



# Annual Report 2005 – 2006

## Contents

Structure of the Chamber ..... Inside front cover

Chamber members ..... 2

Chief Executive’s review ..... 3

Communications ..... 7

Economic overview ..... 11

Economic policy ..... 27

Environment policy ..... 39

Health ..... 47

Labour policy and labour relations ..... 51

Legal issues ..... 59

Safety and sustainable development ..... 63

Skills development ..... 71

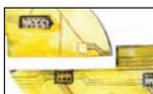
Financial statements ..... 77

Abbreviations ..... Inside back cover

## Diversity in the mining industry

Mining, more than any other industry, is an extremely diverse endeavour encompassing as it does a host of commodities from platinum to diamonds and coal to sands. These are extracted from a variety of different geologies in many and varied parts of South Africa and beneath the country’s oceans.

The people who work in the industry come from disparate backgrounds, gender and race. A complex mix of qualifications, abilities, talents and experience are called for in the industry and the continuum from exploration through excavation, production, beneficiation and sales incorporates a myriad of opportunities for everyone.



# Chamber members

## Financial corporations

Anglo American Corporation plc

## Coal mining

Anglo Operations Limited, Anglo Coal Division

Eyesizwe Coal (Pty) Limited

Ingwe Collieries Limited

- ◆ Douglas Colliery Limited
- ◆ Khutala Mining Services (Pty) Limited
- ◆ Optimum Colliery Limited

Kangra Group (Pty) Limited

Kumba Resources Limited

Kuyasa Mining (Pty) Limited

Sasol Mining

Tweewaters Fuel (Pty) Limited

Xstrata Coal South Africa

## Diamond mining

De Beers Consolidated Mines Limited

Namakwa Diamond Company

South African Diamond Producers' Organisation

Trans Hex Group Limited

## Gold mining

African Rainbow Minerals (Gold) Limited

AngloGold Ashanti

Armgold/Harmony JV Limited

Barrick Gold Corporation

Gold Fields Limited

- ◆ Beatrix Mining Company Limited
- ◆ Driefontein Consolidated (Pty) Limited
- ◆ Kloof Gold Mining Company Limited

Harmony Gold Mining Company Limited

JCI Gold limited

## Platinum mining

Anglo American Platinum Corporation Limited

Impala Platinum Limited

Lonmin Platinum Limited

## Small, medium and emerging markets

ASA Metals (Pty) Limited

Aggregate and Sand Producers Association of South Africa

Clay Brick Association Limited

G & W Base and Industrial Minerals (Pty) Limited

Imerys South Africa (Pty) Limited

Mvelephanda Resources

Randgold and Exploration Limited

Ridge Mining

Vametco Mineral Corporation (Pty) Limited

## Other members

AngloGold Health Services (Pty) Limited

BHP Billiton (SA) Limited

Murray and Roberts (Cementation) (Pty) Limited

Corobrick (Pty) Limited

Shaft Sinkers (Pty) Limited

## Suspended operations

City Deep Limited

Consolidated Main Reef Mines and Estates Limited

Crown Mines Limited

# Chief Executive's review

The theme of this year's Annual Report is diversity, a characteristic that most appropriately captures the essence of the mining industry. Effective management and control of the diversity, which so conspicuously typifies the mining sector, are among the accomplishments that have given the industry the world-class reputation that it deserves. They are the attributes that the Chamber consistently seeks to apply to its own strategic approaches in fulfilling its function as a lobbying and advocacy organisation acting on behalf of its mining company members.

During the first half of 2006, the Chamber identified a need to revise its strategic direction in response to changing circumstances in its operational environment. For several years – in a period when government was intensely focused on policy formulation – the Chamber devoted considerable attention to influencing policy dialogue in an attempt to ensure that what would ultimately become new legislation and regulations were not inimical to the business of mining. From an industry perspective, the most important legislation to emerge from this process was the Mineral and Petroleum Resources Development Act (MPRDA). The Chamber was comprehensively engaged in deliberations with government and other influential stakeholders during the preparation of the Act to secure a legislative and regulatory framework that would create an enabling environment suited to the achievement of



Zoli Diliza, Chief Executive, Chamber of Mines of South Africa

the dynamic business objectives of South Africa's primary industrial sector:

With the MPRDA and other legislative and regulatory reforms in force by early 2006, it was clear that the Chamber would need to change its focus and apply itself more to the implementation processes that had become the major operational imperatives of government.

In an effort to corroborate the Chamber's contention that emphasis had moved from policy formulation to implementation, the Chamber invited Advocate Sandile Nogxina, Director-general in the Department of Minerals and Energy (DME), to express an opinion on this issue at a strategic workshop held on 15 and 16 May 2006.

Nogxina welcomed the concept of Chamber involvement in a manner that would improve DME efficiencies and decrease implementation timeframes. Nogxina added that his department and the mining industry, through the Chamber, needed to work together to promote certainty and stability. This collective responsibility would be aimed at ensuring that mining in South Africa was made as attractive as possible for both domestic and foreign investors.



During the past five years the world has experienced an unprecedented commodities boom with accompanying investment and profitability benefits for the international mining sector. The South African mining industry has not been a major beneficiary of the boom and, most disturbingly, between the first quarter of 2004 and the first quarter of 2006 has witnessed a 32.7% decline in fixed investment.

The Chamber believes that the slump in mining industry fixed investment can largely be attributed to the slow progress in dealing with applications for mining right conversions and new mining rights. Difficulties relating to financial provision requirements as well as the acquisition of water permits are compounding the problem.

This is a matter of grave concern for the Chamber and its members and has been brought to the attention of the minister of minerals and energy. The Chamber has recommended a number of remedial measures that it believes will bring an end to what is potentially a situation that could be damaging to the whole economy.

Publication of the Black Economic Empowerment Codes of Good Practice by the Department of Trade and Industry during the year under review also created anxiety for the mining industry as there was uncertainty over whether or not the provisions contained in the codes would replace the economic empowerment requirements of the Mining Charter.

When the Mining Charter was finalised members of the international investment community in Europe, Australia and the United States were given assurances by Minister Phumzile Mlambo-Ngcuka, the then minister of minerals and energy, that the black economic empowerment provisions embedded in the Charter were the ones that would be the mining industry standard.

Immediately following the publication of the codes the Chamber met with the minister of trade and industry to seek his assurance that they would not replace Mining Charter empowerment requirements. The minister made it clear that the Mining Charter, and not the codes, would be the applicable empowerment template for the mining industry.

Following the reshuffling of Cabinet by the State President in May 2006, the mining industry bid farewell to Minister Lindiwe Hendricks and Deputy Minister Lulu Xingwana. The appointment of Minister Buyelwa Patience Sonjica as the new minister of the DME was welcomed by the industry.

Efforts to introduce the new minister to the industry and for her to meet members of the Chamber's Executive Council were recently successful and a productive engagement between the parties took place in Johannesburg. The industry is looking forward to working closely with the minister.

On a similar note, during the course of the year, the National Union of Mineworkers (NUM) elected Frans Baleni to take over from its long serving general secretary, Gwede Mantashe. The Chamber, on behalf of the mining industry, is looking forward to the continuation of a mutually favourable association with the new NUM leadership, building on the existing good relationship that has been cultivated over the years.

During the year under review the major gold mining companies, trade unions and government agreed to co-operate in a combined effort to chart a new course for South Africa's gold mining sector. The agreement follows a year of discussions in which parties explored ways to address the challenges of the volatile price and exchange rate environment, increasing cost pressures, declining reserves and ongoing job losses.

The agreed process involves the parties working together to initiate a series of joint action programmes to address the key strategic issues in the way of the industry achieving its optimum life-span, competitiveness and contribution to growth, equity and employment. The dialogue and processes are championed at the very highest levels of companies, unions and government. They are supported by a project team that is made up of staff from all three stakeholder groupings, and facilitated by outside experts.

A series of interviews was held with senior representatives of each of the stakeholder bodies and a workshop was organised with stakeholders to define the sector's goals. Three over-arching goals for the sector emerged from this process, namely:

**Goal A:** Extend the life of gold mining through cost containment and productivity enhancement

**Goal B:** Enable complementary economic activities. An analysis of activities within the gold value chain and value-added (non-mining) activities with a view to highlighting pockets of opportunity for the gold mining sector

**Goal C:** Achieve equitable distribution of cost/benefit across stakeholders, including specific elements of the Social and Labour Plan.

A decision was made to carry all the issues forward into a further prioritisation process through data-driven analysis. The issues were subsequently grouped into broad categories to allow a rapid cycle analysis on each category to enable prioritisation of the issues. The categories for analysis are costs; regulatory environment and compliance; skills; productivity; value-added activities/value chain extension; and external factors.

The outcome of the analysis was developed into a set of collaborative initiatives around the key performance areas, which the sector could then carry forward to achieve its stated goals.

A set of 13 collaborative initiatives, which address the key performance areas across all three goals was created for the sector to make these initiatives more functional, they were incorporated into three industry campaigns:

### **Productivity enhancement and cost containment**

- A labour cost analysis
- A productivity improvement campaign
- Increasing operational flexibility
- A co-ordinated planning programme on state-owned providers and administered pricing
- Gold theft and illegal mining.

### **Regulatory and investment environment**

- Acceleration of mining rights and permits delivery
- Cost of regulatory compliance/regulatory impact assessments
- Co-ordination of environmental requirements
- Water licensing requirements
- Stimulation of junior mining activity.

### **Non-mining economic investment**

- Collaboration on non-mining value-added economic activity
- Extending the mining qualification authorities' authority to support non-mining training, and accessing funding for training
- Targeting training to the needs of rural economies, such as partnering with the business trust.

At the time of writing, the parties were considering the way forward.

Safety continues to be a major challenge for the mining industry and the industry is committed to a target of zero fatalities and injuries. The no-harm targets and 10-year milestones are in line with international objectives and benchmarks and essentially indicate commitment by the tripartite partners. The industry recognises that failure to achieve the targets and milestones is not an option, and to this end Chamber members are committed to working together, sharing information, learning from each other, and working closely with its tripartite partners.

The HIV/AIDS pandemic remains a major concern for the industry. A number of programmes are being implemented. However there is still concern about the partners and children of those affected who may not necessarily have access to treatment. Extensive work is taking place through workplace agreements, discussions on Social Health Insurance and the Health Charter.

There are still concerns surrounding the implementation of financial provisions for mine closure. In a workshop held between the Chamber members and the DME, the Chamber presented a proposed model that aims to improve the risk profiling of applicants. The model would provide further criteria to determine the probability of premature closure. Further engagements with the DME are continuing.

The Institute for Security Studies (ISS) published a monograph in April 2001 dealing with theft from South African mines and refineries. The ISS estimated that the undetected theft of gold from mines during the five years from 1994 to 1998 amounted to an average of 35 tons a year; however, because of insufficient information; no attempt was made to estimate the value of undetected thefts of platinum group metals (pgms) at the time. The Chamber asked the ISS to undertake a further study, which has now been completed. The new study estimates that syndicates

could be selling unwrought gold in excess of R1 836-billion a year and could be exporting more than R255-million worth of pgms a year. Interventions and activities have been put in place in an effort to eliminate the problem.

The European Union's (EU) proposed legislation on the Registration, Evaluation and Authorisation of Chemicals (REACH) continues to be of concern to the Chamber and its members. While the legislation was published to deal with chemicals, it has, unfortunately, been drawn up in such a way that ores, concentrates and minerals produced in this country and elsewhere in Africa have been caught in its net. I wish to emphasise that this does not mean that South Africa does not support the fundamental objectives of the legislation, but some issues of concern have arisen from the proposed legislation. The Chamber will continue to engage with the EU and looks forward to further co-operation with the EU institutions on this matter.

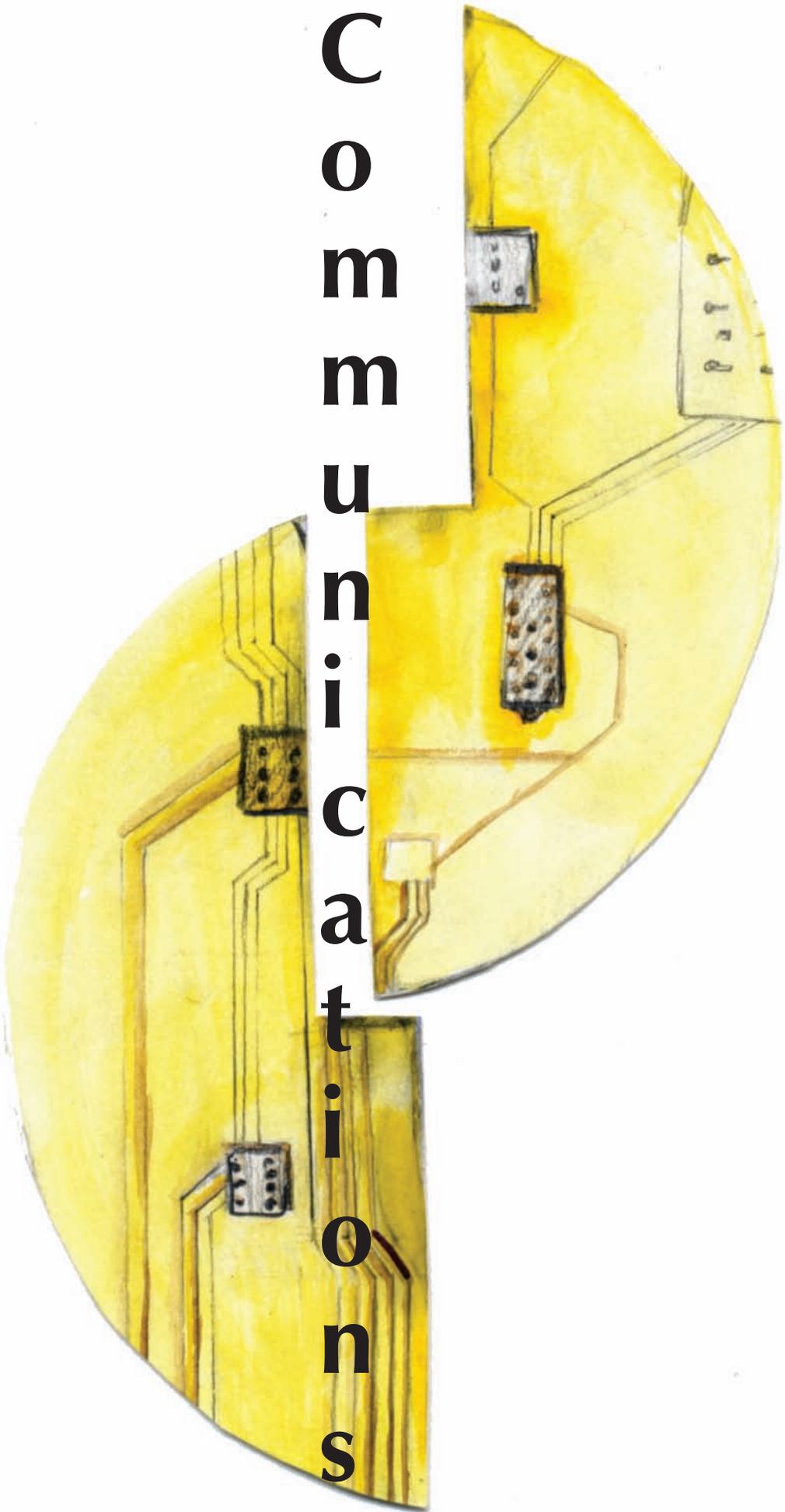
It is expected that mining companies should comply fully with the REACH.

The continued success and progress for 2005/6 could not have been achieved without the strong support of the Chamber Executive, the other principal committees and the expertise and commitment displayed by Chamber officials.

As Chief Executive of the Chamber I have consistently been committed to transformation of the organisation in a manner that offers employment opportunities to suitably qualified previously disadvantaged South Africans. It is a process that I have implemented with particular emphasis on preserving the capacity of the organisation to manage successfully the important activities designated to it by its mining company members.

Equally important has been the requirement not to disrupt the correct intellectual chemistry so critical to the Chamber's ability to add value to its members' strategic and operational imperatives. While there remain some outstanding objectives, I feel satisfied that the Chamber has evolved into an effective and modern organisation that is truly representative of South African demographics.

# Communications



# Communications



## Introduction

Sustained and effective communications is essential in any organisation, not least in the Chamber where its advocacy and lobbying role with government, labour and other stakeholders relies on information, transparency and candour; vital ingredients if it is to remain the recognised, authoritative voice of the mining industry in South Africa.

The Chamber's reputation depends on its ability to create and nurture relationships with its stakeholders. It therefore uses multiple instruments to engage with its stakeholders and to disseminate information to ensure that intelligence reaches its intended target audience.

The Chamber is proactive in keeping members of the public, government and all other stakeholders informed of the organisation's activities on behalf of the mining industry in the economic and socio-economic spheres, on health and safety issues, and in the area of environment and sustainable development.

Communications Services uses both the mainstream media and its own communication vehicles, such as its publications and workshops, to deliver the mining industry's policy position on various issues.

## Strategic planning

Communications Services realigned its mandate to the mission of the Chamber. This meant a review of all communication channels, materials and/or outlets that will be available and accessible to the target markets. The information needs of the target audiences were identified and a strategy was formulated to assist in promoting the image of the South African mining industry among its many stakeholders.

## Publications

The Chamber produces a number of publications that are used to inform and interact with different audiences.

### ***Mining, the Chamber's flagship publication***

This quarterly publication was launched in 2005 and it has proved to be a huge success. It covers a range of mining related issues and impartially analyses the state of the mining industry in South Africa. Over 3 500 copies are distributed locally and abroad to carefully selected investment analysts, financiers, policy and decision-makers in government and elsewhere.

The issues that have been covered thus far include legislation and empowerment, environmental sustainability, beneficiation, silicosis, tuberculosis, small-scale mining, safety, mine water and acid drainage, and skills development.

## ***Mining News***

*Mining News* ensures regular contact and communication with mines and mine employees.

Communication between the Chamber and its member mines and employees plays a vital role in the industry's ongoing communication efforts. This monthly newspaper contains accurate and relevant information of interest to the industry's work force and thus enables employees to become better informed and responsible partners in the economic prosperity of the mining sector. It is also a useful tool at ABET classes.



## ***Website***

The Chamber's website ([www.bullion.org.za](http://www.bullion.org.za) or [www.chamberofmines.org.za](http://www.chamberofmines.org.za)) provides links to a host of important sources, for example, service and equipment suppliers, international and local mining houses, newspapers, and the mining research community.

Communications Services will continue to extend the range of the website to provide up-to-date information for investors, market analysts, researchers and other interested parties.

## ***Facts & Figures***

*Facts & Figures* provides not only statistical data, but comments and analyses on the data. It is published annually in both hard copy and on the Chamber website. It is an invaluable source of mining data and

statistics on and for 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 the Department of Finance.

## **Compendium**

*Compendium*, a monthly newsletter, contains information on the latest regulatory developments relevant to decision makers and stakeholders in the mining industry; skills development and the environment; economic issues that impinge on the mining industry; and health, safety and sustainable development strategies.

## **Stakeholder engagement**

### **Parliamentary portfolio committees**

The Chamber's chief executive, Zoli Diliza, met with Nkosinathi Mthetwa, the chairperson of the Portfolio Committee on Minerals and Energy in March 2006. The meeting covered a range of mining issues of mutual interest to the industry and the portfolio committee. Diliza also invited the portfolio committee to visit the mining industry to acquaint new committee members with the industry and its policy requirements. The meeting has been scheduled for September 2006.

The Chamber also extended invitations to other portfolio committees involved with the mining industry, such as the committees on water affairs and forestry, and environment affairs and tourism.

### **Regional liaison**

#### **MIASA**

The Chamber continued to provide secretarial services for the Mining Industry Associations of Southern Africa (MIASA). MIASA is an association of the six chambers of mines situated in Botswana, Namibia, South Africa, Tanzania, Zambia and Zimbabwe.

At its August meeting MIASA gave attention to, amongst other issues, the promotion of the establishment of an

Africa-wide mining industries association; the fostering of the establishment of mining chambers in Angola, the Democratic Republic of the Congo, Madagascar and Mozambique; the promotion of understanding in member states and the Southern African Development Community (SADC) about the threats to mining posed by the European Union's REACH Policy (Registration, Evaluation and Authorisation of Chemicals); improvement of its interaction with SADC structures through the SADC Business Forum; participation in the finalisation of SADC's draft policy on the harmonisation of mining policies; and addressing the role of members in the International Council on Mining and Metals (ICMM).

Also discussed were the looming shortage of mining skills in the region; the utilisation of redundant mining infrastructure; the proposed introduction of a SADC road transport management system; and the thrust in SADC for minerals beneficiation. An updated MIASA information brochure is available.

