standard, and these are being debated by the Transformation Committee (where IRS represents the industry) and the Minerals and Mining Development Board.

Amendments to labour legislation

Atypical Employment

Cosatu has been arguing for some time that legislative intervention is necessary to address the various problems that it has identified with participants in so-called atypical work such as independent contractors, dependent contractors, employees employed by labour brokers and short-time and part-time workers. It takes a particularly hard stance apropos labour brokers, believing that these should be completely banned. Government has made it clear that its intention is not to ban temporary employment services, but to drive equality and to look at the role of the client as well as freedom of association. For some years the issue has been on Nedlac’s agenda, but tripartite engagement has been sporadic. In recent months, however, the matter – particularly relating to labour brokers – has again been given prominence.

As the BUSA position on atypical employment was developed some years ago when the matter was initially tabled in Nedlac, BUSA is revisiting its mandated position to determine if it is still appropriate. To this end, BUSA hosted an atypical employment summit for its members in May 2009.

While Chamber members are not themselves engaged in labour broking, they are clients of companies in the sector. For this reason, IRS has established a dedicated task team to prepare Chamber positions that will be fed into the BUSA processes, and ultimately into the tripartite discussions taking place under Nedlac’s auspices.

Labour legislation

The minister of labour has officially served notice on Nedlac that it is his intention to amend the Labour Relations Act and the Basic Conditions of Employment Act to strengthen compliance and to improve the functioning of the CCMA. The Department of Labour’s detailed proposals have not yet been sent to Nedlac. The Chamber task team dealing with atypical employment will also develop the Chamber’s positions on the proposed legislative changes. These positions will be incorporated into the positions that BUSA tables in Nedlac.

Industry retirement and risk benefits

Social security and retirement reform

The Chamber is participating in a BUSA task team that is developing a unified business position on government’s proposals on a new retirement regime for the country.

As things stand, it was decided to await the inter-governmental task team’s united position paper on
social security prior to finalising the Chamber and BUSA position papers, which will constitute organised business’ mandate during the Nedlac negotiations on social security.

Industry Retirement Funds’ Task Team

During the course of the year, it was decided to establish an Industry Retirement Funds’ Task Team. The main objective of the task team is for the employer trustees of the mining industry retirement funds to share information with Chamber members on issues being dealt with by the boards, as far as they are able to do so without compromising their independence and fiduciary responsibilities. The task team is a sub-structure of the Chamber’s Labour Policy Committee.

Mineworkers’ Provident Fund (MPF)

The MPF faces a number of challenges, particularly a backlog in outstanding claims. IRS has been facilitating contact between the members of the Labour Policy Committee and the fund’s principal officer and administrators. The fund’s administrators gave a clear commitment to address the backlog in claims and to work in partnership with the mining companies to resolve the problem. The fund’s administrators gave presentations on the steps being taken in this regard to the Labour Policy Committee, the Gold Producers Committee and the Collieries Committee.

Labour courts

The future of the labour courts has still not been finalised, notwithstanding that the discussions have been on-going for some years. Towards the end of 2008, the director-general of the Department of Justice and Constitutional Development invited Nedlac to enter into talks with the department on its discussion document entitled Single Judiciary – Integration of the Labour Appeal Court and the Labour Court into the Supreme Court of Appeal and the High Court respectively. The department proposed the following arrangements:

- the Labour Appeal Court to be folded into the Supreme Court of Appeal
- the Labour Court to be folded into the High Court
- the current Labour Court judges to become High Court judges
- there will be a list of Supreme Court of Appeal and High Court judges with expertise in labour law matters and only they will be given such matters to adjudicate
- the social partners will be “involved” and will “participate” in the nomination of judges to the list
- decisions of the High Court on labour matters will have national application
- the participation of union representatives and employer representatives in court proceedings will be preserved.

The Nedlac representatives welcomed the department’s proposal that the composition of the Judicial Services Commission be altered to include Nedlac. Support was also given for the proposal to fold the Labour Appeal Court into the Supreme Court of Appeal. However, Nedlac’s representatives were not in favour of the proposal to fold the Labour Court into the High Court. Instead they proposed that the Labour Court become a division of the High Court with its decisions having national application.

It is believed that the Superior Courts Bill will again be referred to Nedlac for consideration.

Taxation of Mozambican employees

The question of taxation of Mozambican mineworkers is still under discussion and engagement with representatives from the National Treasury is on going.

The National Treasury is in the process of formulating a recommendation to its minister on the taxation of Mozambican mineworkers and has embarked on a process of consultation with roleplayers before this is finalised.

Other interaction

Business Unity South Africa (BUSA) and Nedlac

The industrial relations adviser is the deputy chair of the BUSA Standing Committee on Social Policy and
the senior policy analyst is a member thereof. The latter is also one of the employer representatives on the Labour Market Chamber of Nedlac.

**Judicial Services Commission**

The industrial relations adviser serves as the employer representative on the Judicial Services Commission when this body meets to interview and appoint judges to the Labour Court.

**Tripartite Technical Committee on HIV/AIDS**

Although the primary Chamber representative on this Committee is the Chamber’s health adviser, IRS participates in meetings to consider the issues from an industrial relations perspective.

The technical committee reports to a committee of principals where the Chamber is represented by one of its senior executives. During a meeting of the committee of principals that took place in 2008, the then minister of minerals and energy, Minister Buyelwa Sonjica, expressed a need for a code of good practice or guidelines to address accommodation on mines. She appointed a tripartite committee to draft the document. However, given that the then Department of Minerals and Energy had developed its own Housing and Living Conditions Standard, in terms of the MPRDA, it was thought prudent to develop guidelines rather than standards.

Draft guidelines for accommodation in the mining industry were prepared by the tripartite committee to be considered by the committee of principals.

**Assistance to Chamber members**

In addition to its collective bargaining and advocacy functions, IRS also assists members with queries and provides information on labour related matters. It also produces a quarterly, Labour Policy Digest, which contains articles on topical issues. IRS alerts members to new policy and legislative developments in the industrial relations arena.

Through its Labour Policy Committee and specialist task teams, IRS also provides a forum for industrial relations practitioners in the mining industry to meet, share information and develop mining policies and position papers on broader issues that are fed into national debates, either directly or through BUSA.
Companies Act, 2008 and Regulations

The new Companies Act was passed into law on 8 April 2009. It introduced fundamental changes to the South African Company Law, in particular to company oversight and distressed company rescue. Extensive regulations are in the process of being drafted to facilitate the necessary administrative processes before the Act can be implemented by proclamation of the President, sometime after April 2010. The Department of Trade and Industry is consulting with various interest groups in the drafting process. The Chamber is participating through the auspices of BUSA. Draft regulations are expected to be ready for comment in the second half of 2009.

Matters relating to the Ex-Mineworkers’ Union and unclaimed benefits distribution from retirement funds

The Chamber administers the mines’ 1970s Pension and Provident Funds, which have been converted to Unclaimed Benefits Funds. In addition, the Chamber nominates trustees to the boards of various mining industry retirement funds, including the Sentinel Mining Industry Retirement Fund, Mine Employees Pension Fund, the Mineworkers Provident Fund and the Chamber of Mines Retirement Fund.

In May 2009, following representations to and a report by the Ad Hoc Parliamentary Committee on Matters Relating to the Ex-Mineworkers’ Union – to which the Chamber made representations in 2008 – the Unemployment Insurance Fund (UIF) commissioner was mandated to identify and coordinate benefits due to ex-mineworkers. The Chamber and the mines’ 1970s funds continue to engage constructively with government, working closely with the UIF commissioner and local communities to identify beneficiaries and distribute unclaimed benefits.

Retirement fund reform

During the year under review, the Chamber continued to participate in the BUSA Social Security and Retirement Task Team, on the Department of Social Development and Revenue’s proposed reform of the Social Security and Retirement system. The timeline for implementation of reform has been
extended to 2012. In the meantime, the largest mining industry retirement funds, on which Chamber appointed trustees serve approximately 200,000 members, are positioning themselves as the mining industry funds of the future.

**Teba Bank and Teba Bank Controlling Company**

The Chamber and the National Union of Mineworkers (NUM) are trustees of the Teba Fund, which in turn is the majority shareholder of Teba Bank and Teba Bank Controlling Company. In this capacity, the Chamber has nominated non-executive directors to the board of the bank to participate in the oversight of the bank’s services and regulatory obligations to shareholders and the South African Reserve Bank. The bank fulfils a vital role as paymaster and ‘Worker’s Bank of Choice’ to the mining industry in collaboration with members of the Chamber and the NUM.

**Moratorium on short-term insurance guarantees for mining rehabilitation**

Selected insurers have issued short-term insurance guarantees to the DMR on behalf of various participants in the mining industry for the past 10 years. These guarantees go some way to satisfy the DMR’s requirement that mines make financial provision for the rehabilitation of their mines on closure. In the first half of 2009, the then Department of Minerals and Energy announced a moratorium on the acceptance of short-term insurance guarantees for financial provision from mining companies. Owing to the worldwide financial crisis of 2008 and 2009, the moratorium on insurance guarantees exacerbates the financial strain on mining companies for which bank guarantees have become uneconomical and largely unavailable.

The Chamber’s Environmental Policy Committee and legal services have engaged with the Financial Services Board, National Treasury, insurance suppliers, the DMR and its members, to explore suitable alternatives for financial provision by mining companies, to alleviate undue financial demands on an already financially strained mining industry.

**Mineral and Petroleum Resources Development Amendment Act**

The first draft of the Mineral and Petroleum Resources Development Amendment Bill was published on 31 August 2005. The Chamber duly submitted comments on the Amendment Bill. On 4 May 2007 the Amendment Bill was introduced into parliament. The Chamber again submitted comments and made a presentation to the Portfolio Committee on Minerals and Energy during its public hearings on the Bill.

Subsequent to the public hearings, the Portfolio Committee adopted various amendments to the Bill, some of which related to new matters on which the public, including the Chamber, had not had an opportunity to comment. On 27 May 2008, the Chamber received another updated version of the Bill and submitted comments thereon to parliament by the deadline of 30 May. The Chamber’s comments were limited to the new issues that had been raised in the Bill and on which it had not previously commented. The Chamber also made an oral presentation to the Portfolio Committee on 4 June. Despite further discussions being held with the department on the Chamber’s concerns, and further engagement with the Portfolio Committee on 25 June 2008, the Bill was adopted without addressing the Chamber’s concerns. The Bill was subsequently signed by the president and published in the Government Gazette of 21 April 2009 as Act No. 49 of 2008. In terms of the Amendment Act, it is to come into effect on a date to be fixed by the president by proclamation in the Government Gazette. At the time of drafting this report no such date had been fixed by the president.