### **Association of African Mining Industries**

MIASA members believe that other chambers of mines in Africa beyond the SADC region should be involved in a continent-wide mining association to strengthen lobbying efforts. Such an association could also play a role in fostering good mining policy on the continent.

There are at least six mining chambers and associations to the north that could have an interest in such an association, including the chambers of mines of Ghana, Guinea, Morocco, Uganda, Kenya and Malawi. MIASA organised a meeting of all African chambers of mines and mining associations in Cape Town in February 2006 to discuss the establishment of such an association. Eight chambers – the six MIASA members plus Ghana and Guinea – and government representatives from Angola and Nigeria attended, while messages of support were received from the chambers of Kenya, Uganda and Malawi.

After basic details had been worked out, a second meeting agreed to establish the Association of African Mining Associations, 'to promote the interests of the mining industry in Africa'. Membership will be open to national and regional mining associations. The Ghana Chamber of Mines' representative was elected interim chairman. Work proceeds on the formulation of a business case, a constitution and a budget.

### **SADC Business Forum**

In an effort to expedite interaction by the SADC private sector with the SADC, nine regional sectoral business associations, including MIASA, launched the SADC Business Forum in late 2004. The main priority is to sign a memorandum of understanding with the SADC. This has been delayed because of legal technicalities. Other issues on the forum's agenda include the development of proposals for an independent secretariat and resource mobilisation, EU economic partnership agreements and the threat of new trade blocks splitting the SADC, the implementation of the Regional Indicative Strategic Development Plan, the SADC Customs-Private Sector Partnership Forum and the European Union-Southern Africa Business Forum.

### **African Mining Partnership**

The third meeting of the African Mining Partnership, attended by 18 African mining ministers, took place in Cape Town in February 2006. The aim of the partnership is to champion mining and mineral initiatives and pursue projects of strategic interest to mining under the New Economic



Partnership for Africa's Development (Nepad). However, little progress has been made to date. The one highlight of the meeting was the adoption of a 24-point resolution on the EU REACH policy for forwarding to the European Commission.

### ***International interaction***

The Chamber continued to liaise with international stakeholders during the year under review, such as:

- ❑ A visit from the co-ordinator and an assistant of the Chamber of Mines of Namibia's Occupational Health Education and Awareness Programme. The aim of the visit was for them to familiarise themselves with South Africa's mining industry HIV prevention programmes and successful workplace interventions.
- ❑ The director-general and the head of mines inspection of the Ministry of Energy and Mines of Eritrea met with the Chamber to learn about the roles and functions of a chamber of mines. This was the third country, the others being Uganda and Madagascar, to visit the

Chamber to obtain information on the structure and functions of a chamber:

- ❑ The chief executive officer of the Chamber of Mines of Ghana held discussion with the Chamber on the African Mining Partnership, the proposed all-Africa mining industries association, developments concerning REACH, mining skills developments in Ghana and the impact of non-governmental organisation (NGO) activity on Ghana's mining sector:
- ❑ Chinese delegations continued to visit the Chamber during the year to find out more about industry safety and health practices in South Africa.

# Economic overview



# Economic overview



## Contribution to the economy

Real fixed investment in South Africa's mining sector plunged by 18.3% in 2004 and a further 16.5% in 2005. Between the first quarter of 2004 and the first quarter of 2006 real mining fixed investment in South Africa has dropped by 32.7%. The Australian mining sector's real fixed investment surged by 74.8% in the same period.

The period from July 2005 to June 2006 has been characterised by an improvement in the rand price of minerals (the rand equivalent of the Economists metals index was up 66% versus 55% in US\$ terms) – yet mining investment in South Africa has remained weak. The decline in real investment in mining is manifesting itself in lower mining production, which in the first six months of 2006 was down by 6%, with the sector's GDP contribution falling by 2.7% in the same period. Employment in the sector has fallen from 456 000 at end 2004 to 442 000 at the beginning of 2006.

Reasons holding back investment in the sector could well be red tape constraints; and interpretational uncertainties of the social and labour plans; the Mining Charter; the MPRDA, the provision of funding for environmental rehabilitation, etc., which have been identified as key constraints to the issuing of conversions and new rights/licenses. This is compounded by long delays in the issuing of water licenses. Mining companies are being constrained from investing in new projects because of increasing uncertainty over legal title and mining/prospecting rights. These new projects should be fuelling further growth in investment in the mining sector especially on the back of rising rand prices, the world-wide boom in the commodities market and the anticipated large infrastructure projects called for by the Accelerated Shared Growth Initiative of South Africa (ASGISA), for example, new coal mining projects to meet the demand for improved electricity capacity.

In the Chamber's internal capital investment survey, completed in 2006, the basic concern raised by nearly all respondents was the constraints caused by red tape. Many large mining companies face having to retrench thousands of employees as the boundaries of existing rights are reached because new rights have not yet been issued. The Chamber estimates that about R10-billion of mining fixed investment is being forfeited annually. The cost of projected investment lost to the mining sector is damaging to growth and investment in the economy. It may also contribute to future electricity generation constraints and even precipitate an inland liquid fuels crisis.

The Chamber estimates that forfeited mining investment could add another four percentage points to the growth in fixed investment and 0.5% to the annual economic growth rate of the country. The trickle down effect of lower mining investment and falling production is evidenced in the country's poor export performance, which in turn is exacerbating pressure on the current account of the balance of payments, which is placing pressure on the rand exchange rate, pushing

up inflation and forcing the Reserve Bank to raise interest rates.

## The global commodity boom

Since the start of the current bull phase of the commodity cycle in October 2001 the Economist All Metals Index is up by over 215% in US\$ terms and has been running for over 56 consecutive months. Certain analysts are calling this a 'super-cycle' as the impact of China, and increasingly India, are seen as a once-in-a-century event. The current synchronised global commodities boom is driven by the confluence of a set of positive factors such as:

- ❑ Economic growth in all key regions of the world that has boosted demand for minerals. World economic growth was 4.9% in 2005 with an expected 5.1% growth rate in 2006 (International Monetary Fund). Asia registered a 9% growth rate in 2005 and the advanced economies recorded 2.6% growth.
- ❑ China's increasing appetite for raw materials further drives demand. Its economy grew by 10.2% and India's economy grew by 8.5% in 2005
- ❑ Greater consolidation in the mining sector as the bear market in commodity prices in the 1990s forced mergers and acquisitions
- ❑ Greater discipline on the mining side as companies have refrained from rushing into investing in a plethora of new projects. Mining companies are investing



# The South African mining sector in 2005

The South African mining sector in 2005,

- accounted for 6.2% of gross domestic product (GDP) versus 6.3% in 2004. The value the industry added to the economy grew by 2.4%, mainly as a result of the 9% rise in platinum group metals (pgm) production combined with growth in diamonds (up 9.7%), coal (up 0.6%), and iron ore (up 1%), which helped offset the decline in gold production (down 13%). The non-gold mining sector grew by 6.3%. If one adds the indirect multiplier effects of the industry, the overall contribution of mining to GDP is about 15%. These indirect multipliers include transport and professional services; forward linkages, such as electricity generation; and the induced effect of mining generated incomes
- directly accounted for 6.1% of total fixed investment and for 8.5% of the total private sector investment despite the 16.5% decrease in mining investment
- continues to act as a magnet for investment in South Africa. At the end of 2005 the mining sector accounted for R1-trillion, or 29%, of the value of the Johannesburg Securities Exchange. About R11.5-billion was paid to shareholders in the form of dividends
- contributed R104-billion to South African exports, representing 30% of the country's total merchandise exports. If beneficiated minerals are added to primary exports (such as ferro-alloys, steel, chemicals and catalytic converters) then the sector accounts for over 50% of exports
- moved about 100 million tons of bulk commodity ores for export purposes on the rail system and thus was the dominant user of the country's railways and ports. The 100 million tons of bulk commodity exports represents 55% of the whole of Transnet's volume of transport in 2005
- directly employed an average of 442 911 workers, against 457 371 in 2004. On an indirect basis it is estimated that another 147 673 workers are employed in associated industries that either supply products to, or use products from the mining industry (the multiplier linkages of the industry). Around five million people are directly dependent for their daily subsistence on mine employees
- accounted for 6.2% of those employed in the non-agricultural formal sector of the economy and 8% of the total private sector of non-agricultural employment. If the multiplier and induced effects of the mining industry are used, the contribution to employment as a result of mining rises to about 25% of total non-agricultural formal sector employment in South Africa
- paid R36.4-billion in wages and benefits to employees, which accounted for about 5.4% of the total compensation paid to all employed people in the country for the year. This contributed substantially to domestic demand in the South African economy
- paid R9-billion in direct taxes and a major portion of indirect taxes to the fiscus. Mining's direct taxes accounted for about 10% of total company tax (and secondary tax on companies) paid to government
- was the world's largest producer of pgms, gold, chromium, ferrochrome, vanadium, manganese and vermiculite. The industry was also a major supplier of aluminum (world rank 2), antimony (3), coal (6), ferromanganese (3), fluorospar (4), iron ore (8), nickel (11), silicon (7), titanium minerals (2), uranium (9) and zirconium (2), alumina silicates (2)
- accounted for a substantial amount of the supply and demand for energy. The industry consumed 31 825 gigawatt hours – 16.3% of Eskom's local electricity sales, whilst 106 million tons of coal was mined and used for electricity generation, which accounted for about 93% of the electricity produced in the country. Almost 41.4 million tons of coal was consumed in the manufacture of synthetic fuels – about 35% of liquid fuel production in the country.

and bringing on-stream new production that makes commercial sense and that does not fuel a boom and bust cycle

- The slowdown in Greenfield's exploration in the bear market of the 1990s diminished the number of potential mining projects that could come on-stream in the early 2000s. However, there has been a large surge in global exploration since 2002
- The weakening US dollar has supported US dollar commodity price appreciation
- Increasing geopolitical tensions have also pushed up prices of many commodities.

## Impact on the global mining industry

Virtually all large-scale mining countries have experienced a surge in local currency commodity prices, including South Africa, when the rand equivalent of the Economist All Metals Index rose by 128%.

According to the Price Waterhouse Coopers' annual survey of the fortunes of the global mining industry (i.e. the top 40 mining companies), *Let the good times roll*, 2005 was another spectacular year for the global mining industry. The Gross revenue of the sector rose 25% to US\$222-billion, net profit rose 59% to US\$45-billion, average profit margins increased to 20% and return on equity was 25% in 2005 versus 19% in 2004. Despite an 82% increase to US\$16-billion in the distribution of funds to shareholders, the gearing of the sector fell by 15% and the gearing ratio fell to 16% showing further improvements in the overall balance sheet of the global mining sector.

Rising gross operating surpluses resulted in a 31% increase in capital expenditure to US\$31-billion in 2005. Exploration expenditures rose by 182% to US\$4.9-billion in 2005 (Metals Economics Group). For a key mining country such as Australia the commodities boom has resulted in a

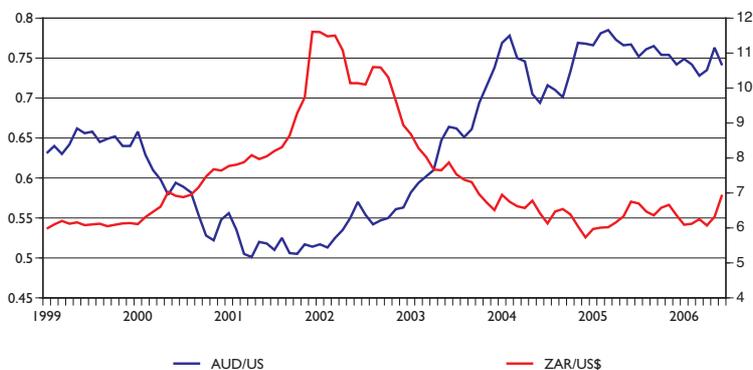
large improvement in the gross operating surpluses (pre-tax profit rose 95% in 2005) and a surge in capital investment (up 34.5% in 2005).

## Impact on South Africa

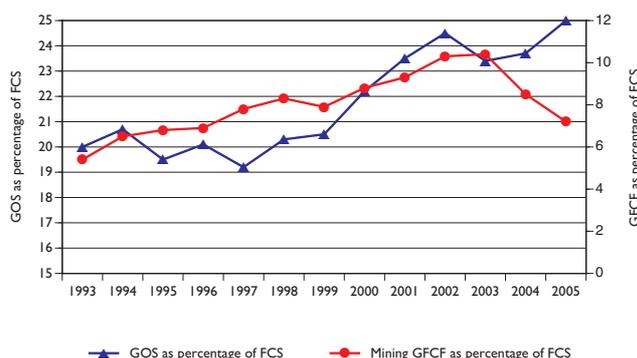
Unfortunately, in the period from mid-2002 to first half 2005 South Africa missed out on much of the benefit of rising US\$ mineral prices owing to substantial strengthening in the rand exchange rate and to internal logistical constraints in rail and port capacity. The Economist All Metals Index was up only 37% in rand terms from October 2001 to June 2005 versus an 89% increase in US dollar terms. Australia also experienced an appreciating currency impact from mid-2002 to early 2005 as illustrated by the strong correlation between the rand and Australian dollar in movements against the US dollar.

Since the middle of 2005 rand mineral prices have escalated rapidly. The US dollar Economist All Metals Index rose a further 55% between June 2005 and June 2006 and the rand equivalent index rose by 66%. A similar price appreciation in local currency terms was experienced by the Australian mining industry.

Exchange rates ZAR & AUD vs US\$



Mining gross operating surplus (GOS) and gross fixed investment expressed as a percentage of mining total capital stock (FCS) in real 2000 money terms



Between July 2005 and June 2006 many rand-based commodity prices moved to record levels – the pgm weighted basket price rose to R278 161 a kilogram and gold moved to R150 000 a kilogram. Total rand sales revenues for the mining sector improved by 24.5% to R146-billion on the back of improving prices. The gross operating surpluses of South African mining companies have grown by 11.8% in nominal terms to R55.7-billion in 2005. In the first half of 2006 the annualised gross operating surplus increased to about R62-billion, showing the positive impact of higher rand prices and good progress in cost containment.

However, real fixed investment has fallen off sharply in the past two years with declines of 18.6% in 2004 and 16.5% in 2005 in real terms. This runs against international trends where rising commodity prices and rising gross operating surpluses are being translated into large increases in exploration spending and in capital investment.

International comparisons provide some external reference point for the relative performance of fixed investment in the mining sectors of South Africa and Australia. With rising gross operating surpluses real investment in Australia surged by 74.8% in the first quarter of 2004, compared with the same period in 2006. Similarly, investment in South Africa's mining sector would also be expected to rise strongly, however; investment levels fell sharply. Between the first quarter of 2004 and the first quarter of 2006 real mining fixed investment declined by 32.7%.

Even if one compares the South African mining sector to another large-scale, export-driven industry, like manufacturing, in an attempt to gauge the rand exchange rate's impact, it is clear that something is fundamentally amiss in the mining sector. Real mining fixed investment fell 18.6% in 2004 and a further 16.5% in 2005 versus the manufacturing sector's growth in fixed investment of 11.1% and 11.4% in 2004 and 2005 respectively.

South Africa has slipped from fourth position in 2003 to seventh in 2005 in the country rankings for exploration allocations. Local exploration expenditures<sup>1</sup> increased by 62.5% from 2002 to 2005, which is half the pace of exploration growth elsewhere. Global exploration expenditure increased by 123% to US\$4.9-billion between 2003 and 2005 and Africa's exploration expenditures rose by 116% to US\$0.8-billion in the same period. According to the Fraser institute<sup>2</sup> South Africa has dropped from 17th out of 47 territories surveyed in 2002/03 to 27 out of 64 territories in 2005. Much of the existing exploration expenditure in South Africa is Brownfield's exploration around existing mines (to extend the lives of these operations). The fall off in Greenfield's exploration is of particular concern since this type of activity is the lifeblood of the mining sector.

Investment pressure appears to be manifesting itself in a decline in the physical volume of production. In the first half of 2006, mining production was down by 6%, with pgm production down 6.4%, gold down 9.7%, coal down 3.9% and diamonds down 2% on a year-on-year basis. This contributed to the 2.7% year-on-year decline in the mining sector's GDP in the first half of 2006. This could have serious

implications for South Africa's current account of the balance of payments as higher rand commodity prices are offset by declines in the physical volume of mining production, slowing real export growth, placing pressure on the current account and undermining economic growth.

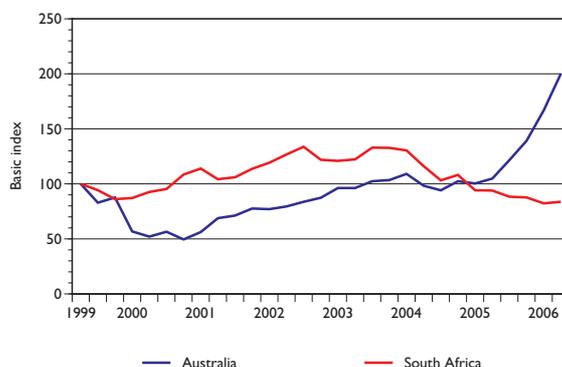
The relatively weak performance of exports, with only 2.3% annual growth on average over the past five years, has dragged down South Africa's economic growth rate. Much of this slow export growth can be attributed to weakness in mining investment and exports.

## Contribution to GDP and investment

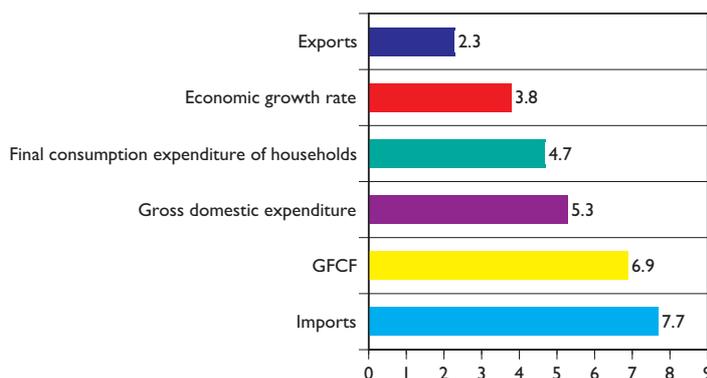
As a result of the decline in fixed investment, the economic growth rate of the mining sector slowed from 2.8% in 2004 to 2.4% in 2005 – less than half the country's overall economic growth rate of 4.9% in 2005. The mining sector accounted for 6.2% of GDP in 2005 versus 6.3% in 2004. The growth in physical mining production slowed from 4% in 2004 to 3% in 2005. The 9% increase in pgm production combined with growth in diamonds (up 9.7%), coal (up 0.6%), and iron ore (up 1%) helped to offset the decline in gold production (down 13%). When the gold sector is excluded, the non-gold mining sector grew by 6.3% in 2005 versus 7.7% in 2004. The indirect multiplier effects of the industry take the overall contribution of mining to about 15% of GDP. These indirect multipliers include, for example, transport, professional services; forward linkages, such as electricity generation; and the induced effect via mining-generated incomes. The mining sector accounted for 6.1% of total fixed investment in the economy, down from 8% in 2004.

The mining sector continued to be an important component of the Johannesburg Securities Exchange. At the end of 2005 it accounted for R1-trillion, or 29%, of the value of the Johannesburg Securities Exchange.

Real gross investment in mining, base indexed to 2000, Australia versus South Africa



Key drivers of economic growth in South Africa, average annual growth rate – 2001 to 2005



## Mineral sales and exports

The substantial rise in US dollar commodity prices combined with a 3% increase in the volume of local mining production resulted in total mineral sales rising to R145-billion in 2005. The main contributors to this rise in mineral sales were iron ore (up 64%), coal (up 28%), manganese (up 27%) and pgms (up 15.4%). Pgms consolidated the top spot with R38.5-billion in sales followed by coal at R36-billion and gold at R27-billion. Together the top three minerals account for 70% of South Africa's total mineral sales.

Mineral exports rose by 16.7% to R104-billion, which accounted for 30% of the country's total merchandise exports. If beneficiated minerals are added to primary exports, such as ferro-alloys, steel, chemicals, catalytic converters, and so on, then the minerals complex accounts for over 50% of merchandise exports.

## Employment and wages

The mining sector employed 442 911 workers in 2005 compared to 456 232 in 2004, a decline of 2.9%. The sector accounted for 6.2% of people employed in the non-agricultural formal sector of the economy and for 8% of the total private sector non-agricultural employment in 2005. Wages and salaries paid to mine employees contributed substantially to the economy. R36.4-billion in wages and benefits were paid to mine employees and accounted for 5.4% of the total compensation paid to all formally employed people in South Africa in 2005.

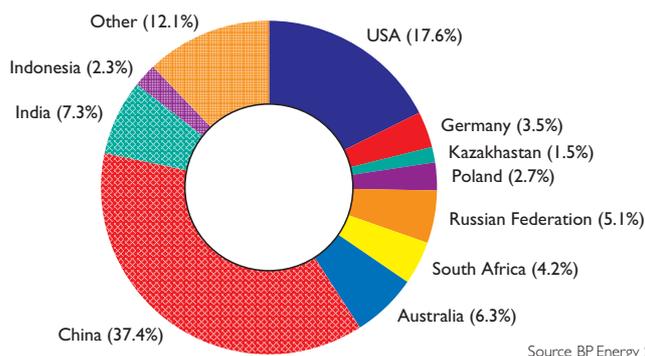
## Coal

The coal mining sector, driven by higher exports and prices, has become the second largest component of the South African mining sector. Annual coal sales of R36-billion in 2005 was second to pgms at R38.5-billion, but higher than gold at R27-billion.

A combination of continued global economic growth (about 4.5% in 2005), a large increase in electricity demand in Asia and pressure on other energy sources, such as crude oil and nuclear power contributed to the 5.1% increase in global coal production in 2005. The world seaborne thermal coal trade grew by 4% to 571 million tons in 2005. South Africa's thermal coal exports increased by 4.8% to 69.8 million tons and the country regained its position as the world's third largest thermal coal exporter after Indonesia and Australia.

The local coal mining industry continued to be a key driver of

2005 global coal production – 5.8 billion tons



economic growth and development in 2005 and the first half of 2006. The sector accounted for 93% of electricity generated, about 35% of liquid fuel production, 1.2% of GDP directly (3% if the indirect multipliers are added), 6.1% of merchandise exports, employed 56 971 workers and paid R6.3-billion in wages.

Although total coal exports recovered to 71.1 million tons in 2005, heavy rains, train derailments and regulatory red tape contributed to a 3.9% year-on-year decline in saleable coal production and a 5% drop in exports in the first half of 2006.

## World hard coal reserves and production

Proven world hard coal reserves (bituminous and anthracite) were 478 billion tons by the end of 2005. The USA is the largest reserve holder with 23% of world reserves followed by India (19%), China (13%), the Russian Federation (10%) and South Africa (10%). Total coal reserves are estimated to be around 909 billion tons. Although India has relatively large hard coal reserves the quality is poor.

Global hard coal production increased by 7.4% to five billion tons in 2005 on the back of growing electricity and steel requirements. Total production of coal increased by 5.2% to 5.9 billions tons.

China is the world's largest coal producer with a 37.4% share. Its coal production grew by 10.2% to 2.2 billion tons in 2005. South Africa is ranked sixth in terms of world production with 244.9 million tons – 4.2% of the world total.

## The global energy market

World primary energy consumption grew by 2.4% to 10 537 million tons of crude oil equivalent in 2005. According to the BP World Energy Statistical Review coal provided 27.8% of the world's primary energy consumption in 2005, compared to crude oil at 36.4%, natural gas at 23.5%, hydro-electric power at 6.3% and nuclear energy at 6%. In the high growth area of the Asia/Pacific region, coal makes up 48.1% of primary energy consumption, with China at 69.9% and India at 55%.

Electricity generation, a key driver of the international coal market, is closely linked to economic growth and industrial production.

Production rose by 4% in 2005, which compares to an average annual growth rate of 3.2% over the past decade.

The EU comprised 17.6% of global electricity production and the region's production grew by 0.4% in 2005, versus an annual average growth rate of 2% over the past decade. The consumption of coal as a primary energy source in the EU fell by 2.2% in 2005. The Asia/Pacific region accounted for 32.5% of electricity production. Its consumption of coal for primary energy purposes increased by 8% in 2005. The key driver in this region is China, which grew electricity production by 12.3% in 2005, and has sustained a high growth rate in electricity production of 9.5% a year over the last decade. China's consumption of coal for primary energy production increased by 10.6% in 2005.

### World seaborne thermal market

Europe's import demand for thermal coal declined by 2% to 195 million tons, although the world seaborne thermal coal market still grew by 4% in 2005. Europe and Asia account for about 87% of the demand for thermal coal imports.

The EU market is characterised by declining local coal production, combined with modest drops in consumption owing to nuclear, hydro and gas being preferred. Nevertheless there was a steady increase in thermal coal imports. Slow levels of economic and electricity production growth and a reduced rate of decline in EU coal production were responsible for a slight decline in imports of thermal coal in 2005.

Asia accounts for 53% of total global thermal coal imports, with Japan alone importing 113 million tons. A rapid rise in demand for electricity generation in India and the location of mines far away from key consumption localities resulted in strong growth in imports of higher quality thermal coal. Thermal coal imports reached 20.5 million tons in 2005 and this number could double in the next five years.

China is a major thermal coal importer. Great distances between producing coal mines and major consumption areas has resulted in supply and demand imbalances and the interesting situation of China importing thermal coal in certain coastal

areas, while exporting it from others. The booming economy and rapidly escalating demand for coal for electricity generation will result in lower exports and a rise in imports. China's thermal coal imports grew by over 50% in 2005.

With the global economy expected to continue growing at a reasonable pace over the next five years, a 3% annual growth rate in the seaborne thermal coal market would see an additional 100 million tons in annual demand by 2010.

Indonesia overtook Australia as the world's largest thermal coal exporter in 2005 with 123 million tons. South Africa has regained third spot as China's thermal coal exports have declined.

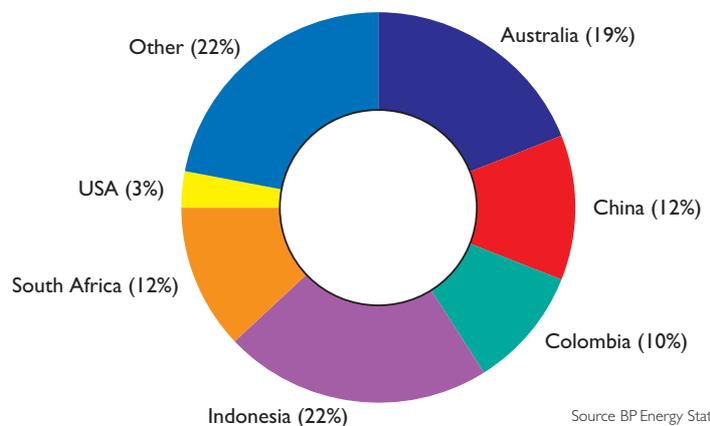
### Local production and sales

South African run-of-mine production declined by 5% in 2005. Saleable production increased by 0.9% from 242.8 million tons in 2004 to 244.9 million tons in 2005. Total revenue from coal sales amounted to R36-billion, of which coal sales accounted for R14.9-billion. The R21.2-billion in export sales is 6.1% of total merchandise exports.

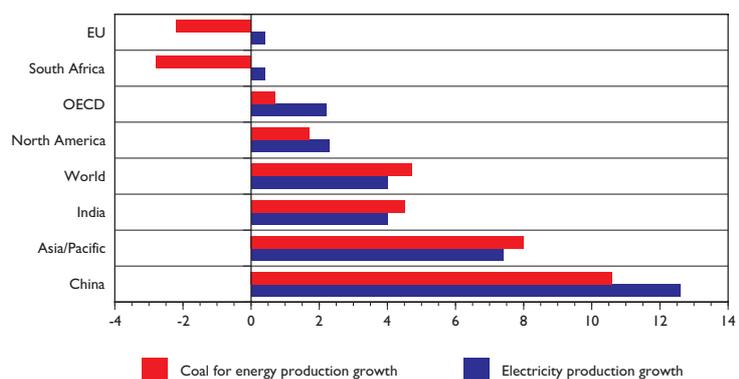
### Domestic market

The domestic sale of coal in 2005 declined by 3% to 172.5 million tons. The 1% growth to 41.4 million tons in coal used for synthetic fuel production was not sufficient to offset the 3.9% decline in coal sold to the electricity generation industry. The decline was caused by slow growth in supply-side industries, a mild winter and the use of stockpiled coal by

World seaborne thermal coal exporters, 2005



2005 growth rate in electricity production and consumption of coal for primary energy production



Eskom. Demand for metallurgical coals increased by 3.9% to seven million tons on the back of growing local steel demand. However, the 20.6% decline in industrial use to 10.9 million tons more than offset the gains in the metallurgical and merchants categories.

## Coal exports

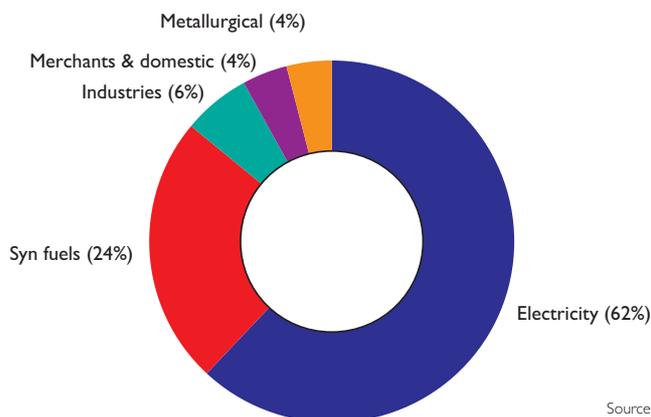
South Africa's coal exports increased by 4.6% to 71.1 million tons in 2005. The revenue generated from exports increased from R14.2-billion in 2004 to R21.2-billion in 2005. About 98% of exports are thermal coal. South Africa's coal exports in 2005 recovered on the back of improved transport services, large growth in thermal coal exports to Asia/Pacific, further consolidation in the European market and growth in exports to African countries (up 38.6% to 3.5 million tons).

The country continued to consolidate its share of the key EU market. The establishment of South Africa as a reliable supplier of consistent quality coal, combined with shorter distances to Europe versus the Asia/Pacific market has continued to boost its competitiveness in Europe. The 53% rise in the United Kingdom thermal coal imports was one of the key drivers of the growth in coal exports to that region. South Africa faces increasing competition from Colombia in the European market – Colombia increased thermal coal exports to Europe by 7% to 55 million tons in 2005.

Over the past decade South Africa has continuously lost market share in the Asia/Pacific market owing to the emergence of Indonesia as a major thermal coal exporter, growth in exports from Australia and the long transport distances from South Africa to Asia. Indonesia's annual growth rate in coal exports has been about 20% a year over the past two decades. Nevertheless, a combination of greater domestic coal use in Indonesia for electricity generation, the addition of a 5% levy on coal exports, plus lower freight rates in the Asia/Pacific market create scope for South Africa to gain share in this market. India in particular appears to be a prospective growth area. South African coal exports to India grew by 355% to 3.1 million tons and exports to the Asia/Pacific market increased by 81.3% to 4.1 million tons in 2005.

Exports during the first half of 2006 have been severely hampered by derailments and coal production shortages, which occurred as a result of heavy rains in the first quarter of the year. Opencast operations were particularly affected as they had to deal with flooded pits. In addition, the slow pace of the issuance of mining licences by government has curtailed important investment in new coal mines. This is already affecting export capacity.

Coal sales by volume to the domestic market, 2005



Source DME

## Local and export market prices

The average price received increased by 12.4% to R86 a ton on a free-on-rail (FOR) basis in 2005. A further 5% improvement to R90 a ton was recorded in the first half of 2006. Average export prices rose by 39.8% to about R296 a ton free-on-board (FOB) in 2005 on the back of stronger export and global energy prices. A severe winter, gas shortages and the rising prices of gas and electricity in Europe put further pressure on the coal price as it became a relatively more cost effective option. The shortages of water for hydro-electricity generation and nuclear power also resulted in greater reliance on coal-fired power generation in the first half of 2006.

## Export facilities

Exports through the Richards Bay Coal Terminal (RBCT) increased by 4.9% to 69.2 million tons in 2005, although this failed to achieve the 72 million ton target set at the beginning of the year. The first half of 2006 has seen exports through RBCT plunge by 6% to 30.5 million tons. This is way below the 36.5 million tons target for the first half of the year.

RBCT announced an agreement with government to expand the terminal from its existing 72 million tons to 92 million tons. The cost of the expansion is estimated to be R1-billion and was initially expected to be completed by July 2008. Unfortunately, the project has been delayed and it should now be completed by 2009. The increased capacity will add another R6-billion a year to coal exports and about R1-billion a year to Spoornet's revenue.

Exports out of the bulk connections terminal in Durban decreased by 28.6% to 0.8 million tons in 2005 as a result of a planned refurbishment of the facility. In the first half of 2006, the port increased coal exports by 120% to 0.7 million tons as it normalised exports following the planned outage. The Matola Coal Terminal in Maputo loaded 1.1 million tons in 2005, a 22.3% increase on 2004.

## Diamonds

The total global production of natural diamonds in 2005 grew by 10.7% to 166 million carats. The value of global mine

production increased by 13.4% to approximately US\$12.7-billion.

Manufacturing estimates suggest that the value of polished diamond production reached about US\$19-billion in 2005. The value of retail sales of diamond jewellery is thought to be about US\$62-billion, with the USA, Europe and Japan accounting for about 79% of the total. The Asia/Pacific market is emerging as a key growth centre as high levels of economic expansion and consumerism in China and India increase diamond jewellery sales in those countries.

South Africa grew its share of the value of mine production from 11.6% of the total in 2004 to 12.6% in 2005. Local diamond production grew by 10.3% to 15.8 million carats valued at about R10.2-billion. The first half of 2006 has been somewhat different as production disruptions and red tape constraints resulted in production declining by 2% on a year-on-year basis. The diamond mining industry accounted for about 0.4% of GDP directly (or 1% if the indirect multipliers are included), 2.8% of merchandise exports, employed about 21 976 workers directly and paid R2.6-billion in salaries and wages in 2005.

### **Diamond supply by country**

Botswana is the world's largest diamond producer by value and accounts for 25% of world production. The country's production grew by 2.5% to 31.9 million carats, with the Jwaneng mine boosting production by about 15% to a record 15.6 million carats. Botswana's production was valued at approximately US\$3.2-billion in 2005.

Russia surpassed Botswana as the world's largest diamond producer by volume in 2004 and in 2005 increased production to about 36 million carats. However, much of Russia's production increase is in smaller industrial quality diamonds, which were recovered using better extraction technology. The value of Russian diamond production is estimated at US\$2.2-billion and accounts for 17.3% of world production by value.

South Africa is the world's third largest diamond producer by value with a 2005 share of 13%. Despite the closure of the Koffiefontein mine and the Kimberley underground operations, growth in production from Venetia (up 18.5% to 8.5

million carats) and growth from other operations resulted in a 10.3% increase in the country's production to 15.8 million carats in 2005 with De Beers accounting for 96.2% of South African production. In 2005, 14.3 million carats (13 million carats in 2004) were sourced from kimberlites, followed by 1.4 million carats (1.3 million carats in 2004) from alluvial sources and 55 163 carats (105 000 carats in 2004) from marine sources.

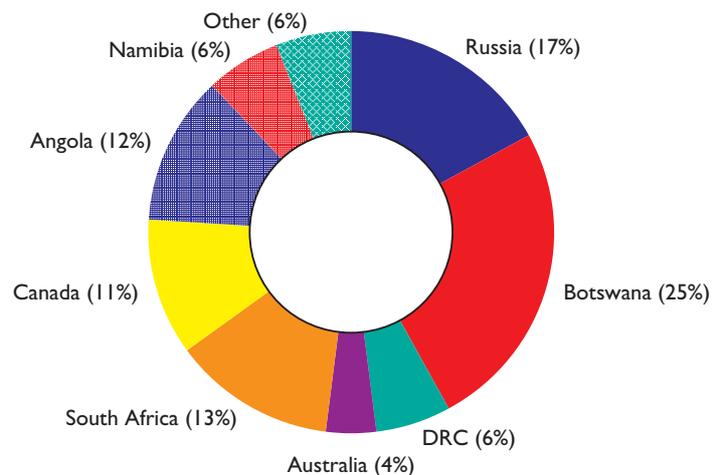
Angola is the world's fourth largest producer with an 11.8% share of global production by value. Based on the Kimberley certification scheme six million carats were produced in 2004. Official statistics from the DRC indicate that sales revenue rose from US\$0.7-billion in 2004 to US\$0.8-billion in 2005. Namibian diamond production declined by 7% to about 1.8 million carats valued at US\$0.7-billion in 2005.

Canada is new to diamond mining. In 1997, it had no diamond mines in operation, but by 2005 it was producing 11% of the world's diamonds by value and was ranked as the fifth largest producer. Three mines are currently in operation, two more are expected to open by 2008 and a further three are in an early appraisal stage. It is likely that Canada's production, especially of gem quality diamonds, will raise it to be the third largest producer by value by 2008.

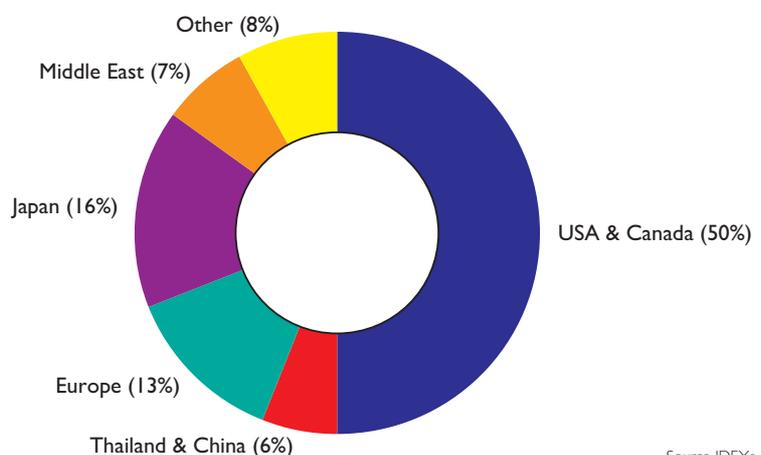
### **Global diamond demand**

According to the International Diamond Exchange (IDEX), the 2005 diamond pipeline is made up of US\$12.7-billion in the value of diamond

*World natural diamond production by value US\$12.7-billion*



*Retail sales of diamond jewellery by market, 2005*



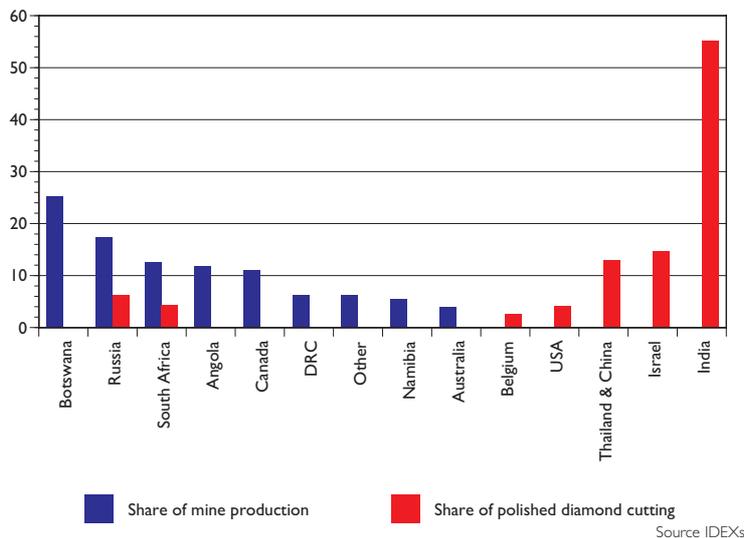
Source IDEXs

mine production, about US\$13.2-billion in actual mine sales to the cutting industry, US\$19.3-billion in cut and polished diamonds, US\$17.8-billion in sales of polished diamonds to the jewellery manufacturing industry, and retail sales of diamond jewellery of US\$62-billion. For the second year in a row the diamond cutting and polishing industry produced more polished diamonds than were needed by the retail sector, which resulted in a rise in polished diamond inventories (a US\$1.5 billion overhang) and higher inventory costs to the cutting industry.

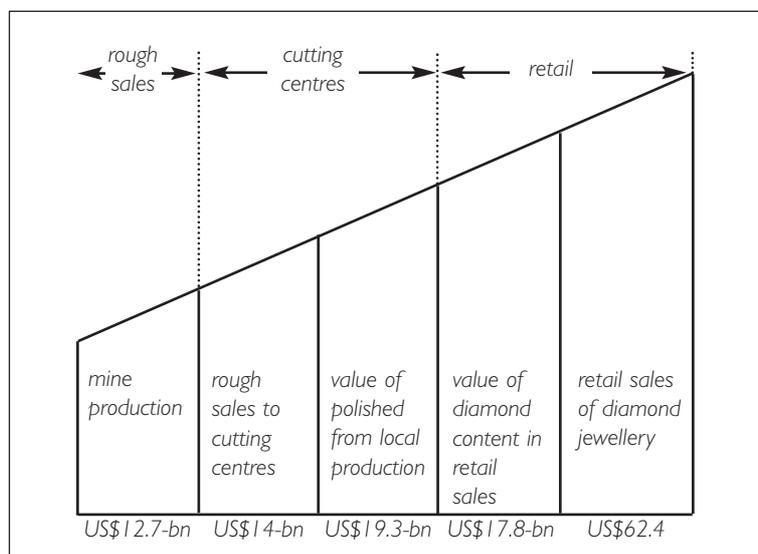
The value of polished diamonds sold to the jewellery fabrication industry constituted a 34.5% value addition to the value of mine sales to the cutting industry, while the retail sector added the most value being worth 373% more than mine sales. The USA dominates the retail sales market with a share of nearly half of the global market. Europe and Japan add another 29%, and the fast growing Middle East and Asian markets add another 13%.