The following are some of the Chamber’s concerns:

- reference to ‘an old order right’ included in the definitions of ‘residue deposit’ and ‘residue stockpile’ will make it possible for the state to grant authorisations to persons other than the current owners of old order dumps to extract minerals from those dumps. This would amount to expropriation and could expose the state to compensation claims.

- the MPRDA does not currently empower the minister to refuse an application for a conversion, or subject the conversion process to strict time limits. The Amendment Act proposes new provisions compelling an applicant to comply within a short period with certain requirements for conversion, failing which the minister would...
be obliged to refuse the conversion. These provisions undermine the assurance given by government at the time that the MPRDA was drafted that there would be security of tenure for holders of existing rights.

- the MPRDA preserved the payment of contractual royalties to communities despite the state becoming custodian of all mining rights. The Royalty Act recently passed by parliament provides no relief to persons who would now also have to pay royalties to the state. Once the Royalty Act takes effect, mining companies paying royalties to communities would therefore be paying two royalties for the same mineral right, i.e. to the state and to the community. This has severe tax implications for the mining industry, will negatively affect investor confidence and is possibly unconstitutional.

- the Amendment Act proposes to amend the MPRDA to preclude any extension of a mining area or the addition of minerals or seams. The possibility for extending an area or adding seams is a necessary mechanism in practice. If new rights have to be acquired for such extended areas or added seams, the extended area or added seam is regarded as a separate operation, which might conflict with the mine’s practical business plan for developing an area, and would ring-fence the extended operation for income tax purposes and could be regarded as a separate mine for purposes of the Mine Health and Safety Act. All of these consequences could have severe adverse practical implications.

- community participation in mining is currently facilitated in the MPRDA by way of the empowerment requirements in the Mining Charter and the accompanying scorecard and social and labour plans. The Amendment Act will empower the minister to impose conditions requiring the participation of the community where applications relate to land occupied by a community. The minister should not be able to increase community participation beyond what is required in the Mining Charter and the mine’s social and labour plan.

**MPRDA: code of good practice for the minerals industry**

Section 100(1) of the MPRDA requires the minister, within five years from the date on which the MPRDA
took effect, i.e. before 30 April 2009, to develop two documents for the minerals industry in South Africa. The first is a housing and living conditions’ standard, while the second is a code of good practice. Although both these documents were developed during this reporting period and under similar circumstances, the focus here will only be on the code of good practice (the code). (The housing and living conditions standard is discussed in the chapter dealing with labour policy and labour relations.)

The Minerals and Mining Development Board (MMDB), established under section 57 of the MPRDA, with the primary function of advising the minister, appointed a sub-committee to deal with the development of the code. Despite intensive engagement, the sub-committee was unable to reach consensus on the code. The Chamber could not support the recommendations to the MMDB by the sub-committee and submitted a separate minority report to the MMDB. Owing to the serious concerns expressed by Chamber representatives on the MMDB regarding some elements of the code, the MMDB decided to recommend to the minister that the code should be published for comment in the Government Gazette before it was finalised. Unfortunately, the code was not published for comment and a final code was published in the Government Gazette of 29 April 2009.

A major concern is that the code contains a scorecard, which is different from the Mining Charter scorecard. It is also quite different from the Department of Trade and Industry codes and its generic scorecard. Other problems relate to the fact that the code imposes various new substantive obligations on employers and provides that non-compliance will be regarded as a breach of the MPRDA.

At the request of the Chamber a meeting was held on 22 May 2009 with the director-general of the then DME and the NUM, where it was agreed that the relevant sub-committees of the MMDB should meet to review both the code and the housing standard (in light of the Chamber’s concerns) with the aim of producing outcomes that are acceptable to all stakeholders.

A number of meetings of the code sub-committee were cancelled for various reasons, and the first meeting was only held on 26 August. Significant progress in resolving the Chamber’s concerns was made at this meeting and following further deliberations within the working group, recommendations were made to the MMDB for consideration at its meeting on 4 September.

**Expropriation Bill**

An Expropriation Bill was introduced into parliament in 2008. The main aim of the Bill was to align it with the Constitution. However, there were various provisions in the Bill that were of concern to the Chamber and its members. The Chamber made written submissions to the Portfolio Committee on Public Works and participated in oral presentations to the Portfolio Committee. Following additional criticism from various quarters, the Bill was withdrawn in the second half of 2008.

In July 2009, BUSA asked its members for their views on the principles that should underlie the revised Expropriation Bill. The Chamber provided its comments on this matter to BUSA. Besides commenting on general principles, the Chamber also raised issues specific to the mining industry, including that:

- no rights, permits, permissions, licences or other authorisations in terms of the MPRDA, the National Water Act or the National Environmental Management Act should be capable of expropriation, unless expressly referred to in the notice of the expropriation and then with the consent of the relevant minister
- unregistered rights should be the subject of separate express expropriation, or at the very least should be capable of express exclusion in notices of expropriation
- the minister of mining should be notified and consulted on all proposed expropriations since (in terms of the MPRDA) no land uses (with certain exceptions), contrary to mining, may occur without the consent of the minister of mining.

It is understood that once BUSA’s comments have been finalised, BUSA will be engaging the Department of Public Works to try to influence the principles underlying the revised Expropriation Bill before it is finalised.

**Income tax: mine employees from Mozambique**

The taxation of mine employees recruited from Mozambique is regulated by a Labour Treaty between the republics of South Africa and Mozambique and by the Income Tax Act, 1962. The Income Tax Act exempts from normal tax only those employees who are temporarily employed in South Africa, which conflicts with the Labour Treaty, where the practice
has been, with the knowledge of the South African Revenue Service (SARS), not to deduct any income tax from the salaries of Mozambican employees, regardless of whether they were temporarily employed or in full-time employment.

In 2008, mining employers became aware that SARS was considering taxing employees from Mozambique who were employed full-time. A meeting was held with the Department of Labour (DoL) and SARS in July 2008, where SARS confirmed that it wished to treat Mozambican employees in the same way all other foreign nationals are treated. SARS was aware that a change to the Labour Treaty would have to be agreed between the two governments. Prior to such a change to the Treaty, the matter would have to be taken to cabinet.

In August 2009, the Chamber was invited to a meeting at National Treasury, which was also attended by representatives from the DoL, the Department of Home Affairs and SARS. National Treasury advised that it would be recommending to the minister that the taxation of Mozambican mineworkers be brought in line with the taxation of all foreigners working in South Africa, i.e. that such workers be subject to income tax in South Africa. National Treasury was therefore intending to recommend to its minister that international discussions be held with the Mozambican government prior to a process to phase in the taxation of Mozambican employees that had been in the country for longer than 18 months. National Treasury assured the Chamber that such taxation would only be effective at a future date, that the unions would be notified and involved.

Taxation of retirement and retrenchment benefits of Mozambican employees

It was brought to the attention of the Chamber at the beginning of 2009 that there were conflicting rulings by different SARS offices on the taxation of retirement and retrenchment benefits due to Mozambican mineworkers. This not only caused confusion among the various institutions involved with the administration of such benefits, but also brought about extreme hardship for the employees concerned, in that they had to sustain themselves in South Africa while waiting for the matter to be resolved.

The Chamber met with SARS on 24 March 2009 in an attempt to resolve the situation. The Chamber advised SARS that in terms of the Labour Treaty and the relevant section of the Income Tax Act, retirement and retrenchment benefits of Mozambican employees are not taxed in South Africa. SARS subsequently wrote to the Chamber confirming that retirement and retrenchment benefits of Mozambican workers were not taxable in South Africa, provided the affected mineworkers were employed directly by a South African mine and were in full compliance with the provisions of the Labour Treaty.

Taxation of mining capital expenditure: housing provisions and MPRDA expenditure

At the request of members of the Chamber’s Taxation Committee, the Chamber wrote to National Treasury in May 2009, requesting that the following matters be addressed in the Revenue Laws Amendment Act that is scheduled to go through parliament later in 2009:

- The period of deduction in respect of the cost of housing not deemed to be low-cost housing, had been increased in 2008 from 10 years to 20 years without any consultation with the industry. The Chamber requested that the 10-year period be brought back. The Chamber further requested that, in respect of low-cost housing, the deduction period be five years instead of 10 years, as previously indicated by Treasury.
- The Chamber requested – to conform with the position that National Treasury had indicated to some of the Chamber’s members it would take – that amendments be made to the Seventh Schedule of the Income Tax Act, so that any interest-free loan by an employer to an employee in respect of low-cost housing would not be deemed a fringe benefit for the employee.
- The Chamber further requested that section 36(1)(e) be amended, to clarify that any expenditure incurred in acquiring a mining right in terms of the MPRDA or any expenditure incurred in terms of such mining right be deductible, to the extent that such expenditure is not deductible under any other provision of the Income Tax Act.

Following the Chamber’s letter, a meeting was held with National Treasury and SARS on 25 June 2009, to discuss these issues. At the meeting National Treasury and SARS indicated that, in broad terms, they agreed with the Chamber’s proposals, but that the final say rested with their superiors. In their response document to parliament on the Draft Revenue Laws Amendment Bills, 2009, National Treasury and SARS...
indicated that the 10-year period for deduction of mining housing costs would be brought back and that ongoing expenditure in respect of social and labour plans would also become deductible. At the time of writing the final draft of the Revenue Laws Amendment Bill was not yet available.

Mine Health and Safety Amendment Bill

Following a consultative process with stakeholders, the then Department of Minerals and Energy published a third version of the Bill in the Government Gazette of 16 May 2008. Subsequent to the submission of comments by stakeholders, a revised Bill was introduced into parliament and the Chamber made written submissions to the Portfolio Committee on Minerals and Energy on 1 August 2008 and gave an oral presentation to the Portfolio Committee during its public hearings on 14 August 2008. During the public hearings, and subsequent deliberations of the Portfolio Committee, it became clear that the Portfolio Committee, with the support of NUM, felt that the enforcement provisions in the MHS Act should be strengthened considerably and that employers were generally to blame for what was regarded as an unacceptably high level of accidents in the mining industry. The Portfolio Committee therefore revised the Bill considerably and approved it on 23 September.