Generally, the countries that mine diamonds are not the same as the countries that cut and polish the stones, nor are they the major consumption markets of diamond jewellery. For example, Belgium, India,

Share of global mined diamond production versus share of global value of polished diamonds, 2005



The diamond pipeline, 2005



China, Thailand, Israel and the USA account for 89% of diamond cutting and yet have no local mines. Similarly, the USA, China, Thailand, Japan and Europe account for 92% of the value of retail sales, but have no local mines. Most of the value added in the diamond pipeline is at the retail sales level, which is captured in the key end-use markets, such as the USA. The emergence of India and China as major diamond cutting centres is based on their cost competitive cutting skills and very competitive operating environments.

## Gold

In the first quarter of 2005, the South African gold mining industry struggled with a low R82 206 gold price that resulted in 86% of the industry becoming marginal. By the first quarter of 2006, the substantially improved rand gold price (R109 219/kilogram) resulted in a remarkable improvement in the economics of the industry with only 24% of operations classified as marginal. By the second quarter of 2006, the higher rand price (R129 789/kg) and continued containment of inflation in operating costs provided further improvement with only 10% of the industry being classified as marginal, and no loss-making mines before capital expenditure.

The impact of the low rand gold price, costs and restructuring in some operations affected the viability of a large proportion of the sector. Gold production declined by 13.1% to 297.3 tons in 2005, the lowest level of production since 1923. Production dropped a further 9.9% in the first quarter of 2006 as mines grappled with a new annual leave schedule and the after effects of restructuring. A noteworthy improvement in the economic prospects of the sector in 2006 fed through into a slower rate of year-on-year decline in production of 7.4% versus the 9.9% recorded in the first quarter of 2006.

South Africa remains the world's largest gold mining country and accounted for 11.8% of global new mine supply in 2005. The industry continues to be a large export earner at 7.8% of merchandise exports, it accounts for about 1.4% of GDP directly (or 3.5% if indirect multipliers are added) and employs around 160 000 workers.

## The gold price

Unlike 2004, when the gold price presented a conundrum to South African gold miners as US dollar prices rose 12.6%, but rand prices fell 3.8% to R84 785 a kilogram, 2005 saw both dollar and rand prices rise. The US dollar price rose by 8.7% to an average of US\$445 an ounce while the rand price rose 7.1% to R90 841 a kilogram. The reason for the difference between 2004 and 2005 was the slower pace of appreciation in the rand exchange rate in 2005. The rand appreciated by only 1.4% to R6.36 a US dollar in 2005.

A rapidly rising US dollar gold price in 2006, which was up by 38.3% year-on-year to US\$591 an ounce, was complimented by a small depreciation in the rand exchange rate by 1.5% to R6.30 a US dollar. This resulted in the rand gold price rising by 40.2% to R1 19 504 a kilogram. By June 2006 the rand exchange rate had fallen to R6.95 a US dollar and the rand gold price had risen to R133 790 a kilogram.

## The gold market

The 2005 gold bull market has been driven, to a large extent, by investor interest built on a foundation of positive fundamentals. Investors are looking for alternative instruments to hedge their investment portfolios as rising currency risks combined with geopolitical risk factors continue to promote precious metals demand.

The 2005 international gold market was characterised by modest supply-side growth, the weaker US dollar against major currencies, good investment demand, reasonable growth in jewellery and electronics demand and demand from producers for de-hedging. According to GFMS, global gold mine production rose by a modest 2% to 2 519 tons despite the decline in production from South Africa (down 13.1%), Russia (down 3.4%) and Canada (down 7.8%). The largest increase in production was recorded by Indonesia (up 45.9%) followed by Peru (up 20%). Over the past five years the highest growth areas for production include Peru (up by 9.7%/year), Indonesia (up 7.3%/year) and China (up 5.5%/year). South Africa had the fastest rate of decline in production at 6.9% a year over the last five years.

There are encouraging developments

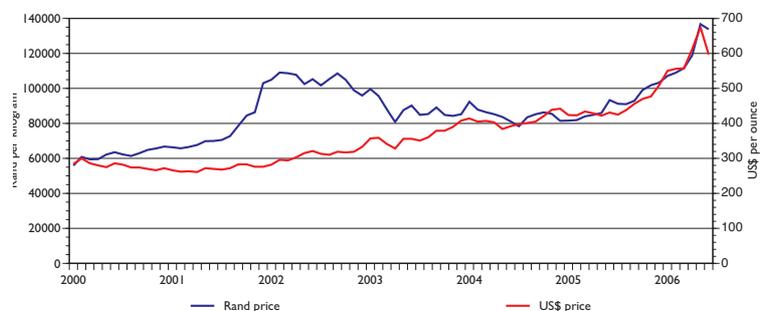
on the fabrication demand side (dominated by jewellery demand) rising by 3.7% (versus 5.7% in 2004) to 3 281 tons in 2005. However, the rapid rise in the US dollar price in late 2005 and early 2006 resulted in a fall off in jewellery demand. Jewellery traditionally makes up more than 70% of total demand. Some of the slack in jewellery demand has been taken up by investment demand and continued producer de-hedging. Other fabrication demand is relatively inelastic to short-term price changes and has continued to remain positive. Increased geopolitical tensions and concerns over the US dollar as a result of the twin deficits in the US have fed this side of the market. Continued de-hedging by gold mine producers has given the market about 200 tons of extra demand a year over the past six years. As a result the outstanding producer hedge positions fell to their lowest levels in over a decade.

The balance between the fabrication demand for gold and new mine supply has remained in deficit since 1988 and for the past decade has meant that 77 tons a year of above surface gold holdings has been added to the supply equation to satisfy demand. The gradual rightsizing of the official sector above ground stocks will continue to support a stronger market. Similarly, a reduction in the mining sector's propensity to hedge forward, when combined with increased research into industrial applications for gold and improved marketing of jewellery will also support the positive market dynamics.

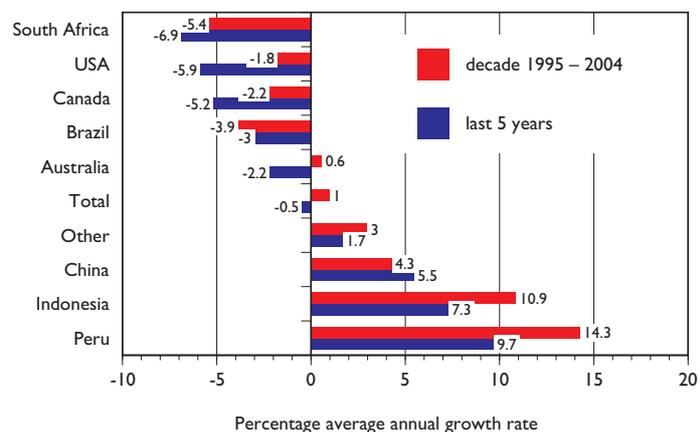
## Production costs

The South African gold mining industry has continued to focus on productivity improvement and cost containment over the review period. However, a large proportion of production costs were driven by suppliers over which the mining companies have little control. Over the past five

The gold price expressed in rand and US\$ terms



Annual rate of growth (decline) in gold production from key countries



years water prices have escalated by 14% a year despite consumer inflation averaging only 5.9%. The 8% increase in raw water prices charged by the Department of Water Affairs and Forestry was a key contributor to higher water prices.

Similarly, steel and other material inputs increased at rates greater than inflation. Despite these cost factors, cash production costs increased by only 3% in 2005 to R73 070 a kilogram. The other cost categories, which include restructuring and retrenchment costs, increased by 12.7% in 2005 resulting in total production costs before capital expenditure rising by 4.6% to R89 130 a kilogram.

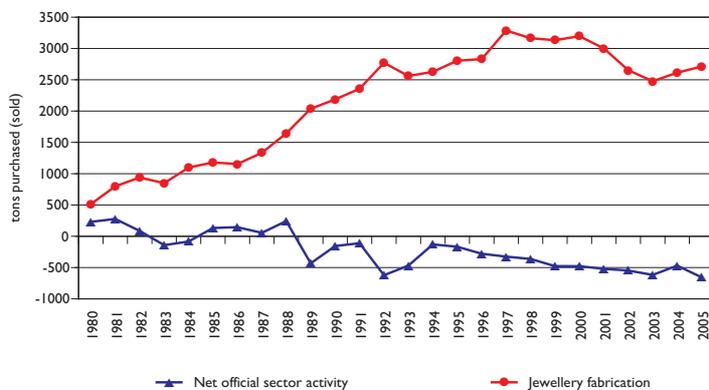
By the first half of 2006, total production costs before capex had risen further to R95 042 a kilogram, mostly as a result of the higher restructuring costs and increases in the cost of water and transport. Many of the restructuring exercises were completed in the first half of 2005 and this should assist in cost reduction in 2006.

The almost 40% appreciation in the rand exchange rate between 2002 and 2004 propelled South Africa from being the cheapest large-scale producer in 2000/2 to the most expensive by 2003. Nevertheless, progress made in cost containment currently provides a better picture and the weakening of the rand in 2006 will reduce US dollar costs.

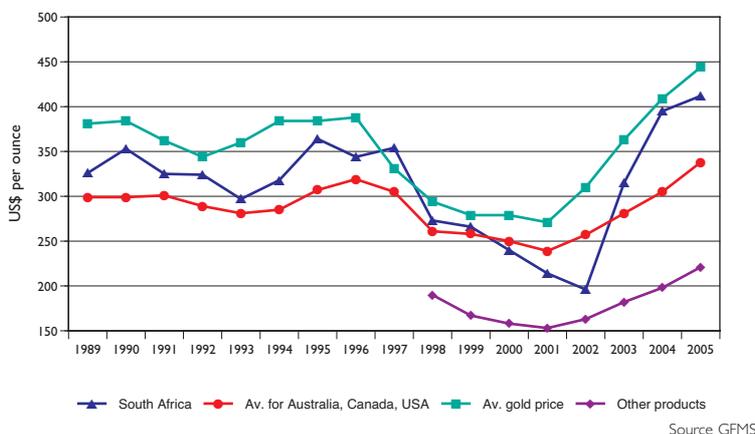
### Marginal mines and employment

The fall in the rand gold price and the rise in production costs meant that, for the first time in many decades, the aggregate South African gold mining industry went into a loss-making position before capital

The changing structure of demand in the gold market



Gold production total cost trends for South Africa, the average of Australia, Canada and the USA and other producers versus the gold price



Source GFM5

expenditure in 2004. The slightly higher average rand gold price in 2005 resulted in the overall industry breaking even before capital expenditure. In the first half of 2006, the improvement in the rand price with cost containment meant an average gross profit margin of 22% before capex (capital expenditure), however, if one includes capex, the industry just broke even in the first half of 2006.

Nine mines employing 69 061 workers and producing 125 tons, were in a marginal or loss-making position in 2005. By the second quarter of 2006, the amount of marginal production had fallen to 23.6 annual tons and employment on marginal mines had fallen to 46 260 employees.

The number of people employed in the sector decreased from 198 465 in 2003 to 187 484 in 2004 and 160 634 in 2005. Retrenchment costs are a major cost to the industry, which has attempted to constrain the number of job losses through redeployment of labour and even a move to more continuous operations on some shafts. R11.8-billion was paid to employees in 2005 in the form of salaries and wages.

### Iron Ore

World iron ore production increased by 13.4% to an estimated 1 520 million tons (source United States Geological Survey), with China driving demand for iron ore for steel production. One of the best indicators for iron ore demand is the production of pig iron where global production rose by 8.5% to 786 million tons in 2005. Similarly, growth in iron ore demand is inextricably linked to the prospects of the global steel industry. Global steel production rose by about 7% to 1 130 million tons in 2005.

China's steel production grew by 28% to 348 million tons in 2005, which compensated for the 3.8% decline in EU steel production and the 5.4% decline in North American steel production. In the first six months of 2006, China increased production a further 19% to an annualised 398 million tons. In the first half of 2006, China exceeded Japan, the EU and Russia to become the world's largest steel exporter.

Strong global demand for iron ore for steel fabrication in 2005, combined with supply bottlenecks and the long lead times

to develop iron ore projects, resulted in benchmark iron ore prices rising 71.5%. A further 19% increase was secured by Australian and Brazilian exporters in 2006.

South Africa is the world's eighth largest iron ore producer with a 3% share. The country's iron ore production increased by 0.5% to 39.5 million tons in 2005, with exports growing by 7.7% to 26.6 million tons. South Africa is the world's fifth largest iron ore exporter with a 3.8% share of global exports.

The rise in iron ore prices helped the value of iron ore sales to increase from R4.5-billion to R7.5-billion in 2005. The iron ore mining industry is the fifth largest component of the South African mining sector. It contributed about 0.3% directly to GDP (or 0.8% if the indirect multipliers are included), 1.8% of merchandise exports, employed 7 492 workers and paid R0.6-billion in salaries and wages.

Employment on iron ore mines in South Africa increased by 5% to 7 492 employees in 2005. Planned expansions are likely to increase employment over the next few years. R624-million was paid to workers in 2005 in the form of salaries and wages, an increase of 8.5% on 2004.

### **Global steel and pig iron markets**

The production of pig iron in China grew by 28.7% to 330 million tons – 42% of global production. China's emergence as a dominant steel exporter has seen an increase in the exports of the country's steel product groups to all the major markets where production has declined. China now produces three times the amount of steel that its nearest country competitor (Japan) does. China also produces nearly double that of the EU. The other fast growing steel producer is India where production increased by 20% to 39 million tons in 2005. South Africa produced 9.5 million tons of crude steel in 2005 giving the country a global rank of 19.

### **Global reserves, production and exports**

Global iron ore reserves are estimated to be 370 billion tons of crude ore with an iron ore content of about 180 billion tons (source United States Geological Survey).

The largest reserve holder is Brazil with 22.8% of the total followed by Russia at 17.2% and Australia at 13.8%. South Africa's share of global reserves is estimated at 1% of the total.

World iron ore production increased by 13.4% to an estimated 1 520 million tons (United States Geological Survey) on the back of demand from China, however, this represents the total physical volume of many different grades of iron ore. If global production is modified to the average world grade, then production is smaller. According to the Australian Bureau of Agricultural and Resource Economics the global production of iron ore, when adjusted to a world average iron content, increased by 10.2% to 1 313 million tons in 2005. The world's largest producer is Brazil, which increased production by 8.1% to 292 million tons. Australia is the second largest producer, and in 2005 increased production by 12.1% to 258 million tons. South Africa is the eighth largest producer producing 39.5 million tons in 2005.

China is the key driver of iron ore consumption. It supplemented the 198 million tons of its local production with 275 million tons of imports in 2005, to grow local consumption of iron ore by 33.7%. China now accounts for 35.7% of global iron ore demand. Two other key demand areas for iron ore, which rely mostly on imports, are the EU with 171 million tons of consumption and Japan with 132 million tons. The world's top five exporters of iron ore are Australia (239 million tons), Brazil (224 million tons), India (81 million tons), Canada (29 million tons) and South Africa (27 million tons).

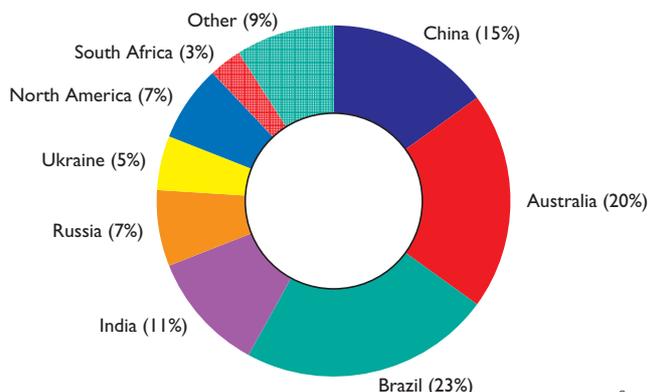
### **South African production and sales**

South Africa's iron ore production increased by 0.5% to 39.5 million tons in 2005. Local sales fell by 2.5% to 12.1 million tons valued at R1.3-billion. The agreement between the iron ore producers and Spoornet to increase rail capacity to the west coast helped boost iron ore export sales, which rose by 7.7% to 26.6 million tons valued at R6.2-billion. The 71% improvement in export contract prices for iron ore in dollar terms resulted in a 69.1% increase in the rand price to R235 a ton. Total South African iron ore sales were 38.6 million tons (R7.5-billion) in 2005.

### **Export facilities**

The agreement reached between Spoornet, Kumba Resources and Assmang to upgrade the Sishen Saldanha railway line will open up an extra 20 million tons in export capacity by 2010 (i.e. a total export capacity of 47 millions tons), which will help double South African iron ore exports by 2010. Agreement has been reached on the upgrade of the

*Global iron ore production, 2005 adjusted to world average iron content*



Source Abare

port of Saldanha, where the South African Ports Authority will upgrade the iron ore terminal. A study is being undertaken to evaluate the potential of a further expansion to 60 million tons a year and beyond.

### **South African iron ore characteristics**

The local iron ore industry has earned a reputation as a reliable supplier of consistent good quality iron ore. South African iron ore generally has good physical strength which means less physical breakdown in the ore during transportation. It has a low moisture content, which reduces energy losses, provides lower transport costs and reduced freezing issues in cold climates.

### **Iron ore prices**

Record steel prices have supported higher iron ore prices. Iron ore prices have been driven by tightness in the iron ore market as mine expansions have lagged the growth in demand. The international iron ore contract price increase was 18.7% in 2004 and 71.5% in 2005. This translated into a 69% increase in export prices to R235 a ton for exporters. In 2006, a further 19% price increase was secured by Australian and Brazilian iron ore exporters. The average price per ton of iron ore sold in the local market was R105 a ton. The average price received by South African producers was R194 a ton sold.

## **Platinum group metals**

The South African platinum group metals (pgms) industry is a key global supplier of pgms and is the largest component of the South African mining sector with total sales of R38.4-billion in 2005. The industry grew its share of the top three pgms production (platinum, palladium and rhodium) to 48.1% of global supply in 2005, versus 47.1% in 2004.

The year under review was challenging as the production weighted basket price for pgms at R157 410 a kilogram for the top three pgms produced remained well below the peak of R169 914 a kilogram achieved in 2001. The low price combined with infrastructure and red tape constraints, plus a large smelter shutdown, all lowered the pace of growth in local production to below expectation.

Total South African pgm production increased by 5.8% to 303 tons in 2005, with production in the three most important pgms rising by a more modest 3% to 259 tons. The first half of 2006 has presented a paradox to the South African pgms mining industry – a small decline in production (estimated at about 6% year-on-year by the DME) could not take advantage of an increase in the production weighted basket price for pgms. On a year-on-year basis the rand price is up by 57.4% to R222 702 a kilogram of platinum, palladium and rhodium produced.

### **The pgms market**

Tightening emission standards in developed countries combined with positive growth in industrial application demand, continued to underpin the pgms market in 2005. Total demand for the three main pgms increased by 5.9% to 500 tons on the back of a 5.1% increase to 263 tons in demand for pgms for autocatalytic converters, a 9.7% increase to 105 tons in the jewellery sector and a 7% increase in demand for pgms for industrial applications (chemical, glass, petroleum, etc.) to 105 tons. Demand for pgms for catalytic converters is 52.5% of total demand and at 263 tons is at the highest level ever recorded. The second largest

components of demand are jewellery and industrial demand, with each comprising 21.1% of the total.

South Africa is the largest supplier of pgms with a 48.1% global share, followed by Russia at 32.4%. The growth in local production of the three most important pgms in 2005 at 3.1% was nearly half its average annual rate of growth of 6.4% achieved over the past five years. The fastest growth in supply over the past five years has been in the other category, which includes Zimbabwe's production at 22.9% growth a year followed by scrap recovery at 14.6%. In the same five-year period, North American supply grew by 7.8% a year. Scrap recovery became the third largest component of supply after South Africa and Russia in 2005 at 47.8 tons.

Palladium was the biggest component of the pgm market in 2005 with a 52.1% share followed by platinum at 42.7% and rhodium at 5.1%.

### **Production, sales and employment**

Expansions at South African mines resulted in a 5.8% increase in the country's total pgm production to 303 tons in 2005, compared to the 286 tons in 2003 (DME). The 2005 production number comprised 164 tons of platinum, 83 tons of palladium, 20 tons of rhodium, 30 tons of ruthenium and six tons of iridium.

South Africa's pgm production value grew by 15.4% to R38.4-billion and R33.5-billion worth of pgms were exported, making pgms the largest individual mineral export earner for the country. If the R5-billion in local pgm sales to the catalytic converter fabrication industry are included, which is also ultimately exported, then the contribution of pgms to merchandise exports is 11.1%. South Africa's catalytic converter industry, which is buttressed by the Motor Industry Development Programme, is the largest beneficiary of locally produced minerals. According to Creamer Media's *Engineering News*, the local catalytic converter industry comprises about 6 000 people employed by approximately 30 companies, and produces about 15 % of global catalytic converters.

The pgm sector, with 155 030 employees in 2005 was the second largest

employer in the mining industry after the gold sector. About R11.3-billion was paid to employees in that year.

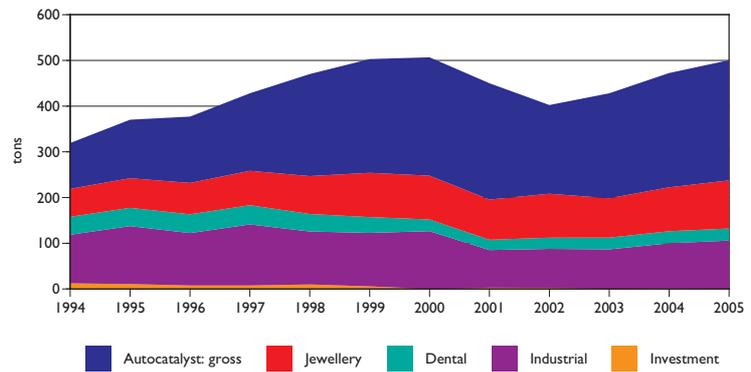
### Production weighted basket prices

The pgm market reflects the variation in supply and demand factors applicable to each metal. The deficits between supply and demand in platinum and rhodium, together with the greater interest by speculators in precious metals reflected in higher dollar prices, while the surplus between supply and demand in the palladium market dampened its price. The best method of reflecting the aggregate direction of pgm prices for each country is to use a production weighted average basket price for that country. This weighted price reflects the production of each pgm in relation to the price of each pgm and then these are averaged together.

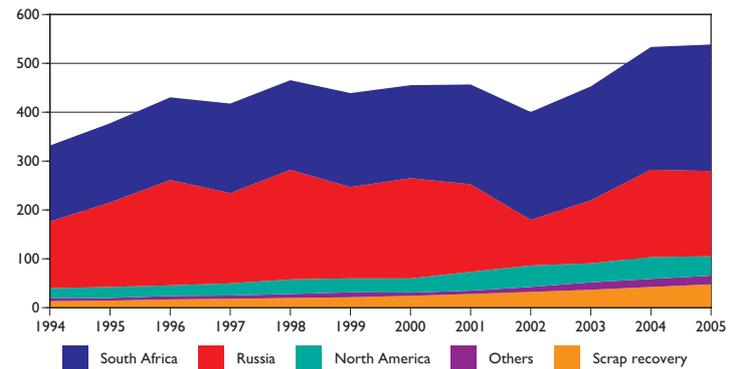
South Africa's production weighted pgm price rose by 16.4% to US\$768 an ounce of platinum, palladium and rhodium produced in 2005 on the back of a 6.2% improvement in the platinum price to US\$898 an ounce and a 110% increase in the rhodium price to US\$2 054 an ounce. The improvement in platinum and rhodium prices more than offset the 12.4% decline in the palladium price, which fell to US\$202 an ounce. With the 1.4% appreciation in the rand exchange rate in 2005, the production weighted pgm price increased by 15% to R157 410 a kilogram. However, much of the action in prices fed through in the last few months of 2005 and in the first half of 2006. The combination of a 28.3% increase in the platinum price, a 68.7% increase in the palladium price and a 168.2% in the rhodium price resulted in the production weighted pgm price rising by 54.4% to US\$1 096 an ounce in first half of 2006. The production weighted pgm price in rand terms rose by 57.4% on the back of the dollar price rise and a weaker rand exchange rate which fell by 1.5%.

The decline in the production weighted average pgm price between 2001 and 2003, before a modest recovery in 2004/05, weighed heavily on the expansion plans of producers. However, the substantial improvement in prices in late 2005 and early 2006, have not automatically fed through into higher investment and

Pgm demand by application



Global pgm supply



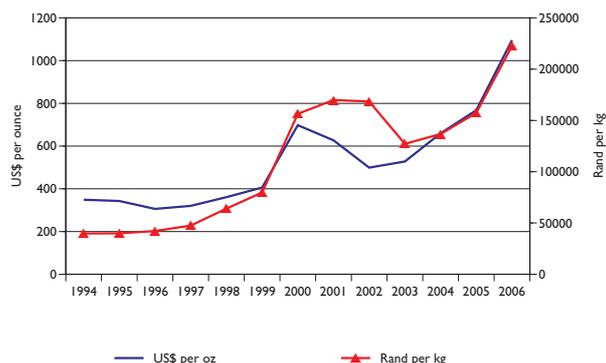
production as infrastructure and red tape constraints, plus extended project implementation periods constrain the sector.

### Platinum

Platinum demand grew by 2% to 232.3 tons in 2005. Supply increased at a similar pace thus keeping the market in a deficit of about 70 tons. The key demand driver and largest component of demand was for catalytic converter production, which increased by 9.5% to a record 118.8 tons. Much of this growth can be attributed to the light duty diesel sector in Europe where diesel car sales constitute about half of new car sales annually. Tightening limits on diesel emissions combined with strong growth in demand for catalysed soot filters were contributors.

Another strong growth area for platinum was the industrial sector where demand increased by 9.1% to a record 52.1 tons. In the electrical sector there was an increase in demand for computer hard discs, while demand for platinum increased in the glass sector as new capacity for high

Production weighted average pgm price for South Africa in rand and US\$ terms (1994 to June 2006)



definition liquid crystal display glass manufacturing was installed in Asia. As expected higher prices resulted in a decrease in platinum jewellery demand to its lowest level in over a decade. A sharp decline in demand from the Chinese jewellery trade combined with slower North American demand were the main culprits. Investment demand fell sharply by 66.7% as Japanese investors' realised gains by selling large bars at higher prices.

The world's largest platinum producer, South Africa (69% share) increased production by 2% to 158.9 tons, which was lower than expected. Efforts to expand production at a faster pace in 2005 were hampered by the modest production weighted basket price of pgms in rand terms, operational problems and infrastructure constraints. In late 2005 and early 2006 bottlenecks in the issuing of conversions and new rights for prospecting and mining have emerged as key challenges.

Russia is the second largest producer of platinum (12% share) and increased production by 5.3% to 27.7 tons in 2005. The fastest rate of growth was recorded in the scrap recovery category, which increased by 11.6% to 23.9 tons (10.4% of total supply). Other suppliers, which include Zimbabwe, increased production by 8% to 8.4 tons. North American production fell by 6.5% to 11.2 tons.

In the first half of 2005 the price of platinum was relatively stable and traded between US\$860 and US\$880 an ounce. The second half of 2005 was much more volatile as the continued deficit between supply and demand, at 2.2 tons combined with limited amounts of above ground stocks resulted in increased speculative interest. By December the price had risen to US\$1 012 an ounce, the highest level in 25 years. Speculative long positions pushed the price to record levels in January 2006 at US\$1 074 an ounce. A new record price of US\$1 328 an ounce was recorded on 18 May 2006, before the price retreated into a consolidation phase. The average platinum price in the first half of 2006 at US\$1 112 an ounce was 28.3% higher than for the same period in 2005.

## **Palladium**

The palladium market remained in surplus in 2005. This is now the fifth year where supply has exceeded demand. Nevertheless, 2005 marked the third year of recovery in palladium demand. In particular, the substantial 53.8% increase in demand for palladium for jewellery to 44.5 tons, spurred on by the development of the Chinese market, now makes jewellery the second largest component of palladium demand.

Purchases of palladium for catalytic converter fabrication in 2005 increased by a modest 0.5% to 118.5 tons. Higher demand in Asia (China, Japan and South Korea) was mostly offset by lower sales in Europe (lower petrol vehicle sales) and North America (lower average metal loadings). Palladium demand for industrial applications increased by 4.3% to 49.3 tons. There was stable demand for palladium for dental alloys. Higher demand for electronic applications was partially offset by lower demand by ceramic capacitor manufacturers.

The total supply of palladium to the market fell by 1% in 2005. Higher levels of scrap recovery and higher local palladium production were not enough to offset the decline in Russian and North American supply. Scrap recovery grew by 18.9% to 19.6 tons in 2005, and this area has been the fastest growing component of supply with an average annual growth rate of 22.6% over the past five years. As in 2004, the sale of palladium from the Russian state stockpile materially added to supply and kept the market in surplus.

Given the supply overhang in 2005, the palladium price was capped at about US\$200 an ounce for much of 2005. Speculative interest in precious metals in late 2005, resulted in the price rising to US\$276 an ounce in December. The price rally continued in the early part of 2006 and rose to a high of US\$398 an ounce on 12 May 2006. The price then corrected back to about US\$280 an ounce in June 2006 before consolidating for a further rally. The average palladium price was US\$202 an ounce in 2005. In the first half of 2006, the palladium price had risen by 68.7% to a year-on-year average of US\$321 an ounce.

## **Rhodium**

Rhodium accounted for 5.9% of total pgm demand – it increased by 9.2% to reach a record 29.5 tons. About 86.6% of rhodium demand emanated from the auto industry, which increased demand by 8.3% in 2005. Increased loadings of rhodium on gasoline engine catalytic converters to meet increasing nitrous oxide emission standards in the US were a key driver. Chemical, electrical and glass demand for rhodium increased by 9.3%, 12.5% and 19.6% respectively.

The total supply of rhodium increased by 3.6% to 27.7 tons in 2005. South Africa is the dominant supplier of rhodium and accounted for 70.4% of total supply in 2005. Local supply grew by 6.8% to 19.5 tons. Scrap recovery, which accounts for 15.4% of total supply, fell by 2.1% to 4.3 tons. Russian supply fell by 10% to 2.8 tons.

Like platinum, the rhodium market has been characterised by regular deficits between supply and demand, with the resultant upward pressure on prices. The 2005 deficit was 1.8 tons, which had to be supplied from ever-diminishing above ground stocks. As a result, the rhodium price increased substantially in 2005 rising from US\$1 330 an ounce in January to US\$3 100 an ounce by November – a 14 year high. Speculator interest in late 2005, combined with limited material available to the market further propelled the price upwards, and a peak of about US\$6 275 an ounce was reached on 22 May 2006. The average rhodium price was US\$2 054 an ounce in 2005 and rose by 168.2% on a year-on-year basis to US\$4234 an ounce in the first half of 2006.

# Economic policy



# Economic policy



## Investment and economic growth

In the decade after 1994 economic attention was focused on macroeconomic stabilisation, trade liberalisation and opening the economy up to the beneficial forces of globalisation. Economic growth jumped from a negative 0.6% a year in the period 1990 to 1993 to register a much improved 3% after 1994. Improving macroeconomic balances increasingly provided the fiscal space for the government to improve access for all to basic services. The opening up of the economy required major adjustment as many economic sectors of the economy were exposed to greater competition, but it also created many new opportunities both within South Africa and externally.

While a better macroeconomic foundation had been laid for providing higher levels of investment and growth, there is now a greater appreciation by government and the private sector of the microeconomic constraints to growth. These include specific infrastructure impediments, regulatory red tape and human capital constraints.

Nevertheless, an average 4.7% a year growth rate was recorded between 2002 and first half 2005. This can be attributed to the impact of a much improved macroeconomy, which when combined with a favourable global economy, enabled the rand to appreciate strongly. It also helped to substantially reduce inflation, which led to the lowest level of interest rates in over two decades. The aggregated effects of a stronger currency, lower interest rates and a burgeoning black middle class, resulted in a powerful consumption driven phase, which has since been a key driver of economic growth.

Consumption driven economic growth is traditionally a developed country phenomenon. Most developing countries derive a substantial portion of their growth from supply-led export upswings, normally in the manufacturing arena. In South Africa the developed and emerging side of the economy have driven consumption while the supply-side of the economy has lagged. An emerging challenge for the country's policy makers is how to improve the economic growth rate at a time when the demand side of the economy is starting to ease.

A slow growth in the supply-side export sectors is reflected in the mushrooming current account deficit of the balance of payments as the sluggish pace of growth in exports of only 2.3% a year over the past five years has not been able to keep up with the high rate of growth in imports of 7.7%. In particular, the poor performance of mineral exports is a key contributing factor to the weak current account. Unfortunately, a weak current account feeds through into a declining exchange rate, higher inflation, higher interest rates and more pressure on consumers.

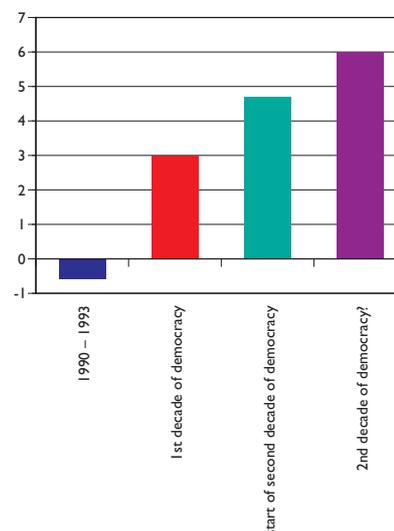
Bureaucracy and infrastructural restrictions are emerging as key constraints to growing the supply-side of the economy. The Small Business Project calculated that regulatory red tape in the country cost business about R79-billion in 2004. This amount is larger than the total capital investment made by both government and parastatals. If these costs could

be substantially reduced, a large portion of funds would probably go into investment and encouraging economic growth and development.

However, the World Bank's book, *Doing Business in 2006* notes that South Africa's rating declined in world ranking in terms of the ease of doing business in 2005, from 28 to 29 out of 175 countries assessed. The country lost ground in the categories of ease of opening a business, dealing with licences, trading across borders, enforcing contracts and closing a business. On the positive side it gained positions in terms of employing workers, registering property and paying taxes.



South Africa's improving growth performance



The countries that are making the most progress in terms of reducing bureaucracy costs are also growing their economies at the fastest pace. There are a number of areas where South Africa needs to make progress to ease the costs of doing business and thus promote investment. For example, the cost of registering a property was estimated at 8.9% of the value of the property in 2005. This compares to a cost of only 4.3% in the Organisation for Economic Co-operation and Development (OECD) countries.

Infrastructural constraints, such as roads, electricity generation, railways and ports are at the top of the private sector's and the government's agenda. Infrastructural impediments in 2004 affected bulk commodity exports. Since then agreements have been struck between the mining sector and Transnet for the expansion of the iron ore and coal export facilities. Improved performances in rail and port were recorded in 2005.

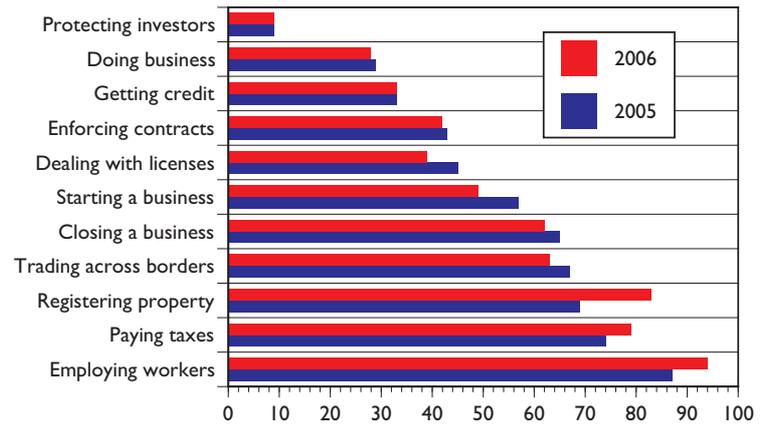
To accelerate the pace of investment and economic growth the government has adopted ASGISA. In essence, ASGISA is designed to identify and unblock binding constraints (regulatory, skills or infrastructural) to investment and economic growth. ASGISA also tackles many of the strictures undermining export growth.

## ASGISA

ASGISA has its genesis in government's objectives to halve poverty and unemployment by 2014. ASGISA is not intended to be a new overarching economic strategy, but rather is focused on specific blockages to economic growth that require resolution. ASGISA's targets are a 6% growth rate by 2009 and investment rising to 25% of GDP from its current 17% level. A 6% compound annual GDP growth rate doubles the size of the economy every 12 years.

The government has actively sought stakeholder input on ASGISA, including a number of meetings between organised business through Business Unity South Africa (BUSA) with President Mbeki, the deputy president and ministers from the key economics departments. The Chamber is participating in the ASGISA process through BUSA. A Chamber representative

World Bank ease of doing business, SA's country rating per category



chairs the BUSA ASGISA task team, providing written input to government. Of the 10 issues BUSA identified as binding constraints on growth in its presentation to the State President in September 2005, nearly all were contained in the government's document; the ASGISA problem has, therefore, shifted from problem identification to problem solving.

### Growth restrictions

Government is cognisant of the need to focus on a small number of key factors inhibiting economic growth, which if dealt with decisively, could impact on investment and economic growth. The key issues include:

- The volatility and level of the currency
- The cost, efficiency and capacity of the national logistics system
- Shortages of suitably skilled labour amplified by the cost effects on labour of apartheid spatial patterns
- Barriers to entry, limits to competition and limited new investment opportunities
- Regulatory environment and the burden on small and medium businesses
- Deficiencies in state organisation, capacity and leadership.

BUSA inputs include:

- The need to continue to promote sound macroeconomic policies, but with further tax cuts and the elimination of foreign exchange controls
- The need for an enterprise development strategy in place of industrial policy
- A regulatory impact assessment strategy that tests the impact of new legislation on investment, growth, employment and empowerment
- Reducing the compliance costs on business, especially small and medium business
- Reducing infrastructural bottlenecks
- Partnerships at the local level should be encouraged to facilitate real delivery of services and infrastructure
- A more comprehensive assessment of the lack of competition in key markets
- Effectively benchmarking factor inputs versus key competitor countries
- Labour market policy and a policy review
- Aligning the National Skills Development Strategy with employment creation.

## ***From problem identification to problem solving***

Countering the agreed set of constraints has involved government in establishing a set of measures that include:

- ❑ Macroeconomic issues – encouraging a more stable and competitive exchange rate
- ❑ Infrastructural programmes
- ❑ Sector investment strategies
- ❑ Skills and education initiatives
- ❑ Second economy interventions
- ❑ Public administration issues.

These so-called interventions by government are co-ordinated by the Office of the Deputy President with much of the work being done in the economic cluster of departments.

## ***Key ASGISA areas focused on by the Chamber***

The Chamber plays an important role in the input made to government by organised business. The following areas require mention:

- ❑ Infrastructure – ASGISA earmarks investment of R372-billion for infrastructure over the next three years. The majority goes to roads (24%), electricity (23%), water (8%), rail (7%) and ports (6%). The Chamber has provided input on the restructuring of the electricity industry, on electricity pricing, on the need for timely issuance of coal mining permits, on the slow pace of environmental and water permitting, and so on. The Chamber has also raised concerns on the lack of a decision on investment in a new inland liquid fuels pipeline because of the need to provide reasonable security of supply of diesel to mines. The Chamber, for example, has actively engaged with Spoomet on future plans and prospects and key areas, such as the lack of adequate railway facilities to the Waterberg coalfields.
- ❑ Regulatory issues – The Chamber has played a role in the BUSA task group on Regulatory Impact Assessments. The Presidency has agreed to the merits of the concept of assessments and will start rolling out the process to various departments. The mining industry would benefit if mining-related policy is first properly assessed for its impact on investment, employment, transformation and small business.
- ❑ Labour market review – The Chamber has played a central role in the development of a business position on labour market reform.

## ***Input sector development project***

At a meeting between the Chamber and the Department of Public Enterprises in March 2006, the Chamber agreed to participate in the ASGISA Input Sector Development project. The project is an attempt by government to leverage the capital and operating expenditure programmes of various state-owned enterprises with the mining sector to attract back to South Africa a number of industries that left the country in the 1980s. The concept is for the mining sector to provide the critical mass of demand and a joint industry/departmental assurance that there would be reasonable demand for various products over the long term. The department projects that the benefits to the economy could be large in terms of investment, import savings, jobs, and transformation.