Of particular concern to the Chamber were the new proposed sections 50(7A) and 86A(1) and (3). In terms of a legal opinion obtained by the Chamber, both these provisions were unconstitutional.

- The proposed section 50(7A) obliged an inspector of mines to impose a prohibition on the further functioning of a site where a person’s death, serious injury or illness, or health threatening circumstances occurred. The obligation would exist even where a site has been made safe; there was no mechanism whereby the prohibition could be lifted.

- Section 86A(1) made it an offence for persons to contravene or fail to comply with the provisions of the MHS Act, thereby causing death, serious injury or illness. The new sub-section (3), inter alia, provides that an accused will not be able to escape liability on the grounds that the death of a person, injury, illness or endangerment was caused by the performance or omission of some other person within the employ of the employer. The effect of this sub-section is that criminal liability could be imposed in circumstances where an accused’s conduct is not necessarily causally related to the death, injury or illness of the victim.

The Chamber wrote to parliament on 9 October 2009, requesting that these provisions be deleted. The Chamber also wrote to the then minister of Minerals and Energy on 15 October 2008, requesting an urgent meeting to discuss the matter.

Despite the Chamber’s interventions, only one amendment was made to the Bill by parliament. The proposed section 50(7A) was amended to give an inspector discretion whether or not to impose a prohibition on the functioning of a site, instead of it being mandatory to do so. However, there was still no mechanism whereby a prohibition could be lifted once a site had been made safe.
The Chamber then engaged with NUM and arranged for bilateral meetings to be held between lawyers representing the Chamber and lawyers representing NUM during November and December 2008. The parties were unable to reach agreement and it was agreed to ask the director-general of the then DME to facilitate a process in which all the parties could discuss the matter. On 25 November 2008, the Chamber wrote to the country’s then president, drawing attention to the unconstitutionality of the provisions and asking him to refer the Bill back to the National Assembly for reconsideration.

On 30 January 2009 the director-general of Minerals and Energy convened a meeting between the then DME, the Chamber and the three unions involved in the mining industry to discuss this matter. It was agreed that a team of stakeholder lawyers would attempt to agree on changes to the unconstitutional provisions and the way forward. Following various meetings between the lawyers, the principals signed off on an agreed document on 24 February 2009 and consensus was achieved between all parties on the way forward. Effectively, the legal representatives of the Chamber and NUM agreed on changes to sections 50(7A) and 86A. It was agreed that the proposed sections would not come into operation at the same time as the rest of the Amendment Act and that the minister would be asked to introduce a new MHSA Amendment Bill into parliament during 2009 to address the constitutionality concerns raised by the Chamber.

The MHSA Amendment Act, Act No. 74 of 2008, was published in the Government Gazette on 17 April 2009. The proclamation bringing the MHSA Amendment Act into force on 30 May 2009, was published on 12 May 2009 and, as agreed, did not include the new sections 50(7A) and 86A.

The important changes to the MHSA that became effective on 30 May 2009 include:

- The Mine Health and Safety Inspectorate has been established as a separate juristic person, which will hopefully assist in ensuring that the inspectorate is better resourced and staffed.
- Employers will be subject to both criminal sanctions and administrative fines in respect of any contraventions of any of the provisions of the MHSA.
- There is a substantial increase in the maximum fines and periods of imprisonment that can be imposed.
- Employers are required to maintain a record of all formal training provided in respect of each employee.
- There is no longer provision for an appeal against a decision by the principal inspector to impose an administrative fine.
- Employers are now required to submit a copy of an employer investigation to the inspectorate.
- Employers are concerned that the Amendment Act has disturbed the balance between preventative and punitive measures in focusing more on punitive measures.

Illegal mining and related matters

The tragic events earlier in 2009 at Harmony’s Eland Mine, where over 70 illegal miners died after an underground fire, have brought the issue of illegal miners sharply into focus. The big, long-term challenge is to find ways of addressing this problem. It must be borne in mind that the issue of illegal mining is merely one aspect of the theft of precious metals. In seeking a solution to the problem of illegal mining, it should be kept in mind that any solution should be part of the overall fight against theft of precious metals and other criminal activities at mines. It is necessary, therefore, to describe the various initiatives currently underway.

At the beginning of 2002, the Chamber held a workshop for all roleplayers, where it was agreed to
establish a special forum to initiate a co-ordinated approach to combat precious metals theft. This led to the establishment of the National Precious Metals Forum (NPMF), which currently consists of representatives from the Chamber, mining companies, Rand Refinery, the SAPS, the SAPS’ Forensic Science Laboratory, and the SAPS’s Special Investigations Unit. (The then DME was invited many years ago to send a representative, but the person only attended one or two meetings.) From time to time other roleplayers attend meetings, as and when the need arises. One of the major initiatives facilitated by the NPMF was the establishment of a precious metals fingerprinting database at the SAPS’s Forensic Science Laboratory. Once the fingerprinting database is fully operational, it will assist in determining the origin of stolen precious metals. In this way a mine can be alerted to the fact that precious metal is being stolen from it and the precious metal can be returned to the mine. A further NPMF initiative was the creation of a special task force (consisting of investigators from the SAPS and the mining industry) to investigate senior precious metals theft syndicate members at national and international level. This has been an ongoing initiative that has achieved some excellent successes over the last three or four years.

In the light of the increase in the use of commercial explosives for blowing up ATM machines, the chief inspector of explosives at the SAPS established a forum in January 2007 to examine ways of improving the control, use and security of explosives. The National Explosives Security Forum (NESF) consists of representatives from the SAPS, prosecuting authorities, the Chamber, mining companies, the DMR, manufacturers of explosives, the South African Banking Risk Information Centre (SABRIC) and security companies. Some of the initiatives implemented through the NESF include combined audits undertaken by the then DME and the SAPS of explosives control and use by mines; the introduction of a dedicated hotline for reporting the theft of explosives – funded by the Chamber; ATM awareness media campaigns; and investigating measures to trace the origin of explosives.

The third forum worth mentioning is the National Non-Ferrous Crime Combating Committee (commonly referred to as the National Copper Forum). This forum was established specifically to look at the problem of copper theft. It is coordinated between Business Against Crime and the SAPS. Other roleplayers represented are the Chamber, mining companies, Eskom, Telkom, second-hand goods dealers and the prosecuting authorities. All issues relating to copper theft are discussed at this forum and a business plan has been drafted and is being implemented to strengthen the fight against copper theft.

Reference should also be made to the Chamber’s Standing Committee on Security. Committee primarily provides a forum for Chamber members to discuss issues relating to the control and security of tangible mining company assets and implement measures aimed at addressing problems. The main focus is on issues such as the theft of gold, platinum and copper. Other topics recently covered include illegal mining and theft of explosives from mines. Some of the members of the committee also serve on one or more of the other forums mentioned above. In particular, they all serve on the NPMF. Because of this overlap, meetings of committee are only held when the matter cannot appropriately be dealt with in one of the other forums or when a specific mining industry mandate is required.

Another initiative undertaken by the Chamber is to arrange occasional meetings with senior government, SAPS and other people whom the Chamber considers need information about the problems facing the mining industry and the measures being undertaken to address them, and who could possibly assist in finding solutions to the problems. In the light of the appointment of a new minister of mineral resources, the Chamber wrote to the minister requesting an urgent meeting to discuss the issues raised in its letter.

Various meetings have been held between mining companies operating in the Free State, the SAPS, the DMR (including the minister), other law enforcement agencies and community representatives. A local forum was established, on which all of the aforementioned roleplayers are represented, to look at various aspects of the problem, including social issues caused by illegal mining in the area and ways to address and eliminate illegal mining. Action plans were drawn up and are being implemented. There was agreement not to create new structures where possible, but to use existing structures as far as possible.

On 7 and 8 July 2009, the Parliamentary Portfolio Committee on Mineral Resources held public hearings on the issue of illegal mining. The Chamber, Harmony, Solidarity and NUM, amongst others, made presentations. The Portfolio Committee indicated that it would be visiting the industry to gain first-hand knowledge and would then arrange further public debates later in 2009. The visit to the industry took place in August 2009.
Safety performance

The goal of the Chamber – in collaboration with government and labour – is to have zero fatalities and injuries in the mining industry.

The mining industry’s safety performance in 2008 has improved significantly and it remains committed to the following milestones agreed upon with government and labour in 2003.

To achieve these milestones, the industry’s safety performance has to improve by at least 20% per annum. Graph 1 illustrates that the industry’s fatality frequency rate (a global benchmark safety performance indicator of the number of fatalities per million hours worked) improved from 0.21 to 0.15 (by 29%) from 2007 to 2008. The number of fatalities decreased from 220 to 171. This graph also shows that the 2008 rate of 0.15 compared to the milestone of 0.10 must improve by at least 27% year on year to achieve or surpass the 2013 target of 0.03.

Graph 2 shows that the gold sector’s safety performance improved from 0.34 to 0.25 (by 26%) from 2007 to 2008. The graph also indicates that the 2008 performance of 0.25 compared to the 2013 target of 0.03.

Graph 1: Industry performance against milestones

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<th>Milestones</th>
<th>In the gold sector: By 2013 achieve safety performance levels equivalent to current international benchmarks for underground metalliferous mines, at the least.</th>
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<tr>
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<td>In the platinum, coal and other sectors: By 2013 achieve constant and continuous improvement equivalent to current international benchmarks, at the least.</td>
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milestone of 0.12 must improve by 31% year on year to achieve the 2013 target of 0.04.

Graph 3 highlights that the non-gold sector’s safety performance improved from 0.14 to 0.11 – a 21% improvement from 2007 to 2008. When the 2008 performance of 0.11 is compared to the milestone of 0.08 it is clear that it is still 27% off the 20% improvement objective and must improve by 23% year on year to achieve the 2013 target of 0.03.

**Leadership and culture**

In 2008, the Chamber arranged a CEO Roundtable where 30 chief executives spent two days focusing on the challenges associated with health and safety. The meeting proved to be a valuable opportunity for CEOs to debate health and safety challenges and what could be done to address the challenges. The outcome of the meeting was a Roadmap to Zero Harm, consisting of actions that the CEO’s committed themselves to implementing to improve health and safety in the mining industry. The strategic objectives are to:

- strengthen mining’s culture of health and safety
- promote learning and build capacity in the industry
- make the working environment healthier and safer.

Subsequent to the CEO Roundtable, a tripartite health and safety summit was held, at which the tripartite leadership endorsed an action plan for improving health and safety to reach the 2013 milestones. The action plan is aligned with the industry’s Roadmap to Zero Harm.