## **Administered prices**

Administered prices are the prices of various goods and services set by government or non-financial government enterprises for public

consumption. Administered prices are important to the mining sector because of the upward pressure uncontrolled administered prices exert on mining operating costs. For example, the Department of Water Affairs and Forestry's (DWAF) raw water prices went up by an average of 7.5% versus the average rate of inflation of 5.9% between 2001 and 2006. The Chamber helped develop the terms of reference for a research project (and benchmarking exercise) focused on rail, ports and water. This project is likely to highlight key administered price setting mechanisms, constraints and solutions. The Chamber has engaged the Department of Trade and Industry on the issue of import parity pricing.

## **Minerals policy**

The Chamber canvassed its members on the regulatory challenges facing the industry and presented its findings to the DME at a workshop in June 2005. This was followed by a written submission to the DME. The slow progress in, for example, the issuing of conversions and new rights/licenses, combined with interpretational uncertainties on the social and labour plans, the Mining Charter, and the provision of funding for environmental rehabilitation are key restrictions to investment.

## **Reducing costs**

As the mining industry is essentially a 'price taker', the players in the sector compete on costs and productivity. South Africa's small domestic market and geographic isolation have resulted in a relatively poor competitive framework in the supply chain to the sector. A large proportion of the goods and services supplied to mining companies is provided by monopoly industries and parastatals.

This is beneficial as in the case of the electricity industry where the use of world-class technology to burn poor grade coals coupled with good management means that electricity sourced from Eskom is competitively priced and reliable. In the case of the dedicated rail facilities provided by Spoomet to the coal and iron ore exporters through the ports of Saldanha and Richards Bay, the contractual agreements have kept annual increases

below inflation over the past five years. In the case of Spoorinet's general freight business, where freight costs were higher than on the dedicated routes, the crippling double digit annual price increases between 2002 and 2005 have been replaced with a system of below inflation annual increases.

However, in many other instances such as with the DWAF's and the municipalities' price setting, it has proved detrimental as upward pressure has been placed on water prices. Over the past five years water prices to mines have risen by about 12% annually, which is over double the average consumer price index (CPIX) inflation rate.

Mining is a large user of diesel, lubrication oils, timber, steel, explosives, clothing, tyres and other goods. The huge rise in diesel prices, which are established by the DME, has put pressure on the industry especially the big open cast operations. Steel makes up around 10% of the cash production costs of large-scale precious metal mines and is an important cost. The Chamber engages extensively with many companies in the supply chain to try to encourage more competitive prices from suppliers.

## Beneficiation

Proponents of beneficiation believe that South Africa is exporting all its minerals in raw form and that employment and extra revenues are forfeited to the industrialised/ industrialising countries that do a good deal of the processing.

Recent policies proposed by the DME include the establishment of a Precious Metals and Diamond Regulator and the compulsory application of a 15% duty on the export of unpolished or uncut diamonds. Thus it appears that government is moving towards legislative means to force mining companies to beneficiate locally.

The industry believes that the reasoning that maintains that mining companies are the culprits for the relative lack of manufacturing beneficiation is flawed. The commonly held view that South Africa's mined products are all exported in raw form is mostly untrue. The beneficiation of primary ores into steel, stainless steel, jewellery, chemicals, plastics, polymers, autocatalytic converters, and so on actually

accounts for around 20% of the country's merchandise exports. Thus beneficiation is taking place where the commercial opportunities exist. Between 10 and 15 tons of gold are fabricated into jewellery each year in South Africa and about five to six tons are exported.

As a result of the Motor Industry Development Plan, which provides vehicle manufacturers with a duty drawback on imports, around 15% of the world's platinum catalytic converters are manufactured in South Africa. About 550 000 carats of high quality gem diamonds are cut locally. In each case the manufacturing beneficiation takes place totally outside of the mining sector and is not based on the availability of the mined product.

The real issue lies with government, which should nurture the competitive advantages that would attract investment by global manufacturing companies in the local fabrication industry. The mere availability of natural resources is no longer a sufficient condition for attracting industries such as manufacturing. Three of the world's major gold jewellery producing countries – India, Italy and Turkey – do not have any gold mines, yet are at the forefront of jewellery fabrication. They have done this on the basis of competitive advantages, such as low cost, productive and specialised labour; direct access to markets and distribution networks; and low tax rates, vat and duty free environments.

India, China and Thailand have emerged as the world's leading diamond cutting and polishing centres, yet they do not mine diamonds. India alone accounts for 52% of the value of the cutting and polishing industry. The average cost of cutting a diamond in India is about US\$8 a carat versus between US\$50 and US\$100 a carat in South Africa. The Indian diamond cutting industry employs almost 900 000 people and is able to cut all sizes of diamonds. South Africa has about 2 000 diamond cutters who focus exclusively on the larger gem quality stones as it is uneconomical to cut smaller, category 3 stones (more than 90% of South Africa's production) because of the high labour cutting costs per carat.

The availability of the raw materials bestows no advantage to the establishment of downstream manufacturing beneficiation. Rather, it is the nurturing of competitive advantages that will attract manufacturing fabricators to South Africa.

## Beneficiation offsets in terms of the Mining Charter

One of the key themes of the Mining Charter is to encourage mining companies to consider facilitating beneficiation via the offsetting of beneficiation against the Charter's ownership requirement. The DME asked the state controlled research organisation, Mintek to develop a framework against which the beneficiation-to-ownership offsets could be measured. A number of commodity task teams, established under the auspices of the Chamber, have engaged with Mintek. Unfortunately, Mintek has remained wedded to the concept of an output-based model that will measure mining company beneficiation efforts on the basis of actual additional value added to a mineral over and above a predetermined base state, and a set of stretch targets that are set way above actual existing mining company beneficiation levels and rely on excessively optimistic future growth expectations. In other words the output-based model's bar is simply set too high.

Mintek has failed to capture two fundamentally important points in

the derivation of their output-based model. First, the local economic, operating, investment and business climate available to manufacturing beneficiaries in South Africa is not competitive versus key foreign growth market competitors. Secondly the Mintek proposals on output-based measurement fail to define an appropriate role for mining companies in manufacturing beneficiation projects.

Mining companies can contribute towards facilitating greater beneficiation by providing industry-wide inputs that may help, such as gold loans. These interventions will help facilitate increased beneficiation – but cannot guarantee it. At this stage no recognition is given to mining companies for such facilitation efforts, yet this is an area of activity where they could probably have the greatest impact. The Chamber is engaging government and Mintek on how to evolve a mutually acceptable approach to the matter.

## The draft royalty bill

Following the release of the draft Mineral and Petroleum Resources Development Bill in March 2003 the Chamber developed a detailed position paper which it presented to National Treasury. Treasury agreed to a five-year exemption for royalties; the elimination of the fiscal stabilisation clause; to investigate the definition of marginality; and a review of the rates. The second draft of the Bill is expected later in 2006.

## BEE and transformation

In an effort to avoid any confusion between the status of the Mining Charter and the Department of Trade and Industry's Codes of Good Practice, the Chamber met with the minister and his BEE team in June 2005 and again in 2006. Agreement has been reached that the Mining Charter would prevail over mining licence issues.

The Chamber agreed to encourage its members to voluntarily comply with the codes. Thus instead of a supplier being adjudicated twice by a ratings agency, once for the mining sector and again for the other sectors, it would be encouraged to use the codes' verification. However, in the case of the mining companies being adjudicated for their BEE status when selling mining products, it was agreed that the Mining Charter should be used.

## Diamond export duty

A cost-benefit analysis of the DME proposals of a 15% export duty was undertaken and the Chamber argued that the DME proposals were based on an incorrect assessment of the issue. Given the substantial differences between the cost of diamond cutting in South Africa and India, the Chamber argued that placing export restriction measures on the mining industry would not help improve the competitiveness of the local diamond cutting industry. In fact, the export duty and proposed new marketing arrangements would undermine the diamond mining sector with very little gain in the diamond cutting industry and a concomitant net loss for the country.

The Chamber also argued that the cutting industry is an area where only modest profit is made as most profit is on the retail side. The Chamber has engaged Treasury to highlight a number of challenges that the diamond mining industry faces in relation to competitiveness and the

DME proposed marketing and export duty arrangements.

## Minerals, a blessing or a curse

Unfortunately, the research paper by Sachs and Warner on the 'resource curse' has become an accepted concept despite the rather dated data used in the study and the combination of gas, oil and minerals into one study.

The Chamber embarked on its own investigation focused on the period 1990 to 2004, and studying only mining dominated countries. The conclusion reached is that there are many mining dominated developing countries that have actually seen higher GDP per capita growth than many resource poor countries.

The main differentiating factor is good governance. The key findings were presented to the Chamber's Sustainable Development Conference in November 2005 and to the G-20 Energy and Resources conference in June 2006.

## Water supply to mines

Following an attempt during 2004 by the Merafong City Local Municipality to impose its pricing regime on water supplied to mines in its jurisdiction, the minister of water affairs and forestry ruled that the municipality did not have the authority to prescribe tariffs for water used in the production process. The ruling, however, required the mines and the municipality to negotiate a reasonable tariff for water supplied to the mines for domestic use in hostels and mine villages.

After protracted negotiations the mines and the municipality agreed that the mines will become a water services intermediary and supply water to the villages on the mines at a municipal tariff to be recovered from the inhabitants. The mines receive water for operational use and the mine hostels at the prevailing Rand Water tariffs applicable to mines and water services authorities.

It is expected that this model will in time be adopted by other municipal jurisdictions containing mines and mine villages.

# Electricity

## ***Multi-year electricity pricing***

Every year Eskom, after consultation with its customers, submits an application to the National Electricity Regulator for approval of its tariffs for the following year. During the latter half of 2005 the then National Electricity Regulator initiated a consultation process on the introduction of a multi-year price determination for Eskom, i.e. pre-agreed electricity price increases over a number of years. The intent was to provide Eskom and its customers with reasonable certainty regarding revenue and electricity prices.

The Chamber and its members participated in the consultation process as certainty on electricity prices is especially important to the mining industry, which is characterised by long-term projects.

In February 2006, the Regulator announced its approval of annual price increases of CPIX + 1% for the period from 1 April 2006 through to 31 March 2009. The price determination includes provision for the cost of electricity distribution industry restructuring.

Although it supports the concept, the Chamber expressed concern about the provision for the financing of the electricity distribution industry restructuring. It was viewed as premature since an ultimate structure for the electricity distribution industry had not yet been agreed to at the time. In addition, the motivation for restructuring the electricity distribution industry was always the resulting cost savings on electricity distribution. The Chamber believes that instead of increasing the price of electricity, restructuring should be financed from the savings.



## ***Electricity Regulation Act***

The Electricity Act, No. 41, 1987, which provided for the National Electricity Regulator to regulate all aspects of the electricity industry, had become obsolete and needed to be replaced. The first step in this process was the establishment of the National Energy Regulator in terms of the National Energy Regulator Act, 2004, to assume the functions of the National Electricity Regulator.

The next step was the introduction of the Electricity Regulation Bill in Parliament in September 2005. The Bill set out the role of the National Energy Regulator in respect of licensing, setting of tariffs, and determination of standards for operators in the electricity industry. It provided the specific legal framework for the generation, transmission and distribution of electricity to individuals, communities and the business sector. The Bill further provided for the establishment of privately owned electricity generators.

The Bill recognised the right of municipalities to reticulate electricity, but did not regulate that right sufficiently to ensure that municipalities met the objectives of government in the electricity industry.

The Bill was silent on aspects relating to the envisaged restructuring of the electricity distribution industry restructuring.

Prior to the Bill being considered by the Parliamentary Portfolio Committee on Minerals and Energy, the section dealing with municipal electricity reticulation was withdrawn.

In its submission to the parliamentary portfolio committee the Chamber expressed concern that the apparent deviation from policy concerning the restructuring of the electricity distribution industry was detrimental to investment decision-making and thus impeded economic development.

The Bill was enacted and the Electricity Regulation Act came into force on 1 August 2006, still without the section dealing with municipal electricity reticulation.

The Act will affect the mining industry in that all electricity distribution, including the provision of electricity to consumers on mine property, will have to be licensed by the National Energy Regulator. The Chamber is engaging with the Regulator on this matter.

## ***Restructuring the electricity distribution industry***

The fragmented state of the South African electricity distribution industry has been a cause for concern since the early 1990s. It was identified as the reason for the lack of progress in electrification, the numerous disparate tariffs and the poor quality of supply. In addition it had become clear that many municipalities were imposing tariffs, which far exceeded the cost of supply, to augment their incomes.

Following an extensive consultation process, consensus was reached that the solution to the problem was to restructure the electricity distribution industry into a small number of regional electricity distributors. This was expressed as a policy position in the Electricity Restructuring Interdepartmental Committee Report of 1997, the 1998 White Paper on Energy Policy and the Blueprint Report of 2001.

To date the policy has not been translated into the legal framework required to restructure the electricity distribution industry. As a result the current initiatives appear to be based on negotiations between the parties

involved. This is creating uncertainty around the conditions of electricity supply and is unhelpful when considering investment decisions, especially in sectors characterised by long-term projects, such as the mining industry.

During 2005, Cabinet approved a plan to establish six regional electricity distributors around the six metropolitan municipalities, namely Johannesburg, Tshwane, Ekurhuleni, Cape Town, Nelson Mandela and eThekweni, with a seventh national distributor covering the rest of the country.

Provincial authorities expressed concerns about the seventh distributor vis-à-vis provincial development strategies. The Parliamentary Portfolio Committee on Minerals and Energy then issued a call for comment on the proposed seventh distributor:

As it had done on previous occasions, the Chamber responded by expressing support for the restructuring of the electricity supply industry as it felt that the creation of financially viable regional electricity distributors would relieve the prevailing chaotic conditions.

The Chamber is concerned that the establishment of six regional distributors around the six metropolitan municipalities will leave electricity distribution in those areas excluded from the distributors under the jurisdiction of the district/local municipalities concerned. Such a situation will negate the objective of the electricity distribution industry restructuring.

The Chamber accordingly supports the establishment of a seventh, national distributor provided that,

- it is a financially viable entity delivering a technically competent service on a commercial basis within the constraints of a system of cost-reflective tariffs
- large industrial customers, i.e. those consuming in excess of 100 GW of electricity a year, are allowed a choice of electricity supplier.

The Chamber also urged that the legal framework required for the restructuring of the electricity distribution industry be established as a matter of urgency.

## Liquid fuel

Diesel fuel is a major energy carrier in mining operations where it is used mainly to transport people and goods in trucks and locomotives. Other applications are in front-end loaders, hydraulic shovels, load-haul-dumpers, self-propelled mobile drill-rigs, construction equipment and utility vehicles. Some mines also use diesel powered electricity generators, either for emergency supply, or in the case of remote small operations, as the only supply.

The mining industry consumed 747.1 Ml of diesel fuel in 2005 (statistics from the South African Petroleum Industry Association). This amounts to 9.2% of all diesel fuel sold in South Africa during that year. It also represents a 5% annual increase in the quantity of diesel fuel consumed by the mining industry.

Given the changing circumstances in the mining industry, its consumption of diesel fuel is expected to increase. This expectation is based on, amongst others, the projected growth in local demand for coal by coal-fired electricity generation, the development of a new coalfield and the envisaged expansion of iron ore production.

There is a growing need for diesel fuel in inland areas where the demand substantially exceeds local supply, thereby increasing the quantity of fuel that needs to be transported from the coast. This presents a logistical challenge for the petroleum industry and all interested stakeholders to increase the ability to transport products from coast to inland areas in an economically sustainable manner.

The current infrastructure, coupled with supply-demand balances, does not provide any cover in the case of extended supply disruptions, nor does it take future growth into consideration.

Transnet, which operates the pipelines from the coast to inland areas, is considering increasing the capacity of the pipeline network. This project will, however, take several years to complete. Another option is to operate block trains of rail tankers. This will involve the oil refineries pooling their output for transport purposes, but it will reduce the turn-around time of the rail tankers from two weeks to five days.

The Chamber is engaging with the stakeholders to address the problem.

## Energy efficiency

Since the signing of the Energy Efficiency Accord in May 2005 industry, including the Chamber, participated with officials from the DME in the Energy Efficiency Technical Committee established by the National Business Initiative to co-ordinate the terms of the accord. Most of the work has involved the development of an acceptable monitoring protocol.

During deliberations it emerged that there was no existing incentive specifically aimed at promoting energy efficiency in South Africa. A survey of international practice indicates that the following incentives are in use in various countries:

- Investment subsidies
- Soft loans
- Tax credits/reduction on energy savings
- Accelerated depreciation of capital goods
- Tax reduction on energy saving equipment
- Reduction of, or exemption from, import duties.

The Chamber proposed that the following incentives be considered:

- Eliminating import duties on energy efficient equipment, especially electric motors
- Reducing VAT on energy efficient equipment
- Introducing accelerated depreciation for energy efficient equipment
- Introducing some form of tax benefit for the implementation of energy efficient practices.

The proposal was submitted to the DME, which undertook to pursue the matter.

## Environmental fiscal reform

During April 2006 the National Treasury issued a draft policy paper entitled, *A Framework for Considering Market-Based Instruments to Support Environmental Fiscal Reform in South Africa* for comment.

The draft expresses the view that it is increasingly important to ensure that the economy develops in a sustainable way and that, at the same time, issues of poverty and inequality are effectively addressed. It states that it is not only the quantity of growth, but the quality of growth that is important.

The paper outlines the role that environmentally related taxes and charges could play in supporting sustainable development, and delineates a framework for examining the potential application of such taxes and charges. It considers measures deemed capable of contributing to both revenue requirements and environmental objectives.

Since a large number of these measures concern energy, the Chamber commented from both an environmental and an energy perspective. The Chamber pointed out that no single element of mining can, by itself, minimise environmental impacts.

While economic instruments are important, they must be integrated with well-considered consultation processes, accurate environmental impact assessments and thorough management of the government's earnings.

Because of the variety of mining operations, products and mining techniques in South Africa, environmental impacts cannot be standardised. It is, therefore, important to use economic instruments that take this complexity into account.

Given the critical role of energy in the economy, any imposts that will increase the cost of energy without any direct, commensurate benefit will impact negatively on the economy. Such negative impact will constrain the efforts currently underway to accelerate economic growth. Ideally an impost on an energy carrier, introduced for environmental reasons, should result in the consumer switching to a more environmentally friendly alternative. Where such an alternative is not available or where its use is, for technical or economic reasons, not feasible the impost becomes merely another tax without any beneficial effect. This situation should be avoided.

It was further pointed out that the Chamber and its members had entered into the Energy Efficiency Accord in terms of which they agreed to collaborate with government to establish a mutually beneficial framework for voluntary energy efficiency initiatives that will help move the country towards its goals of attracting investment in Clean Development Mechanism projects and efficient energy use. There are, however, no existing incentive schemes in South Africa aimed at promoting energy efficiency.

The Chamber recommended that careful consideration be given to the allocation and use of the revenues from the taxes and charges. Consideration should also be given to incentives for, amongst others, energy efficiency, the use of alternative energy sources and water savings.

## Mining industry rail transport initiative

During 2005 the Chamber and Spoornet entered into an agreement establishing the Mining Industry Rail Transport Initiative. The purpose of the initiative is to ensure that the rail transport needs of the mining industry are met efficiently and cost effectively.

The parties met early in 2006 to consider the rail transport needs of the coal mining industry. The issues discussed included the economic outlook for coal, technology development in coal mining, future coal production and Spoornet's plans to expand its capacity.

Most coal in the Mpumalanga Highveld coal fields is produced by large long-life collieries. This situation is expected to change with coal increasingly being produced by smaller short-life collieries. The production rates of these smaller collieries and their brief life spans would not justify the construction of railway lines to service them. Spoornet envisages loading hubs on the rail network to which the collieries could transport coal by road.

Spoornet also revealed that it had a team working on planning the expansion of rail infrastructure in the Waterberg region. It agreed to participate in the mining industry initiatives, undertaken by the Coaltech 2020 Research Programme, to determine infrastructure requirements for the Waterberg region.

## Road transport management system

The deterioration of many of South Africa's roads is of serious concern to the road authorities and the private sector, both in terms of the escalating

backlog in road maintenance needs (and associated funding requirements) and the increase in vehicle operating costs. A large component of the deterioration is directly attributable to the overloading of heavy vehicles. The National Department of Transport has embarked on two initiatives to address the overloading problem, namely:

- ❑ The introduction of amendments to the Road Traffic Act that will impose some responsibility for loads on consignors, vehicle owners/operators and consignees. In terms of current legislation the drivers of heavy vehicles are responsible for ensuring that loads are within legal limits
- ❑ The implementation of a programme to introduce a measure of self-regulation into road transport. This commenced with a project in the timber industry that involved consignors, hauliers and consignees in timber transport, not only in terms of loading, but also vehicle maintenance and driver wellness as a means of addressing the problem of overloading and road safety.

Following the successful reduction in overloading and improved road safety in the timber industry, a national steering committee was formed to introduce a road transport management system into other major industries involving heavy vehicle transport. As the transport of mineral products has been identified as one of the problem areas, the Chamber was approached with a view to introducing a self-regulation system into the coal transport sector.

Although coal constitutes the majority of minerals transported by road, the Chamber was unwilling to allow a specific commodity to be singled out. It was also not satisfied that an informal, industry specific, self-regulating scheme would be sufficient to address overloading and other problems in the transport of minerals by road. The Chamber accordingly proposed that a road transport management system, based on national standards and applicable to all road freight transport, be developed.

The Chamber's proposal was accepted and the steering committee is engaging with Standards South Africa on the development of the required national standards for a



road transport management system. The system will entail:

- ❑ consignors implementing a management system to address the procedures, personnel and equipment to manage the loading and dispatch of vehicles
- ❑ hauliers implementing a management system to address vehicle loading, vehicle maintenance and driver wellness and fitness competencies
- ❑ consignees implementing a management system to address the procedures, personnel and equipment to manage the receiving and off loading of vehicles.

The intention is for participants to be audited and compliance recognised by some form of accreditation. Initially participation in the management system is to be voluntary. There are, however, indications that it could become mandatory at some stage.

## Coaltech 2020 research programme

Since its inception in 1999, the Coaltech 2020 Research Programme, a joint venture

between the major South African coal producers, Eskom, the CSIR and the Chamber, focused its work on the optimisation of resource utilisation in the Mpumalanga Highveld coal fields. It is estimated that the work done by Coaltech 2020 has extended the life of these coal fields by about five years. In addition, a number of problems that inhibited coal mining in the area have been resolved.

Given that the closure of large collieries in the area without opening replacement mines is expected to occur during the next decade, Coaltech 2020 embarked on a series of projects to provide guidelines on ameliorating the socio-economic effects of mine closure. The first project in the series was a background study to determine what actually occurred when mine closures took place.

It is becoming clear that the next coalfield to be developed on a large scale will be the Waterberg Coal Field in the west of the Limpopo Province. Currently only one mine is operating in the area. The region is sparsely populated with little infrastructure. The geology of the coal bearing strata in the area and the nature of the coal is also not well known.

Coaltech 2020 is embarking on a number of projects aimed at developing a better understanding of the geology and the metallurgical properties of the coal in the area. In addition work is planned to determine the potential socio-economic impact of a large number of people settling in the area when other coal mines open. The intention is to develop guidelines that will enable mining companies to resolve problems proactively.

## SADC minerals policy harmonisation

MIASA submitted a proposal to the Committee of Mining Ministers of the SADC during 1998 that an intensive study of the region be undertaken to determine the economic, financial and social policies that would create a climate in the SADC region in which the mining industry could serve as the foundation for powering economic development and social upliftment.

The proposal was accepted by the mining ministers, however, work on the study did not progress beyond a preliminary analysis of existing policies because of a lack of funding and capacity in SADC institutions.

Eventually the United Nations Economic Commission for Africa (UNECA) engaged the Minerals and Energy Policy Centre (MEPC) to undertake the study. On completion of the study in 2004, UNECA convened an ad hoc group of experts to review the draft report. The group included, amongst others, representatives from MIASA. The group of experts amended the draft report extensively after which UNECA presented it to the SADC Secretariat.

The SADC Secretariat convened a technical committee in March 2006 consisting of officials from member states and a representative from MIASA to consider the report and formulate recommendations on its adoption as an official SADC policy.

The technical committee modified the recommendations in the report significantly and recommended that prior to its submission to the SADC Integrated Committee of Ministers, a joint task team comprising mining and tax officials from member states and MIASA consider the elements dealing with taxation. This recommendation was accepted by an ad hoc meeting of SADC mining ministers.

A joint task team, that included a representative from MIASA, met during May 2006 and formulated recommendations on mining tax policy.

## Provincial affairs

### *The North West Province*

Mining and energy are pillars of the North West Provincial Growth and Development Strategy. In terms of the strategy the provincial government commits itself to work closely with the DME to develop a co-ordinated strategy that will assist in identifying and financing beneficiation opportunities in the mining sector whilst encouraging compliance with the Mining Charter. It will use a triple bottom-line approach to resource utilisation, outsourcing and ensuring that ghost mining towns are self-sustainable beyond mining operations.

The province participates in initiatives, such as the South African Mining Preferential Procurement Forum that aims to warehouse a database and accreditation functions for the industry.

The prime objective is to establish a combined front amongst the mining houses and the province wherein policies relating to black economic empowerment/ historically disadvantaged South African businesses are used as a vehicle for preferential procurement lobbying in favour of growth and development. The province will also explore opportunities for small-scale mining and intensive job creation.

To pursue the mining-related objectives of the strategy the provincial government established the Mining and Energy Working Group whose objectives entail nine strategies:

- Promoting a broad economic stance
- Increasing the levels of investment in public infrastructure
- Increasing levels of investment in the first economy
- Lowering the cost structure in the economy and improving levels of competition
- Enhancing the economic inclusion of all population groups
- Creating a labour force with the necessary skills for economic growth
- Increasing research and development spending
- Ensuring a more equitable geographic spread of economic activity
- Co-ordinating second economy interventions.

The platinum and chromite mines in the Rustenburg area responded by establishing the Western Limb Producers Forum, which represents the majority of the mining industry in the Bojanala Platinum District Municipality and includes representation from the Chamber. The objectives of the Western Limb Producers Forum are, amongst others to:

- identify and address the mutual needs and opportunities of members to ensure sustainable service delivery in support of the effective and efficient operation of the members' operations
- ensure an integrated approach to needs and opportunities identified by members. The Forum endeavours to prioritise the common needs and opportunities for submission to, and consideration by, the Bojanala Municipal Mining Forum
- attend to all ancillary matters including, but not limited to, the development of a common and coherent approach towards water and sanitation services and spatial development
- consider local economic development, i.e., job creation; people development; business and SME development; education, training and

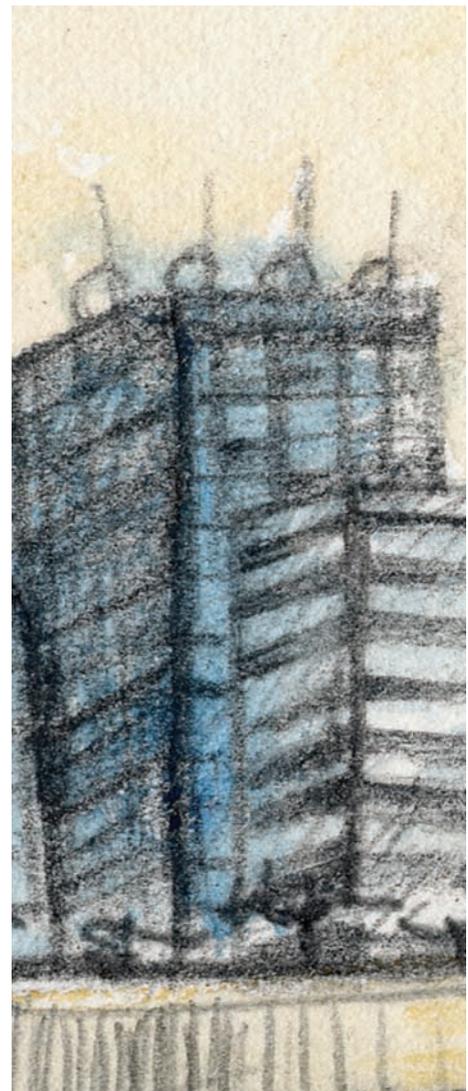
facilities; other municipal services; transport; disaster management; and health and welfare.

The Western Limb Producers Forum largely satisfies the prime objective of the Mining Pillar of the Provincial Growth and Development Strategy.

It also developed a memorandum of understanding to establish and cement a working relationship based on a spirit of co-operation between the public and the private sector with the North West Provincial Government and the municipalities in the Bojanala Platinum District. It was agreed that the forum will actively participate in the activities of the Provincial Growth and Development Strategy Mining and Energy Working Group.

1 Metals Economics Group.

2 Fraser Institute Survey of Mining Companies, 2005/06, published March 2006.



# Environmental policy



# Environmental policy



## Sustainable development

Sustainable development forms the basis of the Chamber's input on environmental policy and legislation. 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.

## Policy, legislation development and engagement

The Chamber's Environmental Adviser's office participated in most initiatives that dealt with environmental issues of concern to the mining industry, and provided expert and specialist input (verbal and written) to many legislation and policy development processes undertaken in the year under review. The main vehicle for considering the mining industry's environmental policy options and generation of draft comments and specialist input is the Chamber's Environmental Policy Committee (EPC).

In addition to engaging various government departments and parliamentary structures, the Chamber continues its liaison with other stakeholders, namely, the environmental NGOs such as the Wildlife and Environment Society of South Africa, and the South African chapter of the World Conservation Union (IUCN – SA). The Chamber enjoys good working relationships with specialist and research organisations such as the Water Institute of Southern Africa, particularly the mine water and the sludge management divisions; the National Association of Clean Air; Coaltech 2020, the surface environment and the mined land research; the Water Research Commission; the National Research Foundation; the Minerals and Energy Education Training Institute; tertiary institutions; and Standards South Africa's International Standards Organisation (ISO) technical committees.

The Chamber continues to engage government and provide specialist input via its participation on task teams, general and steering committees of projects initiated by the DME, the Department of Water Affairs and Forestry (DWAF), the Department of Environmental Affairs and Tourism (DEAT), BUSA's Environment Task Group; and public hearings of the parliamentary portfolio committees on environment and tourism, water affairs and forestry, and minerals and energy.

### ***Environmental management in the mining industry***

The Standing Committee on Environmental Management in the Mining Industry did not meet during the period under review. The committee is under the chairmanship of the DME and addresses issues on the transparent and consistent application of policies throughout the regional DME offices. There is uncertainty about the future of this committee and it is expected that a decision will be taken by the Mining and Minerals Development Board when it reviews existing structures and finalises the

process of establishing its subcommittees.

The Chamber would prefer the committee to be reconstituted because it provides a good platform for interdepartmental liaison between the various government departments and representatives of the mining industry.

In the past, the committee was important as it fostered discussions on the uniform and transparent application of the then regulatory requirements. These ranged from the consistent interpretation of financial provision requirements to strengthening of the co-operation with other government departments.

Had the committee been in operation, current problems surrounding the implementation of the financial provision policy and the uncertainties around environmental impact assessments, would have been discussed in that forum. These two issues are still the subject of bilateral liaison between the Chamber and the DME.

### ***Environmental management guidelines***

In an effort to facilitate better understanding of a successful interpretation of the MPRDA, the DME has produced the *Mine Environmental Management (MEM) guidelines* to be used in conjunction with the Act and Regulations.

The DME, through its Mining through



Sustainable Development Programme, has appointed the CSIR, the Council for Geoscience and Mintek to develop the guidelines, which will be completed by December 2006. The Chamber is involved in the review process to ensure that the mining industry's concerns are taken into account. The MEM guidelines will provide guidance on:

- mine closure
- environmental decision making and implementation for scoping, environmental impact assessments and environmental management programmes
- environmental management programme monitoring and performance assessment.

The Chamber is liaising with the DME on the most urgent matters like financial provision, EIA's and mine closure. Some regional offices have already been visited to discuss the issues of financial provision, but the response has not been favourable. The restructuring process within the DME head office has been hampering finalisation of these issues. As soon as the operation is complete, proper channels will be established to tackle the issues.

### ***NNR/IFR***

The National Nuclear Regulator (NNR) was established by the National Nuclear Regulator Act, No. 47 of 1999 to protect the public, property and environment against nuclear damage. The Regulator is governed and controlled in accordance with the Act by a board of directors and is operated by an executive comprising a chief executive officer and the staff of the NNR. The minister of minerals and energy is the executive authority responsible for the NNR and appoints the board. The functions of the NNR include:

- Nuclear authorisation – the process of granting a written approval to applicants and/or operating organisations to perform nuclear-related activities as detailed in the scope of the authorisation
- Compliance assurance – the regulatory process used 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, for example, 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, co-operate and negotiate with the NNR and advise all stakeholders on radiation matters.

The Chamber, through the IFR, engages with the NNR on mine environmental protection and other policy initiatives.

### **Special case mining**

The radon monitoring in special case mines has been identified as a procedure that requires more research to enable the NNR to compile guidance documents. IFR members that are associated with the special case mines have formed a working group to gather information on this issue. A formal working group, in co-operation with the NNR, will be established within the next few months.

### **Radioactive contaminated sites**

The gold mining members of the Chamber provided R6-million towards the clean up of the 38 contaminated sites identified by the NNR to be contaminated by radioactive material originating mainly from gold mines. Thirty-five of the 38 sites have been decontaminated and clearance certificates have been issued for seven of the sites.

### **National Nuclear Act**

On 28 April 2006, the NNR published the Regulations in Terms of Section 36 of The National Nuclear Regulator Act, No. 47 of 1999, on Safety Standards and Regulatory Practices. The Chamber, through the IFR, commented extensively on the standards and will monitor and communicate to the NNR all mining industry's concerns regarding its implementation.

### **Special radiation projects**

The Water Research Commission commissioned Report 1214: *An assessment of sources, pathways, mechanisms and risks of the current and potential future pollution of water and sediments in gold-mining areas of the Wonderfonteinsspruit Catchment* – on uranium concentrations in the Wonderfonteinsspruit. The outcomes of this report are disputed by both the NNR and the IFR. The former has, as a result, inserted a disclaimer in the report indicating that the report does not give a true and scientific interpretation of the uranium levels in the Wonderfonteinsspruit. The Chamber supports the view of the NNR and encourages further research on the radiation levels.

### ***Department of Environmental Affairs and Tourism***

The Chamber is engaging with the Department of Environmental Affairs and Tourism (DEAT) to establish a platform for its members to raise issue of concern on waste management, air quality and biodiversity conservation and management. Because of specialisation and fragmentation of functions and the autonomy of the provinces, the DEAT's structure does not fit the Chamber's liaison model. The Chamber has followed two mechanisms in trying to engage the department, namely,

- liaison meetings within the Chamber's scope of the dialogue with the IUCN-SA

□ liaison meetings with the environmental impact quality and protection branch have also been pursued, but not much progress has been made owing to changes in personnel. Meetings are arranged on an ad hoc basis.

### **Environmental impact assessments**

The National Environmental Management Act (NEMA), No. 107 of 1998 has been amended and expanded to include a suite of other facets of environmental legislation for which the DEAT is responsible.

The new Environmental Impact Assessment (EIA) regulations, under section 24(5) of the Act have been published in the Government Gazette. The new EIA regulations, which now list mining as one of the activities that has a detrimental impact on the environment and requires an environmental authorisation from the DEAT, have been promulgated and came into effect on 3 July 2006. The mining regulations will only come into effect on 1 April 2007 as the two departments, the DEAT and the DME are still working on administrative systems to streamline processes between the two departments to avoid duplication of requirements.

### **Air quality management**

The National Environmental Management: Air Quality Act came into force on 11 September 2005. The department has given itself two years, to publish the National Air Quality Framework. The framework will outline the management of air quality in South Africa. On 9 June 2006, the department published the Ambient Air Quality Standards, comment on which must be made by 9 September 2006. It is expected that the standards will only be enforceable after the national framework, which will set out margins of tolerance, date by which target is to be achieved and permissible frequencies of exceeding of the standards, has been finalised.

### **Biodiversity and protected areas**

The Chamber and the IUCN-SA have been engaged in discussions since the World Parks Congress in 2003 on the possibility of setting up a national biodiversity and mining dialogue. This dialogue would be similar to the international dialogue taking place between the IUCN and the ICMM.

In light of these discussions a co-ordinating committee was set up to initiate the proposal. The committee consists of individual members from both the Chamber and the IUCN-SA. A steering committee, comprising four members from each sector, i.e. government, conservation and mining, was established.

The Chamber, on behalf of the steering committee of the South African Mining and Biodiversity Forum, has appointed Matrix Consultants to undertake a critical analysis of the state of biodiversity conservation in the South African mining industry and also to recommend a way of adapting the ICMM good practice guidelines for local conditions.

The South African Biodiversity Strategy was launched by the minister of environmental affairs and tourism at a two-day workshop in May 2006. The Chamber's presentation was on the involvement of the mining industry in biodiversity conservation.

### **National Committee for Climate Change**

The purpose of the National Committee on Climate Change is to advise the DEAT on climate change issues, and in particular on the United Nations Framework Convention on Climate Change (NCCC) and the Kyoto Protocol and subsequent implementation mechanisms. The NCCC

meets at least twice a year and comprises members from business, including Chamber members as part of BUSA, all spheres of government, non-governmental institutions, the Development Bank of Southern Africa, and the South African Local Government Authority. The main objective of the committee is to facilitate participatory processes leading to the formulation of a national climate change policy position and a national implementation strategy. It is also a platform for key stakeholders to express their concerns on climate change issues.

In an attempt to update members on issues pertaining to climate change, the Chamber has developed an information pack on climate change and carbon finance to assist members in identifying opportunities for greenhouse gas mitigation using the Clean Development Mechanisms.

### **National cleaner production strategy**

The DEAT, in collaboration with the Norwegian Pollution Control Authority, has initiated a project to develop a cleaner production strategy for South Africa. The project is co-funded by the Norwegian Agency for Development and the DEAT. The Chamber serves on the executive management committee as a sector representative of the mining industry.

The DEAT is aware of the various cleaner production initiatives in which the mining industry is engaged, and the purpose of the strategy is to build on these initiatives by creating a common vision for all involved. A common vision will include the role of stakeholders in issues such as the creation of incentives, incorporation of cleaner production criteria in loan and investment schemes, mechanisms for creating markets for environmentally benign products, including recycled materials and green procurement (sustainable consumption), the introduction of environmental accounting, and mechanisms for promoting product stewardship or extended producer responsibility.

### **Department of Water Affairs and Forestry**

The Chamber and the DWAF have established liaison mechanisms whereby members of the Chamber's EPC and the DWAF's Chief Directorate: Water Use and Conservation (the delegated authority for

the issuing of water use authorisations), discuss matters of mutual concern. The Chamber is particularly concerned about the delay in the processing of water use licence authorisation applications. The DWAF is worried that some of the applications do not have sufficient information to enable the department to make a decision. The liaison mechanism is helpful in identifying bottlenecks.

Chamber members are still not satisfied with the slow progress made in attending to the backlog of applications and with the proposed system of considering applications.

### **Waste discharge charge system**

The DWAF is developing a pricing strategy to provide a framework and detailed proposals to implement a charge system for water use. As part of this strategy, it is creating the waste discharge charge system for waste discharges. The aim of the system is to implement the polluter pays principle and to provide a disincentive for water pollution. The Chamber's EPC reviews proposals from the project team on a quarterly basis or whenever new proposals are presented.

There has been further refinement of the previous proposals on the architecture of the waste discharge charge system and it should be completed towards the end of 2006. Owing to a need for regulatory adjustments, such as amendments to the National Water Act and the promulgation of a Money Bill, other components (other than water resources management charge) of the discharge charge system will not be implemented before 2007. The Chamber's interaction with the project's technical team and the department is ongoing.

### **Integrated resources management and remediation**

A strategy for integrated resource management and for remediation in the mining industry were put on hold because of staff realignment and restructuring in the DWAF.

### **Waste management**

The DWAF is preparing a series of documents dealing with the minimum requirements for the classification and disposal of waste. Consultants have been appointed to develop the documents.

However with the amendment of the Environment Conservation Act, whereby the solid waste management function was transferred from the DWAF to the provincial departments of environment, the management and the co-ordination of the projects became a joint responsibility of the DWAF and the DEAT resulting in various bottlenecks and difficulties.

The process of waste classification is still in the early stages and the consultants are considering the outcomes of the workshop that was looking at identifying types of waste and methods of classification.

### **Benchmarking water use and demand management**

One of the main functions of the Directorate of Water Use Efficiency within the DWAF is to develop appropriate policies and regulations to give effect to water conservation and water demand management. This has led to the directorate initiating a project on the 'Development of a closed-loop water management model incorporating water conservation and water demand management measures in the South African mining industry'. The DWAF will use this project to prepare a guideline document to be used by the mining industry to assist in identifying and assessing the opportunities and constraints in implementing comprehensive water conservation and water demand management measures in the mining environment.

The DWAF made a presentation to the Chamber's EPC and also distributed a questionnaire to identify existing impediments to water use efficiency and to propose various incentives and support systems to overcome them. The aim is to use the findings to develop policies and if necessary regulations that will enhance the implementation of water conservation and water demand management.