A key action detailed in the Roadmap to Zero Harm document is the establishment of a tripartite culture transformation framework. International research demonstrates that an occupational health and safety (OHS) culture is critical to improving OHS performance.

The industry Culture Transformation Framework is being developed through the Mine Health and Safety Council. The council will appoint a partnership organisation to help with the development and implementation of the framework. The framework will provide strategies to improve health and safety culture from a blame, command-and-control, to a more participative, caring and learning culture. The initiative for culture transformation framework development was merged with the leadership leading practice adoption initiative of the Chamber.

**Learning from others**

**Leading practice adoption**

The Mining Industry Occupational Safety and Health (MOSH) task force realised that there was an opportunity to learn from those stakeholders in industry that have excellent safety records. To enable this to happen, it was necessary for industry to shift from the sharing of best practice to the adoption of leading practices.

The Chamber’s executive council agreed to the piloting of an industry leading practice adoption system developed by the MOSH task force. The system involves documenting leading practices that have already been tried and tested at a source...
mine, demonstrating the effectiveness of the practices and developing a leading practice guideline document. The pilot study was successfully completed and the teams met all the deliverables set to be achieved during the pilot phase. The teams then presented the results of the leading practices from the pilot phase in post-demonstration workshops at which communities of practice for adoption (COPAs) were registered to enable the widespread adoption of the leading practices.

The leading practice adoption system is differentiated from other systems by a strong focus on people issues. One of the key aspects is behavioural communication. Behavioural communication directly addresses people’s decision-making and behaviour, rather than their level of awareness and understanding.

Behavioural communication addresses people as stakeholders in the communication process and not merely as audiences. It takes into account issues like credibility, observability of communications, language, literacy levels and cultural beliefs as well as the ability to interpret communications correctly. Another difference between mass communication approaches and behavioural communication is that behavioural communication focuses on the interests and priorities for communication of all those involved through two-way communications processes.

Comprehensive leading practices guides – that cover people and technology issues – are being developed. Leading practices are also promoted through interest groups.

The Falls of Ground team focused on safety issues and demonstrated the entry examination and leading safety practice at Driefontein Masakhane Shaft. The results of the demonstration showed an improvement in the quality of the critical examining and safety procedures. In addition, it showed an improvement in the attitudes and behaviours of the workers towards safety and the rock engineering issues at the mine.

**The Learning Hub**

Following the successful completion of the pilot exercise, the executive council approved the establishment of the Chamber’s Learning Hub. The main strategies of the Learning Hub are to promote leading practice adoption and in the process assist smaller mines and build capacity in critical skills.

In addition to the current teams of dust, noise and falls of ground, the Learning Hub will also have a transport and machinery team. This team will identify leading industry practices for reducing machinery and transport-related injuries and accidents. The activities of the Learning Hub will extend beyond adoption of leading practices to include interaction with suppliers and tripartite centres of excellence.

The Chamber will provide programme support to the Learning Hub and will:
- communicate extensively with stakeholders
- scan the external environment for leading practices
- support teams with documentation, expert assistance and monitoring
- arrange meetings, workshops, etc.
- provide continuity and institutional memory
- ensure quality control.

**Seismicity and rockbursts**

Recent events have highlighted the frequently fatal consequences of seismic activity and rockbursts in deep-level mining operations. This led to the conclusion that more attention is required to manage mine seismicity. The Chamber commissioned a study into the current knowledge of seismicity and rockbursts.

- The study provides insight and makes recommendations that will enable the industry to manage the risk of seismic events and rockbursts better and thus protect lives. The two overall aims of the study were to compile a review of seismic and rockburst safety on South African gold mines and to identify opportunities to minimise the risks arising from seismicity as much as humanly possible.

The review was guided by the following strategies:
- To reduce the magnitude and potential of rockbursts to control the source of the hazard and, if possible, to predict seismic events
- To ameliorate the effects of rockbursts: absorb/deflect the energy in such a way that people are not harmed
- To reduce the exposure of people to rockbursts.

The study concentrated on the status of knowledge and technology on seismic activity and rockburst safety – both locally and internationally – people skills and management systems and the actual implementation of knowledge, technology and systems.

Particular attention was paid to identifying the root and contributory causes of seismic and rockburst accidents. The focus was on accidents that have occurred in the
past 10 years and – to show that seismicity does not only occur in deep-level gold mines – the study considered if a range of factors – including the depth of mining, mining methods, the type of reef mined and geological conditions – influenced the risk of seismic activity.

The study, completed in 2008, was undertaken by an independent panel of local and international experts consisting of mine engineers, geologists, seismologists, industrial psychologists and experts in mine safety law. The study was subjected to peer review by local and international academics.

The Chamber reconstituted the Rock Engineering Technical Committee, which provided a technical review of the study report, particularly the recommendations. The Chamber incorporated all the recommendations from the study into the Roadmap to Zero Harm.

**Capacity**

The Roadmap to Zero Harm includes a commitment to train 40 000 health and safety representatives in the mining industry. The industry is participating in the partnership between the Mine Health and Safety Council (MHSC) and the Mining Qualifications Authority to review the learning material for health and safety representatives.

**Research**

The MHSC oversees an annual health and safety research programme of approximately R60-million. The Chamber is an active participant in the structures that oversee the programme, including the Safety in Mines Research Advisory Committee (SIMRAC). The research programme is funded by the industry through a levy on companies related to their safety and health risk.

Once again the Chamber advocated, and the MHSC agreed, to limit the number of new research projects for the 2009 – 2010 research cycle. Programmes and projects that were either not delivering results or seen to be heading for a dead-end were discontinued. All of the technical advisory committees (TACs) have been disbanded and technical advisory experts (TECs) will now be appointed. The reason is to ensure that the TECs remain technical and unbiased. Human factors/behavioural safety issues will now be dealt with in the culture transformation framework.

The key projects include measuring, managing and monitoring to reduce rockfall risk and the value of safety spending and a review of current practices to address rockfalls. The project on the management of the rockburst risk has been discontinued, subject to a position paper being drafted and considered. The machinery and transportation programme, in its current form, has also been discontinued. It will be replaced by a comprehensive programme for the machinery and transportation programme with distinct outputs addressing all issues as per the presidential audit as well as accident statistics. The digitising of the Chamber of Mines Research Organisation (COMRO) documentation is also underway.

The Chamber is working with other stakeholders to improve the quality and value of MHSC research. The Chamber’s Roadmap to Zero Harm calls for the establishment of a Centre of Excellence to improve the quality of research, research implementation and capacity building. The Centre of Excellence will help the industry to develop fit-for-purpose equipment and state-of-the-art mining methods. As part of the Chamber’s consideration of a Centre of Excellence, stakeholders are being consulted and a position paper is being prepared.

**Legislation**

The Chamber was involved in the revision of the Mine Health and Safety Act Amendment Bill.

The Engineering Council of South Africa (ECSA), under the Council for Built Environment, released draft regulations on the Identification of Engineering Work. Subsequently, the Chamber commissioned a ‘regulations for persons – acid test’ study. The study was aimed at assessing the potential impact of the draft regulations on the mining industry.

The study was concluded in the beginning of 2009. The report concluded that it would not be difficult for the industry to comply with the draft regulations of the Engineering Profession’s Act as 92% of the surveyed engineers met the requirements of ECSA registration. The Chamber will ensure that once promulgated, the industry is not negatively affected. Specific challenges regarding the regulations that were identified are being raised in these forums.

**Presidental Audit**

The Chamber supported the Presidential Audit as a means of improving health and safety. Following the release of the Presidential Audit Report in 2009, the Chamber identified improvement opportunities. A gap analysis was conducted between the report and the Roadmap to Zero Harm and action plans to address the identified gaps were developed.
National sustainable development initiatives

The DMR prepared a Strategic Framework for Implementing Sustainable Development in the South African Minerals Sector: Towards Developing Sustainable Development Policy & Meeting Reporting Commitments. The main objectives of the framework are to develop policy and reporting guidelines on sustainable development issues. The framework will help South Africa to report to the UN Commission on Sustainable Development in 2010. The development of the framework is overseen by a multi-party Sustainable Development Committee under the Mining and Minerals Development Board.

The Chamber interacts with the DMR on the framework and has prepared detailed comments that were considered by the Chamber’s policy committees. Key recommendations include reporting guidelines must be aligned with global reporting guidelines and the number of indicators must be limited (at least at first) so that this does not become too onerous.

International sustainable development initiatives materials’ stewardship

At the World Summit on Sustainable Development all countries represented committed themselves to the responsible management of chemicals, including mining products such as ores, ore concentrates, metals, metal compounds and alloys.

The mining industry, through the International Council on Mining and Metals (ICMM), is developing guidelines on materials’ stewardship to promote responsible management of mining products. The ICMM cooperates globally with the United Nations to develop a product management approach based on the principles of sound science and sustainable development. This approach includes a globally harmonised system for the hazard classification and labelling of products. South Africa fully subscribes to this system, which should be implemented in South Africa from the end of 2009. The Chamber participates...
ICMM

The ICMM aims to promote sustainable development in the mining sector. The Chamber is an association member of the ICMM, a leadership group focused on improving the sustainable development performance of mining companies. The sustainable development framework of the ICMM consists of 10 principles, a reporting guideline, an independent assurance system and the promotion of good practices. More good practice guidance documents were prepared, such as on materials' stewardship and on HIV and AIDS, TB and Malaria. The Chamber participates in the various ICMM meetings. Over the last year issues around climate change, mineral revenue transparency and the strategic review of the ICMM were discussed.
skills development

Advocacy and lobbying

The Skills Development Unit has played a leading role in the business community by engaging with other social partners to influence new education and skills development legislation. During the year under review industry’s social partners negotiated and agreed on the following legislation where the Chamber always led the business delegation:

- **The Skills Development Amendment Act:**
  The Act recognises the development of both artisanshipships and learnerships. It clarifies the legal and governance framework of the National Skills Fund and creates an environment for the establishment of the skills development institutions and the National Artisan Moderating Body.

  After studying the new Skills Development Amendment Act, with its implications on artisan development, the mining industry concluded that the occupation of a miner should not be considered trade.

- **The National Qualifications Framework (NQF) Act:**
  The Act describes the South African Qualifications Authority (SAQA) as an Apex organisation and changes its role from that of developing unit standards and qualifications to that of registering such qualifications on the NQF, in consultation with other statutory quality bodies. The Act recognises the establishment of the General and Further Education Quality Council, the Higher Education Quality Council and the Quality Council for Trades and Occupations (QCTO). SAQA has since become the custodian of the NQF, whilst the quality councils develop unit standards and qualifications and register them on the NQF.

  The QCTO is critical to the private sector and the mining industry in particular, as it recognises workplace learning through issuing nationally recognised certificates on completion of recognised training.

  The Chamber led business delegations at Nedlac...
to negotiate these Acts and concluded by making presentations to the portfolio committees to ensure that the concerns and wishes of organised business are addressed in the new legislation.

Business, through the leadership of the Chamber, made inputs to the following discussion documents that will eventually become the policy governing the application and implementation of the QCTO:

- the Occupations Qualifications Sub-framework
- the Quality Assurance Framework
- National Skills certificates
- Communities of expert practice
- Learning programmes.

The Chamber chairs BUSA’s sub-committee on education and training. This has enabled the Chamber to be part of the BUSA team negotiating the terms of the training lay-off scheme that was proposed by the president of South Africa.

Human Resources Development Strategy – South Africa (HRD-SA)

The work that was done by JIPSA has been incorporated into the new HRD-SA. Through its involvement in BUSA, the Chamber has made inputs into the content of the new HRD-SA. This strategy aims to coordinate all human resources development strategies by government and related bodies, including the National Skills Development Strategy (NSDS) of the National Skills Authority (NSA) and consolidates all of them into the HRD-SA. This, however, does not mean that all other bodies will be dissolved.

BUSA has ensured that the skills development interests of business are not compromised in the new HRD-SA. The Chamber also led the BUSA task team that negotiated the terms of reference of the HRD council that will oversee the HRD-SA. One of the chief successes gained by BUSA in the negotiations, is the representation of BUSA at strategic and technical committees of the HRD council. The new HRD council is yet to be launched under the new ministry of higher education and training.

Skills development challenges

One of the key challenges faced this year is the declining number of artisans in the industry in the face of a global shortage of skills. Communication in the workplace remains an issue because of low functional literacy amongst the majority of operational staff on the mines. It also remains a priority to increase the number of employees registering for artisan development programmes because most of these employees do not meet entry requirements. The industry, together with its social partners at the Mining Qualifications Authority (MQA), embarked on a number of initiatives to address some of these challenges:

Phasing out of Fanakalo in the mining industry

The use of Fanakalo at mining operations was identified as an obstacle to effective communication and also as having a negative impact on safety in the workplace. Employers acknowledged that Fanakalo had become part of the culture of the mining industry, but that it had to be phased out. It was further acknowledged that phasing out Fanakalo would be a complex exercise. The Chamber conducted investigations on the most suitable ways of phasing out Fanakalo, which revealed the following:

- Fanakalo, which is a pidgin (lingua franca), will need to be replaced with another language(s) as a common means of communication
- Changing the lingua franca of the mining industry can alter the culture of the industry and may require changes in management processes.
- It takes an adult – who has already mastered his/her language – between six months and four years to learn a new language, depending on the motivation and learning conditions
- The purpose of teaching another language in the sector needs to be very clear.

Research is needed on the best way to phase
out Fanakalo. The MQA will undertake the research from the second half of 2009. Included in the research terms of reference are the following areas that are of interest to employers:

- The extent of the use of Fanakalo, including dominant geographical areas of usage, the commodities where Fanakalo is dominant, the training centres that still use Fanakalo, the age groups using it, as well as the social contexts where it is dominant
- The impact of Fanakalo on safety in the workplace. The willingness and ability of Fanakalo speakers to learn and use another language
- The costs and resources required to phase out Fanakalo.

**Foundational learning competence (FLC)**

Many employees do not meet the entry requirements of skills programmes – including artisan development programmes – because they either do not or are struggling to complete ABET level 4 (NQF 1). Employers have welcomed the introduction of the FLC by the Skills Development Amendment Act and accepted the challenge of piloting the FLC to test its applicability in the mining industry. Learners acquiring an occupational qualification registered on NQF levels 2 to 4, will have to comply with the requirements of reading, listening and maths literacy skills as defined in the FLC. A successful pilot project, was run by the mining industry to test the content and assessment of the FLC. This programme is seen as an opportunity for many employees to gain access to a variety of occupational skills programmes.

**Artisan development**

The demand for qualified artisans across all industry sectors means that the mining industry has to increase its artisan training programmes. Whilst companies are training their own employees, the real need is to create a bigger pool of qualified artisans from the pool of the unemployed. Employers receive no support from their social partners at the MQA to use their spare capacity to train artisan beyond their immediate needs. The challenge is to source funding from the National Skills Fund for the employer initiated Mining Industry Employment and Skills Development Agency (MESDA) to be launched. The Chamber will continue to request the MQA to partner with the MESDA on the latter’s venture of training the unemployed to become qualified artisans.

**Mining Charter obligations**

Chamber members initiated an independent investigation of the Mining Charter to assess progress made by mining companies since signing the Charter. Members of the Chamber have made significant progress towards meeting the human resource development commitments of the Charter. Almost all companies have created an opportunity for employees to become functionally literate:

- Full-time ABET facilitators were employed at most companies
- Special facilities were built to enable a conducive environment for ABET programmes
- A combination of full-time and part-time classes were arranged for those employees

<table>
<thead>
<tr>
<th>Occupational group</th>
<th>YEAR 1</th>
<th></th>
<th>YEAR 8</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
<td>Coloured</td>
<td>Indian</td>
<td>Black</td>
</tr>
<tr>
<td>Professionals</td>
<td>85.6</td>
<td>1.5</td>
<td>2.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Technicians</td>
<td>72.7</td>
<td>2.6</td>
<td>1.1</td>
<td>23.7</td>
</tr>
<tr>
<td>Craft and trade workers</td>
<td>35.9</td>
<td>36.2</td>
<td>0.5</td>
<td>28.4</td>
</tr>
</tbody>
</table>
willing to enrol in ABET programmes

- Employers took advantage of the MQA ABET discretionary grants for both learners and employers.

The low uptake of ABET classes by employees remains a problem even though employers continue to appeal to employees to take advantage of the free provision of ABET programmes.

The Charter also requires that companies conduct skills audits to assess the skills levels of its employees to develop and create further work opportunities. Social partners at the MQA have struggled to gain a common understanding of how to conduct skills audits at company level. The MQA has since been mandated to commission research on how to conduct a skills audit.

The MQA

The Chamber has continued to play a leading role in influencing policy and implementation plans at the MQA. This is achieved by being the key convenor of employers and by soliciting employer inputs to be forwarded to the MQA. In the past year the MQA embarked on a number of initiatives and projects supported by employers:

- Longitudinal analysis of the skills profile of employees in the mining industry

The MQA uses the Workplace Skills Plan (WSP) and Annual Training Reports (ATR) submitted by companies on a yearly basis to profile the skills of employees in the industry. A longitudinal analysis was conducted, using a sample of 23 companies that have consistently submitted WSP/ATRs over the past eight years. The table below shows how the skills and demographic profile of employees has changed over time when comparing WSPs/ATRs of Year 1 with Year 8.

The percentage of female employees has increased from 2.8 in 2001 to 7.3 in 2008.

Despite concerted efforts on ABET, the number of employees with no schooling up to grade 9 level has increased. However, there has been a slight increase in the number of people with post school level qualifications. The biggest skills shortages occur in the professional category. The average training budget, expressed as a percentage of payroll, has remained between 3.6% and

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>AS AT JULY 2008</th>
<th>AS AT JULY 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical services</td>
<td>55</td>
<td>56</td>
</tr>
<tr>
<td>Cement lime and aggregates</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Diamond processing</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Engineering</td>
<td>250</td>
<td>304</td>
</tr>
<tr>
<td>Jewellery manufacturing</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>Metallurgy</td>
<td>271</td>
<td>306</td>
</tr>
<tr>
<td>Underground coal mining</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Underground hard rock mining</td>
<td>86</td>
<td>98</td>
</tr>
<tr>
<td>Surface mining</td>
<td>54</td>
<td>55</td>
</tr>
<tr>
<td>Occupational hygiene</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Occupational safety</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Rock engineering</td>
<td>66</td>
<td>76</td>
</tr>
<tr>
<td>Surveying</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Small scale mining</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to mining certificate</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>932</td>
<td>1 053</td>
</tr>
</tbody>
</table>
The need to continue with a variety of annual research projects has led the MQA to establish a dedicated research unit to propose and oversee all research projects. After engagement with employers and other social partners, the MQA has embarked on the following research projects:

- Evaluation of support strategies for the mining sector with respect to the Mining Charter
- Skills development needs of small non-levy paying companies
- Language policy implementation/ Fanakalo
- ABET

**Discretionary grant project**

The Chamber participates in allocating the MQA discretionary grants to various skills development projects. In the past year the MQA had R250-million to spend on 31 projects that were to benefit both employers and learners. Amongst others, the following projects assisted employers financially as they attracted larger sums of money per grant:

- Bursaries: R25.1-million
- Work Experience: R22.68-million
- Internships: R11.0-million
- Learnerships/Apprenticeships: R42.3-million
- ABET: R25.0-million
- OHS representatives: R54.0-million

The challenge for all social partners at the MQA is to identify the projects that will attract learners as well as the payment of appropriate grants per project.

**MQA information system**

The MQA board approved the purchase and implementation of a new system to improve data management, client interface and information management. The implementation of this new data system (MQA I-SHARE) has not yet yielded the results anticipated by employers. This challenges the Chamber, as convenor, to lead appropriate interventions at the MQA that would result in an improved information system. The delay in proper implementation of MQA I-SHARE negatively affected employers, as they could not load data on learners and their learning achievements, resulting in certificates not being issues, non-payment of discretionary grants and the late manual submission of WSP/ATRs.
Learning materials

The Chamber co-ordinates and delivers MQA learning materials through the Learning Materials Development Project.

The project delivers learning material packs for individual unit standards across the different disciplines within the sector. It also succeeded in developing learning materials for the fundamental unit standards at level 2, which have been approved and submitted to the MQA for use by MQA accredited training providers.

During the year under review, numerous new qualifications have been registered by SAQA and learning materials for these have or are in the process of being developed.

At the end of this reporting period, 1,238 unit standards were allocated to accredited training providers for learning material development across the different disciplines.

Total number of learning packs approved by the technical review groups as at July 2009.

PDA data development

The Chamber is coordinating the development of data for use with the Personal Digital Assistant (PDA) for assessment of competence of employees/learners against unit standards.

In the engineering discipline, the assessment data for the electro mechanic level 2, 3 and 4 has been developed.

In the metallurgy discipline, six skills programmes have been populated with data for the PDA assessment. Work is continuing on the balance of the unit standards found in the level 1 to 4 metallurgy qualifications.

In the underground hard rock discipline, Competent A and B and the blasting assistant for underground hard rock PDA data population is complete. The balance of the underground hard rock unit standards found in the level 2 qualification is also complete. Work is continuing on the level 3 underground hard rock qualification.

General and further education

Of the children who enter grade 1, 50% drop out of school at grade 9. 60% - 70% of the remaining learners write matric and the average pass rate for matric is in the mid-60% range. Fifteen per cent of those who pass matric obtain an exemption and have access to public higher education institutions. The participation rate in higher education is about 16%, while in developed countries it often exceeds 40%. The higher education results are dismal: only 30% of students enrolled in 2000 graduated within five years and 14% were still enrolled after five years; 56% had dropped out.

It is estimated that around 700,000 young people exit the school system each year, with qualifications ranging between grade 9 and grade 11. A logical place for these young people to go to become employable would be the Further Education and Training (FET) colleges. However, there are more students enrolled in higher education institutions than in the 50 FET colleges.

The NATED (N1 to N6) courses offered by the FET colleges have been phased out and the new National Certificate (Vocational) (NC (V)) introduced in 2007. Only 9.2% of learners passed all seven subjects to be promoted from NC (V) level 2 to level 3. However, the raw scores were adjusted to a 51.5% pass rate. The overall pass rate of NC (V) level 2 in 2008 was in the region of 55% and for NC (V) level 3, 60%. Although the pass rate in 2008 is an improvement on the 2007 pass rate, it, and number of learners engaged in engineering subjects, is very low. This will impact on the intake of learners into engineering artisan learning programmes and will further strain the shortage of artisans.

National Skills Authority (NSA)

The Chamber continues to play a key role as convenor of the business consistency at the NSA. The business members of the NSA assisted in the drafting of the contents of the National Skills Authority.
Development Strategy (NSDS 3) for the period 2010 to 2015. The NSDS 3 draft document is yet to be released for public comment.

The NSA also embarked on a process of reviewing the current SETA landscape, and propose a new SETA landscape for the period 2010 to 2015. The new SETA landscape is yet to be released for public comment. Business will continue to participate at public hearings to influence the way in which SETAs should be structured. Participating at this level further ensures that the interests of the mining industry are protected and the mining industry SETA, the MQA, is minimally affected by the re-organisation of the SETA landscape.

Business members of the NSA also emphasised the need to establish the National Skills Fund (NSF) as a stand-alone public entity. To achieve this goal, a business case for the establishment of such a public entity was drafted and agreed upon by all social partners at the NSA. The draft business case of the NSF is now the subject of negotiation between National Treasury and the Department of Labour (DoL). The transfer of the skills function from the DoL to the newly established Department of Higher Education and Training (DHET) is stalling this process. Business will continue to demonstrate to government and the other social partners, that the NSF – as a public entity – has an advantage of improving skills delivery for the unemployed and further accelerate disbursement of the NSF funds.

The business constituency at the NSA was also quick to meet with the new minister of higher education and training to make recommendations for retaining the NSA under the new ministry. Business needs to continually lobby for the existence of the NSA to maintain the importance of workplace skills development.

**Training lay-offs**

The President of South Africa established a senior leadership task team, consisting of business, labour, government and the community to explore the possibility of introducing a funded training lay-off scheme aimed at reducing the negative impact of large-scale retrenchments caused by the global

<table>
<thead>
<tr>
<th>NAME OF CERTIFICATE</th>
<th>AS AT JULY 2007</th>
<th>AS AT JULY 2008</th>
<th>AS AT JULY 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in Advanced Mine Surveying</td>
<td>16</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Certificate in Advanced Mine Valuation</td>
<td>16</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>Certificate in Advanced Rock Engineering</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Certificate in Basic Mine Sampling</td>
<td>59</td>
<td>191</td>
<td>190</td>
</tr>
<tr>
<td>Certificate in Basic Mine Surveying</td>
<td>29</td>
<td>163</td>
<td>236</td>
</tr>
<tr>
<td>Certificate in Elementary Mine Sampling</td>
<td>27</td>
<td>37</td>
<td>122</td>
</tr>
<tr>
<td>Certificate in Elementary Mine Surveying</td>
<td>20</td>
<td>37</td>
<td>60</td>
</tr>
<tr>
<td>Certificate in Mine Environmental Control</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Certificate in Mine Environmental Control/Occupational Hygiene</td>
<td>30</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Certificate in Mine Survey Draughting</td>
<td>7</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td>Certificate in Radiation Protection Monitoring</td>
<td>30</td>
<td>50</td>
<td>120</td>
</tr>
<tr>
<td>Certificate in Rock Mechanics</td>
<td>8</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Certificate in Strata Control</td>
<td>6</td>
<td>45</td>
<td>70</td>
</tr>
<tr>
<td>Intermediate Certificate in Mine Environmental Control</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Certificate in Mine Environmental Control/Occupational Hygiene</td>
<td>25</td>
<td>38</td>
<td>45</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>251</strong></td>
<td><strong>664</strong></td>
<td><strong>916</strong></td>
</tr>
</tbody>
</table>
economic crisis. The Chamber played a key role in ensuring that the training lay-off scheme did not add any cost burden to the industry. The terms of reference of the training lay-off scheme were negotiated at Nedlac and the impact of its implementation will be evident in the year to come.

**South African Qualifications Authority (SAQA)**

The new NQF that came into effect in June 2009, was an outcome of negotiation by all social partners at both NEDLAC and SAQA. The business constituency, led by the Chamber, ensured that business’s inputs are taken into account when the NQF Act finally became law. The Chamber led the business constituency in making its presentation to the parliamentary public hearing on the proposed Act. This input ensured the following on behalf of business:

- Representation of the business constituency at all quality councils (QCs), including SAQA
- Ensuring parity of esteem amongst all QCs, including the yet to be established Quality Council for Trades and Occupations
- Recognition of workplace learning and ensuring that there will be an occupational qualifications framework as a sub-framework of the NQF.

The active participation of Chamber staff in national debates on quality assurance measures for education and skills development, has led them to be nominated to serve on the SAQA and QCTO boards on behalf of the business constituency.

**Chamber of Mines’ Certificates**

The provision of tuition leading to the attainment of various Chamber of Mines’ Certificates, remains relevant in the absence of new unit standards based qualifications at NQF levels 1 to 4, required for people to practice in specified areas of work. The demand for these qualifications on a year-to-year basis is represented in the table on the previous page. The new NQF Act requires all learning programmes to be issued by an accredited training provider or quality assurance partner. In future, the Chamber will not be allowed to issue all these certificates. Plans are underway to hand over the issuing of certificates to the MQA (NQF levels 1 - 4) and the relevant tertiary institutions for all certificates at NQF level 5 and above. The Chamber plans to issue its last certificate in December 2011.
CHAMBER OF MINES OF SOUTH AFRICA

ANNUAL FINANCIAL STATEMENTS

for the year ended 30 June 2009
The following reports and statements are presented:

- Executive Council’s responsibility for financial reporting: 100
- Independent auditor’s report: 101
- Balance sheet: 102
- Income statement: 102
- Statement of changes in equity: 102
- Cash flow statement: 103
- Accounting policies: 103–104
- Notes to the annual financial statements: 105–109
Executive Council’s responsibility for financial reporting

The Executive Council of the Chamber is responsible for the maintenance of adequate accounting records and preparation and integrity of the financial statements and related information. The financial statements have been prepared in accordance with South African Statements of Generally Accepted Accounting Practice. The Chamber’s independent external auditors, Deloitte & Touche, have audited these financial statements and their unqualified report appears on page 101.

The annual financial statements are prepared on a going concern basis. Nothing has come to the attention of the Executive Council to indicate that the Chamber will not remain a going concern for the foreseeable future.

Approval of annual financial statements

The Annual Financial Statements as set out on pages 102 to 109 were approved by the Executive Council on 18 September 2009 and are signed on their behalf by:

Mr S Nkosi
President

Mr MG Diliza
Chief Executive
Independent auditor’s report to the members of the Chamber of Mines of South Africa

We have audited the annual financial statements of the Chamber of Mines of South Africa which comprise the executive council’s responsibility for financial reporting, the balance sheet as at 30 June 2009, the income statement, the statement of changes in equity and cash flow statement for the year then ended, a summary of significant accounting policies and other explanatory notes.

Executive Council Responsibility for the Financial Statements

The Executive Council is responsible for the preparation of these financial statements in accordance with South African Statements of Generally Accepted Accounting Practice, and in the manner required by the Labour Act in South Africa. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditors Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity’s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal control. An audit also includes evaluating the appropriateness of accounting principles used and the reasonableness of accounting estimates made by management, as well as evaluating the overall financial statement presentation.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Chamber of Mines of South Africa at 30 June 2009, and of its financial performance and its cash flows for the year then ended in accordance with South African Statements of Generally Accepted Accounting Practice, and in the manner required by the Labour Relations Act in South Africa.

Deloitte & Touche
Per A J Zogby
Partner
Johannesburg
18 September 2009
## Balance Sheet as at 30 June 2009

<table>
<thead>
<tr>
<th>Notes</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>1</td>
<td>889 444</td>
</tr>
<tr>
<td>Inventory</td>
<td></td>
<td>371 987</td>
</tr>
<tr>
<td>Investments</td>
<td>2</td>
<td>7 991 894</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 253 325</td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>3</td>
<td>3 163 034</td>
</tr>
<tr>
<td>Bank and cash</td>
<td>4</td>
<td>26 518 594</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29 681 628</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td></td>
<td>38 934 953</td>
</tr>
<tr>
<td><strong>Funds AND LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Funds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated funds</td>
<td></td>
<td>6 521 247</td>
</tr>
<tr>
<td>Project funds</td>
<td>5</td>
<td>12 900 574</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19 421 821</td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>6</td>
<td>15 664 740</td>
</tr>
<tr>
<td>Short term loan</td>
<td>7</td>
<td>3 848 392</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19 513 132</td>
</tr>
<tr>
<td><strong>Total funds and liabilities</strong></td>
<td></td>
<td>38 934 953</td>
</tr>
</tbody>
</table>

**Income statement for the year ended 30 June 2009**

<table>
<thead>
<tr>
<th>Notes</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Revenue</td>
<td>8</td>
<td>48 651 467</td>
</tr>
<tr>
<td>Administrative and operating costs</td>
<td>9</td>
<td>(50 662 321)</td>
</tr>
<tr>
<td>Deficit before depreciation</td>
<td></td>
<td>(2 010 854)</td>
</tr>
<tr>
<td>Depreciation</td>
<td></td>
<td>(566 235)</td>
</tr>
<tr>
<td>Operating deficit</td>
<td></td>
<td>(2 577 089)</td>
</tr>
<tr>
<td>Interest Income</td>
<td></td>
<td>2 577 089</td>
</tr>
<tr>
<td>Project income</td>
<td>5</td>
<td>10 150 000</td>
</tr>
<tr>
<td>Project expenditure</td>
<td>5</td>
<td>(17 212 250)</td>
</tr>
<tr>
<td>(Decrease) / increase in project funding</td>
<td></td>
<td>(7 062 250)</td>
</tr>
</tbody>
</table>

**Statement of changes in equity for the year ended 30 June 2009**

<table>
<thead>
<tr>
<th>Notes</th>
<th>Project funds</th>
<th>Accumulated funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 2007</td>
<td>13 763 671</td>
<td>6 521 247</td>
</tr>
<tr>
<td>Increase in project funding for the year</td>
<td></td>
<td>20 284 918</td>
</tr>
<tr>
<td>Transfer to project funds</td>
<td>6 199 153</td>
<td>6 199 153</td>
</tr>
<tr>
<td>Balance at 30 June 2008</td>
<td>19 962 824</td>
<td>6 521 247</td>
</tr>
<tr>
<td>Decrease in project funding for the year</td>
<td></td>
<td>26 484 071</td>
</tr>
<tr>
<td>Transfer from project funds</td>
<td></td>
<td>(7 062 250)</td>
</tr>
<tr>
<td>Balance at 30 June 2009</td>
<td>12 900 574</td>
<td>6 521 247</td>
</tr>
</tbody>
</table>

annual report 2008 – 2009 102 chamber of mines of south africa
Cash flow statement for the year ended 30 June 2009

<table>
<thead>
<tr>
<th>Notes</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>Cash flows from operating activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net cash (outflow) / inflow from operating activities</td>
<td>10</td>
<td>(938 974)</td>
</tr>
<tr>
<td><strong>Cash flows from investing activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additions to equipment</td>
<td>(130 350)</td>
<td>(483 255)</td>
</tr>
<tr>
<td>Disposals of equipment</td>
<td>–</td>
<td>119 380</td>
</tr>
<tr>
<td>Investment income</td>
<td>2 577 089</td>
<td>2 087 396</td>
</tr>
<tr>
<td>Decrease / (increase) in investments</td>
<td>7 062 250</td>
<td>(6 966 967)</td>
</tr>
<tr>
<td>Net cash inflow / (outflow) from investing activities</td>
<td>9 508 989</td>
<td>(5 243 446)</td>
</tr>
<tr>
<td>Net increase / (decrease) in cash and cash equivalents</td>
<td>8 570 015</td>
<td>(703 291)</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at beginning of the year</strong></td>
<td>17 948 579</td>
<td>18 651 870</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at end of the year</strong></td>
<td>26 518 594</td>
<td>17 948 579</td>
</tr>
</tbody>
</table>

Accounting policies for the year ended 30 June 2009

Impact of Standards and interpretations not yet effective
At the balance sheet date, the following accounting standards were in issue but not yet effective:
- IAS 1 (AC 101) – Presentation of Financial Statements – Amendments arising from April 2009 annual improvements to IFRSs – effective for periods beginning on or after 1 January 2010
- IAS 7 (AC 118) – Statements of Cash Flows – Amendments arising from April 2009 annual improvements to IFRSs – effective for periods beginning on or after 1 January 2010.
- IAS 36 (AC 128) – Impairment of Assets – Amendments arising from April 2009 annual improvements to IFRSs – effective for periods beginning on or after 1 January 2010.

Accounting policies

Accounting policies
The principal accounting policies and basis of accounts used are in all material respects consistently applied. The Annual Financial Statements have been prepared in accordance with the historic basis, except for certain financial instruments which are stated at fair value and these policies conform with South African Statements of Generally Accepted Accounting Practice.

Revenue recognition
Revenue represents contributions from members, administration fees and interest income. Contributions are recognised when invoiced and consists of contributions for operating costs and capital expenditure, collected in-line with the yearly approved budget. Administration fees are earned in respect of services provided to associated entities. Interest income is accrued on an effective yield basis.

Project income
Project income represents contribution from members for specific projects.

Project expenditure
Project expenditure relates to expenditure incurred on projects approved by the Executive Council.

Equipment
Equipment is stated at historical cost less depreciation. Depreciation is calculated using the straight line method so as to write off the cost of each asset less its residual value over its estimated useful life.

The rates of depreciation used are:
- Motor vehicles: 5 years
- Computer equipment: 3 years
- Furniture and fittings: 5 years
Accounting policies (continued)

**Investments**
Unlisted investments comprise shares in related companies and are stated at cost. Other investments comprise monies invested to fund liabilities and projects which are stated at cost.

**Cash and cash equivalents**
Cash and cash equivalents comprise cash and short term deposits. The carrying amount of these assets approximates fair value. Credit risk is limited as the counter parties are financial institutions with high credit ratings.

**Financial instruments**
Financial assets and financial liabilities are recognised on the Chamber’s balance sheet when the Chamber has become a party to contractual provisions of the instruments. Trade receivables and payables are stated at their nominal value. Trade receivables are reduced by appropriate allowances for estimated irrecoverable amounts.

**Retirement benefits**
The policy of the Chamber, subject to the rules of the Chamber of Mines Retirement Fund, is to provide retirement benefits for its employees. Payments to the defined contribution fund are expensed as they fall due.

The Chamber of Mines does not have a post retirement medical aid liability as this liability has been fully funded and was bought out by Momentum Employee Benefits.

**Inventory**
Inventory consists of gold coins and medallions. Inventory is valued at the lower of cost or net realisable value.

**Management judgements**
In the process of applying the Chamber of Mines accounting policies, the most significant judgements made by management relate to the following:
- revaluation of the useful lives and residual value estimations of assets and,
- the bad debt provision

**Impairment**
An annual impairment review of assets is carried out by comparing the net book value of the assets with their recoverable amount. Recoverable amounts are based on the higher of the value in use and the net selling price. Value in use is determined by applying a discount rate to the anticipated pre tax cash flow for the remaining useful life of the asset.

Where the recoverable amount is less than the net book value, the impairment is charged against income to reduce the carrying amount of the affected assets to recoverable amounts. The revised carrying amounts are amortised on a systematic basis over the remaining useful life of such affected assets.

**Provisions**
Provisions are recognised where the Chamber of Mines of South Africa has a present legal or constructive obligation as a result of a past event, a reliable estimate of the obligation can be made and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation. Provisions are reviewed at each balance sheet date and adjusted to reflect the current best estimate.
## Notes to the annual financial statements for the year ended 30 June 2009

### 1. Equipment

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Accumulated depreciation</th>
<th>Net book value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>2009</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>1 333 245</td>
<td>676 371</td>
<td>656 874</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>913 323</td>
<td>809 961</td>
<td>103 362</td>
</tr>
<tr>
<td>Furniture and fittings</td>
<td>469 426</td>
<td>340 218</td>
<td>129 208</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2 715 994</td>
<td>1 826 550</td>
<td>889 444</td>
</tr>
<tr>
<td><strong>2008</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>1 263 468</td>
<td>303 550</td>
<td>959 918</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>873 851</td>
<td>670 719</td>
<td>203 132</td>
</tr>
<tr>
<td>Furniture and fittings</td>
<td>448 325</td>
<td>286 046</td>
<td>162 279</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2 585 644</td>
<td>1 260 315</td>
<td>1 325 329</td>
</tr>
</tbody>
</table>

#### Reconciliation of movement:

<table>
<thead>
<tr>
<th></th>
<th>Motor vehicles</th>
<th>Computer equipment</th>
<th>Furniture &amp; fittings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>2009</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net book value at beginning of year</td>
<td>959 918</td>
<td>203 132</td>
<td>162 279</td>
<td>1 325 329</td>
</tr>
<tr>
<td>Additions</td>
<td>69 777</td>
<td>39 472</td>
<td>21 101</td>
<td>130 350</td>
</tr>
<tr>
<td>Depreciation</td>
<td>372 821</td>
<td>139 242</td>
<td>54 172</td>
<td>566 235</td>
</tr>
<tr>
<td>Net book value at end of year</td>
<td>656 874</td>
<td>103 362</td>
<td>129 208</td>
<td>889 444</td>
</tr>
</tbody>
</table>

#### 2008

#### Reconciliation of movement:

<table>
<thead>
<tr>
<th></th>
<th>Motor vehicles</th>
<th>Computer equipment</th>
<th>Furniture &amp; fittings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>2008</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net book value at beginning of year</td>
<td>883 106</td>
<td>388 235</td>
<td>165 521</td>
<td>1 436 862</td>
</tr>
<tr>
<td>Additions</td>
<td>424 275</td>
<td>–</td>
<td>58 980</td>
<td>483 255</td>
</tr>
<tr>
<td>Depreciation</td>
<td>228 083</td>
<td>185 103</td>
<td>62 222</td>
<td>475 408</td>
</tr>
<tr>
<td>Disposals</td>
<td>119 380</td>
<td>–</td>
<td>–</td>
<td>119 380</td>
</tr>
<tr>
<td>Net book value at end of year</td>
<td>959 918</td>
<td>203 132</td>
<td>162 279</td>
<td>1 325 329</td>
</tr>
</tbody>
</table>

### 2. Investments

- **Rand Mutual Assurance Company Ltd**
  - 80 (2008: 80) 
- 4 shares @ R20 (2008: 4 shares @ R20 each)
- Executive valuation R 80 (2008: R 80)

#### Term deposits:

<table>
<thead>
<tr>
<th>Fund</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry task force radiation fund</td>
<td>–</td>
<td>109 419</td>
</tr>
<tr>
<td>Disaster relief fund</td>
<td>740 000</td>
<td>740 000</td>
</tr>
<tr>
<td>Insurance claim fund</td>
<td>880 000</td>
<td>880 000</td>
</tr>
<tr>
<td>Research fund</td>
<td>–</td>
<td>38 432</td>
</tr>
<tr>
<td>HIV AIDS project</td>
<td>–</td>
<td>375 765</td>
</tr>
<tr>
<td>Epidemiology study for former mine workers</td>
<td>2 997 978</td>
<td>4 345 708</td>
</tr>
<tr>
<td>Occupational lung disease in the mining industry</td>
<td>484 138</td>
<td>484 138</td>
</tr>
<tr>
<td>Development of conceptual water strategies</td>
<td>–</td>
<td>500 000</td>
</tr>
</tbody>
</table>
Notes to the annual financial statements 2. investments (continued)

<table>
<thead>
<tr>
<th>Project Funds</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Future of gold sector project</td>
<td>–</td>
<td>27 546</td>
</tr>
<tr>
<td>Mining industry occupational safety &amp; health project (MOSH)</td>
<td>1 356 942</td>
<td>5 653 003</td>
</tr>
<tr>
<td>Strategic positioning of mining industry &amp; the chamber</td>
<td>–</td>
<td>500 000</td>
</tr>
<tr>
<td>Strategic review of the mining industry</td>
<td>–</td>
<td>200 000</td>
</tr>
<tr>
<td>Printing of mining related information packs / guidelines</td>
<td>–</td>
<td>69 465</td>
</tr>
<tr>
<td>Bargaining council consultancy project</td>
<td>188 000</td>
<td>100 000</td>
</tr>
<tr>
<td>Mineworkers provident fund - risk project</td>
<td>–</td>
<td>100 000</td>
</tr>
<tr>
<td>Subvention of salaries</td>
<td>585 278</td>
<td>930 588</td>
</tr>
<tr>
<td>Development of closure strategies</td>
<td>30 000</td>
<td>–</td>
</tr>
<tr>
<td>Global instruments on climate change</td>
<td>300 000</td>
<td>–</td>
</tr>
<tr>
<td>Guidelines on biodiversity</td>
<td>288 495</td>
<td>–</td>
</tr>
<tr>
<td>International council on mining and metallurgy (ICMM)</td>
<td>60 983</td>
<td>–</td>
</tr>
<tr>
<td>Public seminars on environmental performance</td>
<td>80 000</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>7 991 894</td>
<td>15 054 144</td>
</tr>
</tbody>
</table>

3. Accounts receivable

Accounts receivable - members | 2 255 057 | 8 010 671 |
Accounts receivable - non members | 1 300 219 | 777 283 |
Less: Provision for doubtful debts | (392 242) | (407 251) |
                                      | 3 163 034 | 8 380 713 |

4. Bank & cash

Cash at bank | 7 232 252 | 7 825 434 |
Cash on call | 27 278 156 | 25 177 209 |
Amounts classified under investments | (7 991 814) | (15 054 064) |
Bank and cash | 26 518 594 | 17 948 579 |

5. Project funds

Disaster relief | 740 000 | 740 000 |
Insurance | 880 000 | 880 000 |
Research | – | 38 432 |
Balance at 1 July 2008 | 38 432 |
Expenditure | (38 432) | – |
Balance as at 30 June 2009 | – |

Industry Task Force Radiation Fund

Balance at 1 July 2008 | 109 419 |
Expenditure | (109 419) | – |
Balance as at 30 June 2009 | – |

HIV/AIDS Project

Balance at 1 July 2008 | 375 765 |
Expenditure | (375 765) | – |
Balance at 30 June 2009 | – |

Epidemiology Study For Former Mine Workers

Balance at 1 July 2008 | 2 997 978 |
Expenditure | (4 345 708) | (1 347 730) |
Balance as at 30 June 2009 | 2 997 978 |

Occupational Lung Disease In The Mining Industry

Balance at 1 July 2008 | 484 138 |
Expenditure | – | – |
Balance as at 30 June 2009 | 484 138 |
Notes to the annual financial statements 5. project funds (continued)

<table>
<thead>
<tr>
<th>Project Funding Recovery</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>4 908 760</td>
<td>4 908 760</td>
</tr>
</tbody>
</table>

This amount primarily relates to the recovery from the Chamber’s insurers of irregular expenditure that occurred in previous financial years. This funding recovery will be utilised for future projects.

<table>
<thead>
<tr>
<th>Future Of Gold Sector</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 2008</td>
<td>27 546</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(27 546)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development Of Conceptual Water Strategies</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 2008</td>
<td>500 000</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(500 000)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic Positioning Of Mining Industry &amp; Chamber</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 2008</td>
<td>500 000</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(500 000)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic Review Of The Mining Industry</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 2008</td>
<td>200 000</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(200 000)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development Of Frameworks For Closure Strategies</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount received</td>
<td>100 000</td>
<td>30 000</td>
</tr>
<tr>
<td>Expenditure</td>
<td>(70 000)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>30 000</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Instruments On Climate Change</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received</td>
<td>300 000</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>300 000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guidelines On Biodiversity</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received</td>
<td>350 000</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(61 506)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>288 494</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ICMM</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received</td>
<td>200 000</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(139 017)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>60 983</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Printing Mining Related Information Packs / Guidelines</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 2008</td>
<td>69 465</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(69 465)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bargaining Council : Consultancy</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 2008</td>
<td>100 000</td>
<td></td>
</tr>
<tr>
<td>Received</td>
<td>100 000</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>(12 000)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td>188 000</td>
<td></td>
</tr>
</tbody>
</table>

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### Notes to the annual financial statements 5. projects (continued)

<table>
<thead>
<tr>
<th>Project</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineworkers Provident Fund - Risk Project</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Balance at 1 July 2008</td>
<td>100 000</td>
<td>100 000</td>
</tr>
<tr>
<td>Expenditure</td>
<td>(100 000)</td>
<td></td>
</tr>
<tr>
<td>Balance as at 30 June 2009</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Public Seminars On Environmental Performance And Stewardship           |                             | 80 000                      |
| Received                                                              | 150 000                     |                             |
| Expenditure                                                           | (70 000)                    |                             |
| Balance as at 30 June 2009                                            | 80 000                      |                             |

| Subvention Of Salaries                                                | 585 279                     | 930 588                     |
| Balance at 1 July 2008                                                | 930 588                     |                             |
| Expenditure                                                           | (345 309)                   |                             |
| Balance as at 30 June 2009                                            | 585 279                     |                             |

| Mining Industry Occupational Safety & Health Project (MOSH)           | 1 356 942                   | 5 653 003                   |
| Balance at 1 July 2008                                                | 5 653 003                   |                             |
| Received                                                              | 8 950 000                   |                             |
| Expenditure                                                           | (13 246 061)                |                             |
| Balance as at 30 June 2009                                            | 1 356 942                   |                             |


6. Accounts payable

| Accounts payable - members                                          | 1 188 029                   | 241 289                     |
| Accounts payable - non-members                                      | 14 476 711                  | 12 391 367                  |
| Total accounts payable                                             | 15 664 740                  | 12 632 656                  |

7. Short term loan

Chamber of Mines Building Company (Proprietary) Limited 3 848 392 3 844 115

This loan is unsecured interest free and payable on demand.

8. Revenue

| Contribution from members                                          | 45 444 954                  | 42 906 008                  |
| Administration fees                                                | 950 131                     | 874 250                     |
| Other income                                                        | 2 256 382                   | 2 866 462                   |
| Total revenue                                                       | 48 651 467                  | 46 646 720                  |

9. Administrative and operating expenditure

| Auditors’ remuneration                                              | 246 000                     | 222 578                     |
| - Current year                                                      | 246 000                     | 222 578                     |
| - Other services                                                    |                             |                             |
| Staff costs                                                         | 32 837 188                  | 31 657 082                  |
| Operating costs                                                     | 17 579 133                  | 16 379 048                  |
| Total administrative and operating expenditure                      | 50 662 321                  | 48 258 708                  |
Notes to the annual financial statements (continued)

10 Reconciliation of increase in project funding for the year to net cash flow from operating activities:

<table>
<thead>
<tr>
<th>Item</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Decrease) / Increase in project funding for the year</td>
<td>(7 062 250)</td>
<td>6 199 153</td>
</tr>
<tr>
<td>Adjustment for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>566 235</td>
<td>475 408</td>
</tr>
<tr>
<td>Interest received</td>
<td>(2 577 089)</td>
<td>(2 087 396)</td>
</tr>
<tr>
<td>Operating funding before working capital changes</td>
<td>(9 073 104)</td>
<td>4 587 165</td>
</tr>
</tbody>
</table>

Working capital changes

<table>
<thead>
<tr>
<th>Item</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in accounts receivable</td>
<td>5 217 679</td>
<td>1 060 427</td>
</tr>
<tr>
<td>Increase / (decrease) in accounts payable</td>
<td>3 032 083</td>
<td>(1 113 544)</td>
</tr>
<tr>
<td>Increase / (decrease) in loans</td>
<td>4 277</td>
<td>(3 816)</td>
</tr>
<tr>
<td>(Increase) / decrease in inventory</td>
<td>(119 910)</td>
<td>9 923</td>
</tr>
<tr>
<td>Net cash (outflow) / inflow from operating activities</td>
<td>(938 974)</td>
<td>(4 540 155)</td>
</tr>
</tbody>
</table>

11 Cash and cash equivalents

<table>
<thead>
<tr>
<th>Item</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank and cash</td>
<td>26 518 594</td>
<td>17 948 579</td>
</tr>
</tbody>
</table>

12 Financial instruments

The organisation’s non-derivative instruments consist of cash deposits with banks, accounts receivable and payable and loans from group companies.

Currency risk management

The organisation is not exposed to currency risk, other than the translation of its foreign bank account balance.

Interest rate risk management

The organisation adopts a policy of regularly reviewing interest rate exposure and maintains both fixed and floating rate borrowings.

Credit risk management

Management has a credit risk policy in place and exposure to credit risk is monitored on an ongoing basis. Provision is made for specific doubtful debts, and at the year end management did not consider there to be any material credit risk exposure that was not provided against. Reputable financial institutions are used for investing and cash handling purposes.

Fair values

The carrying amounts of the financial assets and liabilities carried on the balance sheet approximate their values at the end of the year.

13 Subsequent events

As at the date of signing these financial statements, there were no significant or material post balance sheet events which would require adjustments to or disclosure of in the annual financial statements.

14 Taxation

The Chamber of Mines of South Africa is exempt under section 10 (1) (d) of the Income Tax Act.