### **Liaison with other stakeholders**

#### **Engagement with NGOs**

The Chamber co-ordinated the Consultative Forum on Mining and the Environment (CFME) made up of the Chamber's EPC members, organised labour, environmental NGOs and community-based organisations (CBOs). From the perspective of the mining industry, the purposes of the dialogue were to:

- build professional and personal relationships with the NGO and CBO leaders
- raise issues of mutual concern
- develop a conflict resolution mechanism and facilitate public participation in mining development processes.

In the period under review two key problems were identified. First, the forum was successful in reducing the antagonism between the industry and the NGOs, Unfortunately Chamber members no longer gave the forum the priority it deserved and meeting attendance was poor. Secondly, the dynamic nature of the NGO fraternity impacted negatively on continuity mainly owing to changes in leadership and resource constraints.

During the Chamber's EPC review of the CFME and the role that the Chamber plays in it, the Chamber held a meeting with the Wildlife and Environment Society of Southern Africa. The latter suggested that it would like to play a facilitative role in the CFME and bring together all environmental NGOs.

The Chamber agreed to the society's proposal to establish an

environmental forum to study other economic sectors including mining, residential developments, petrol stations, shopping complexes, etc. The Environmental Forum Northern Areas was established and the Chamber is a member and is represented on the steering committee. The forum has brought together different environmental NGOs to form one strong united voice to deal with all environmental issues. The forum is liaising with local, district, provincial and national government authorities, industry and mining in the northern areas to ensure sustainable development.

The forum also intends to engage, educate and empower the public, authorities, consultants and the media and also to act as an environmental watchdog.

### **Johannesburg's stakeholder forum**

The City of Johannesburg has recognised that environmental management is dynamic and can no longer be left only in the hands of government authorities. This realisation was brought about by the number of environmental awareness workshops held across the city and the fact that the current structure within the city does not allow for effective input into environmental initiatives.

The City of Johannesburg Environmental Stakeholder Forum will be used as a platform for interactive stakeholder participation on the city's policies, strategies and plans affecting the environment. The forum is finalising its terms of reference. The Chamber participates in this forum.

### **Coaltech 2020**

Coaltech 2020 is a collaborative coal mining research programme. The research outcomes focus on developing new technologies and mining methods that will make coal mining more competitive as well as extending the useful life of the existing infrastructure and improving the overall utilisation of the country's coal reserves.

Some of the projects Coaltech 2020 is co-ordinating fall under the categories of surface environment; mined land research; and human and social. The Chamber is involved in the steering committees. The surface environment research projects focus on the following current and future issues:

- ❑ Coal residue management: vegetation/rehabilitation – future projects to study seepage and stockpile inventory
- ❑ Emissions and dust control: characterisation of spontaneous combustion, quantification of greenhouse gasses and greenhouse gas minimisation technologies. Future research to be considered on dust suppression, development of emission standards and legislation; the New Air Quality Act and its implications on mining
- ❑ Utilisation and disposal of ash: Deposition in mined out areas, neutralisation capacity (ash with acid mine drainage), liming substitute and backfill material. Work to be extended through the construction of a large-scale pilot plant
- ❑ Water management and geohydrology including brine management and disposal. Work has been done to establish current and future water requirements in the Olifants region, use of mine water for irrigation, developing economical mine water treatment technology and wetland management. Focus will now be on brine and hydrocarbon management
- ❑ Mine closure and rehabilitation: environmental/closure costing, rehabilitation techniques and development of closure guidelines.

Coaltech 2020 is co-funding the Chamber's rehabilitation guideline project. The guidelines will be ready for publication by November 2006.

### **Water Research Commission**

The Water Research Commission (WRC) operates in terms of the Water Research Act, No. 34 of 197. Its mandate is to support water research and development as well as the building of a sustainable water research capacity. The WRC serves as the country's water-centred knowledge hub, leading the creation, dissemination and application of water-centred knowledge, focusing on water resource management, water-linked ecosystems, water use and waste management and water utilisation in agriculture.

The WRC receives funds from a levy on water use for conducting research on water. Several of the projects are relevant to the mining industry and the Chamber sits on various steering committees for those projects. New projects started in April 2006 are:

- ❑ Reclamation of water from flooded Witwatersrand gold mines by selective dewatering of key underground compartments
- ❑ Arsenate resistance in microbial communities developing in maturing fly ash acid mine drainage solids
- ❑ An investigation of innovative approaches to brine handling
- ❑ The origin of sodium and its applications to water quality prediction in the South African coal mining environment.

### **National Business Initiative**

The National Business Initiative was launched by former President Mandela in 1995. It came into being with the merger of the former Urban Foundation with the Consultative Business Movement. It is a leading business coalition focusing on the broader role of business in sustainable development during the first decade of democracy in South Africa. It is an alliance of forward-thinking South African and overseas companies committed to actualising the vision of a thriving South African society, with a market economy that functions for the benefit of all.

The Chamber co-operates with the initiative on the implementation of the

Energy Efficiency Accord that was signed by some Chamber members during May 2005. An Energy Efficiency Technical Committee oversees the energy efficiency process by developing a monitoring and reporting guideline. Other issues under discussion are climate change and sustainable development.

A meeting and information session with the minister of minerals and energy will take place towards the end of August. New signatories to the accord will have an opportunity to sign the accord in a public forum during this meeting.

### ***National Research Foundation: South African Environmental Observatory Network (SAEON)***

SAEON is a research facility funded by the Department of Science and Technology and managed by the National Research Foundation. The Chamber is a member of the technical steering committee of the research facility.

SAEON was created to produce reliable and accessible environmental information by monitoring and studying long-term environmental change over large spatial scales. It aims to help generations of South Africans understand their natural environment and how it is changing over time and space. SAEON was launched on 21 September 2005 at Hans Merensky Estate in Phalaborwa by the minister of science and technology. The SAEON Ndlovu Node in Phalaborwa will focus on the Savanna Biome in the Lowveld.

The projected scenario of mining activities eventually closing down in Phalaborwa over the next few decades provides a special opportunity to monitor long-term impacts and recovery from such operations, as well as forcing the essential requirement of differentiating human and natural parameters. The Olifants River flowing past Phalaborwa, is heavily impacted by local economic activities and human settlements and has downstream effects in the Kruger National Park. The Olifants River is therefore a prime study site for water – one of SAEON's themes.

### ***Water Institute of Southern Africa***

The Water Institute of Southern Africa (WISA) provides a forum for the exchange

of information and views to improve water resource management in southern Africa. The institute promotes and applies scientific and engineering knowledge and management skills in the planning, design, construction, operation, maintenance, investigation, research and education on the natural and the controlled water cycle. This includes, but is not 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 arms of WISA and sits on the management committee of the mine water division.

### ***Tshwane University of Technology***

The Chamber, in conjunction with Tshwane University of Technology, has taken the lead in making the mining industry aware of the importance of sound environmental management accounting practices as a management tool in strategic environmental management. The Chamber co-hosted a workshop aimed at environmental practitioners and accountants from different industry sectors, to engage in discussions around environmental costs and expenditures. The Environmental Management Accounting Network for Africa was established during the workshop. It will form part of a group of other international regional networks feeding into the United Nations' working group on environmental management accounting. Chamber members attended this workshop and it became apparent that the South African mining industry is one of the leaders in environmental management accounting.

### ***Minerals and Energy Education Training Institute***

The Minerals and Energy Education Training Institute,

- provides training accredited by the University of Witwatersrand and recorded with South African Qualifications Authority (SAQA)
- delivers courses compatible with the National Qualifications Framework
- offers customised, focused events covering issues of concern to industry leaders
- promotes access to courses for historically disadvantaged South Africans.

It aims to contribute to improving the implementation process of the public policies in the minerals and energy sectors by enhancing the stakeholder knowledge on the management of the industry, potential risk factors and compliance requirements with the new legislation.

The Chamber offers courses on mining legislation and environmental impacts of mining from time to time.

### ***Centre for Sustainability in Mining and Industry***

The Centre for Sustainability in Mining and Industry (CSMI) is based at the University of the Witwatersrand and aims to become a centre of excellence in the provision of education, training and research in the fields of safety, health, environment and community impact management. The CSMI was established following the recommendations of the Global Mining Initiative and the Mining, Minerals and Sustainable Development project, both of which stressed the importance of sustainable development in the mining industry.

The importance of these issues was reaffirmed at the 2002 World Summit for Sustainable Development held in Johannesburg. As part of

their commitment to sustainable development, BHP Billiton, Lonmin and AngloGold Ashanti formed a partnership with the School of Mining Engineering at the University of the Witwatersrand and the centre was established on 1 April 2004. The Chamber serves on the Technical Advisory Committee: Environment of the centre.

### ***Centre for Environmental Management***

The Centre for Environmental Management is attached to the School for Environmental Sciences and Development at the North-West University, Potchefstroom Campus. Its core activities are to build capacity and facilitate change by:

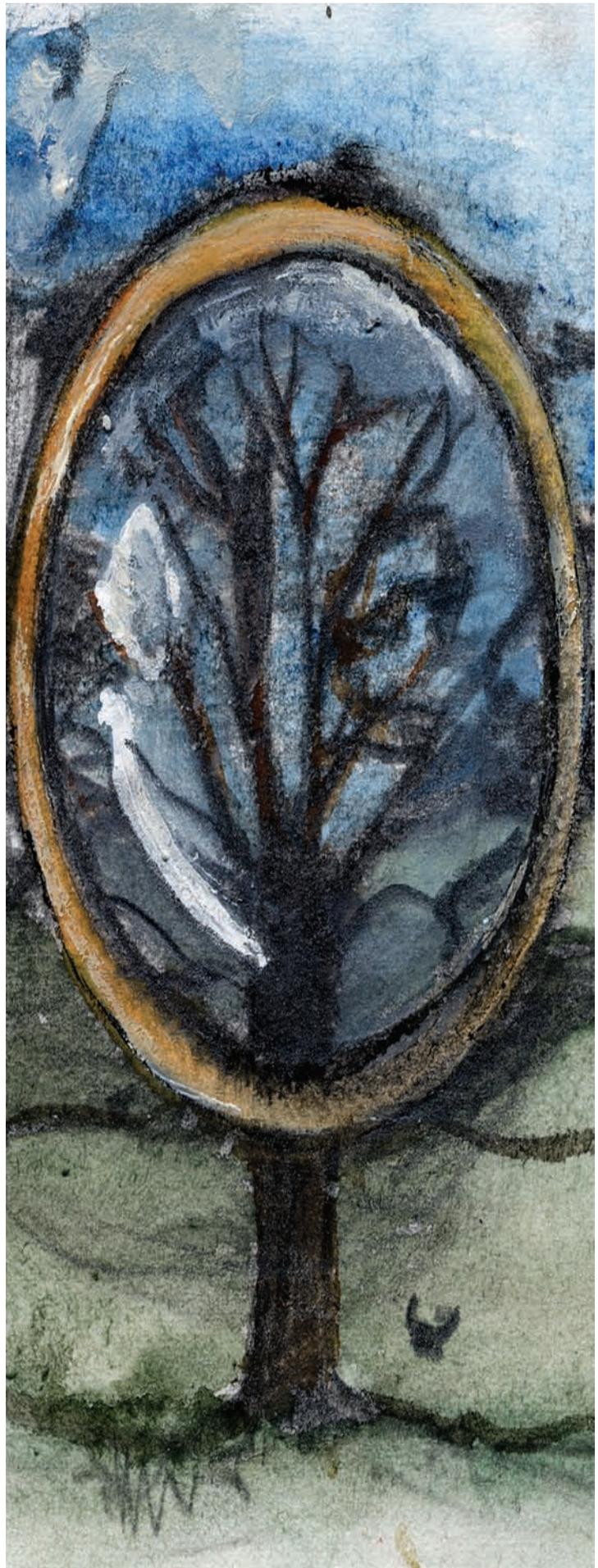
- ❑ conducting applied research in environmental management, as well as sustainable development and related issues, and finding innovative solutions to environmental and sustainability challenges
- ❑ developing and conducting flexible and appropriate training programmes in environmental management and related fields
- ❑ rendering advisory services in environmental management, and governance.

The Chamber presents some of the course modules on environmental management and water management in the mining industry, mine closure and rehabilitation.

### ***ICMM***

The Chamber is one of 27 national and commodity association members of the ICMM. It participates in the Environmental Stewardship Task Force and the Biodiversity Working Group, and is a correspondence member of Integrated Materials Management Task Force and the Community Development Task Force.

The Environmental Stewardship Task Force meets twice a year during the ICMM's annual meetings. It has deliberated on a wide range of issues, including, overseeing the progress of the Biodiversity Working Group and the dialogue with IUCN, the production of various environment related reports such as the Financial Assurance Report, and the development of a best practice website on tailings management. Other issues are rehabilitation and closure, water issues, a cyanide code and the review of International Finance Corporation and World Bank environmental, health and safety guidelines.



# Health



# Health



## ODMWA project

The partnership project between the Chamber of Mines, the NUM and the Department of Health has progressed steadily since discussions started in 2003. The project outline is more clearly defined as:

- ❑ Systems to improve the service component of the Occupational Diseases in Mines and Works Act (ODMWA) that would include:
  - ▶ improving access to benefit medical examinations by strengthening existing occupational health services in government hospitals in the areas where former mineworkers reside
  - ▶ strengthening and improving systems at the Medical Bureau for Occupational Diseases (MBOD) and the Compensation Commissioner on Occupational Diseases (CCOD) such that certification of occupational lung diseases and compensation for occupational lung diseases are expedited timeously
- ❑ Developing sustainable community social and economic development projects in the areas where former mineworkers reside.

Member companies of the Chamber have agreed to fund 10 identified sites for the purpose of benefit medical examinations and community social and economic development projects and will make money available for improving services at the MBOD and the CCOD. The implementation phase of the project should begin in December 2006.

## Mine health and safety targets

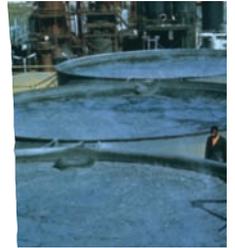
### *Prevention of silicosis*

A *Silicosis Prevention Information Resource* was published in April 2006 to strengthen existing programmes on dust control in the mining industry and to give substance to the milestones developed by the MHSC on silicosis elimination. The resource contains a best practice booklet on silicosis prevention, training CDs and videos and a silicosis prevention information resources CD. The CD contains information on silicosis prevention from around the world. The section on the Chamber includes information on dust control efforts in South African mines from 1902 to 2005. Detailed information is provided on the Chamber's anti-dust campaigns. The Mine Ventilation Society of South Africa (MVS) section includes a listing of dust related papers published in the bulletin/journal of the MVS from 1944 to 2005. A large number of papers from the MVS journal on dust are included as pdf image files. Completed Safety in Mines Research Advisory Committee (SIMRAC) reports on airborne dust and associated respiratory disease are in the SIMRAC section.

The International Labour Organisation has agreed to use this booklet in their training programmes under the Global Programme for the Elimination of Silicosis. The National Institute for Occupational Health (NIOH) has asked to reproduce copies of the resource for distribution in southern Africa.

### *Prevention of noise induced hearing loss*

To facilitate easy access to a large library of information on noise and vibration a *Noise and Vibration Information Resources* CD was published in March 2006. It contains information from around the world on noise and vibration including international and South African standards, legislation and many full text documents such as completed SIMRAC reports. Owing to the popularity of the CD a copy will be distributed by the NIOH as an insert with the September/ October 2006 edition of *Occupational Health Southern Africa*.



The Mine Health and Safety Council (MHSC), through SIMRAC, is facilitating a study to provide baseline data on both noise and dust in the mining industry. The study will include measurements from the industry and will also rely on independent measurements done by the study group.

## Employer 2006 OHS summit

The second annual Employer Summit on the occupational health and safety (OHS) targets and milestones was held in June 2006 and was attended by chief executives, senior executives, management and health and safety personnel. The 2006 summit focused primarily on occupational health. It stressed the need to improve the existing

occupational health data bases to access the information needed to plot progress in meeting the targets and milestones. The summit also stressed that greater efforts are required by the mining industry if they are to meet the OHS targets and milestones.

As a summit follow-up the Chamber established a task group to provide further strategic suggestions on meeting the OHS targets.

## **SIMRAC research**

The MHSC has approved a study to evaluate the impact of research carried out by SIMRAC over the last 10 years. Efforts are also underway to improve the MHSC research process and the quality of the research outputs to better assist the mining industry in improving health and safety. Employers feel that more emphasis should be made of better management of existing research projects and increased emphasis on implementation of research outputs.

## **IOHA 2005 international conference**

The International Occupational Hygiene Association's Sixth International Scientific Conference (IOHA 2005) was held in the Pilanesberg from 19 to 23 September 2005. This was the first IOHA conference held in Africa. The theme of the conference was 'The development of occupational hygiene in Africa and globally'. The conference was hosted by the Southern African Institute for Occupational Hygiene in conjunction with the Mine Ventilation Society of South Africa and IOHA.

The conference attracted around 350 delegates from over 40 countries and included 21 scientific sessions with 150 scientific papers, 14 keynote talks, 32 posters, 13 professional development courses, three workshops, and three industrial visits. The development courses included short sessions with experts from around the world on a number of mining related topics that included airborne pollutant measurement, diesel emission control and dust control.

Two sessions were dedicated to silicosis and delegates were updated on the Global

Programme for the Elimination of Silicosis, the work of the World Health Organisation Network of Collaborating Centres in Occupational Health and IOHA on silicosis, and new and international initiatives.

## **Revised occupational exposure limits for airborne pollutants**

The DME's 2002 listing of occupational exposure limits has been reviewed and compared to existing limits from around the world. Recommendations to update the DME limits have been made for some 100 substances and the revised listing will be published in the fourth quarter of 2006.

The Chamber is represented on the Department of Labour Technical Committee 7 that reviews limits and biological exposure indices under the Hazardous Chemical Substances Regulations.

## **Mining industry HIV programmes: 1989 – 2006**

The South African mining industry has become more practical and outcomes orientated in its approach to HIV and AIDS since it started looking critically at the developing HIV epidemic in 1989. The earlier years focused primarily on prevention programmes and managing opportunistic infections, but since 2002 the industry has increasingly become involved in providing antiretrovirals to workers with AIDS.

The treatment programmes are well established with the following data emerging:

- Between 40 and 45% of all HIV people who currently need treatment are receiving treatment
- After 18 to 24 months on treatment, virological, immunological and weight responses remain appropriate and positive
- Almost 94% of HIV positive people on treatment return to work
- Significant losses to the programme are emerging – about 30 to 35% – mainly patients defaulting, dying or being retrenched. Concerns remain about the number of people defaulting and increasing effort is being put into following-up on these individuals.

Whilst the industry takes pride in the achievements of the comprehensive programmes, it is concerned about partners and children who may not necessarily have access to treatment. Extensive work is being undertaken to address this problem through workplace agreements, discussions on social health insurance and the Health Charter.

The XVI International AIDS Conference held in Toronto recently provided the first opportunity to follow-up on the UN member states' high level meeting on AIDS in June 2006, which ambitiously committed to provide 'universal' access to comprehensive prevention programmes, treatment care and support by 2010.

The conference noted that owing to the interventions of multilateral organisations, the Global Fund and individual governments, access to treatment has improved especially in sub-Saharan Africa. In South Africa through government, employer and civil society programmes almost 250 000 AIDS patients receive antiretrovirals – this still only covers half the people who should be on treatment. Based on extensive research, conference delegates came to the conclusion that:



- ❑ AIDS remains a major crisis for women
- ❑ Children are still being ignored in prevention and treatment programmes
- ❑ Abstinence alone will not work and more effort needs to go into the use of microbicides, circumcisions and discouraging multiple partners in preventing the spread of HIV
- ❑ Community-based programmes and the involvement of civil society are

*Theatre staff prepare a patient for surgery at the Leslie Williams Hospital*

key interventions in the areas of prevention and treatment.

It appears that globally and nationally we are failing in our responses to HIV and AIDS and much more needs to be done.

# Labour policy

&

# labour relations



# Labour policy & labour relations



## Transformation of the mining industry

### Sector Partnership Committee

The Sector Partnership Committee is one of several committees that have been established by the Minerals and Mining Development Board. The committee's function is to:

- advise the board on the sustainable development of mineral resources
- identify the transformation and downscaling consequences of the sector
- develop human resources in consultation with the MQA
- develop a housing and living standard for the mining industry.

A number of these functions manifest in the social and labour plans that mines must submit when applying for the conversion of their mining rights. The Chamber has, through its housing committee, begun to prepare a set of principles and objectives on housing and living standards for consideration by the committee.

The Social Contract for Rapid Housing Delivery of the Department of Housing has taken up much of the time of housing managers on mines, and the relationship between the social contract and the mining standard to be developed by the committee remains amorphous.

### Social and labour plans

In terms of the MPRDA the State is the custodian of all mineral resources. To access such resources applications for mining rights or conversions must be accompanied by a social and labour plan that must contain the following:

- a human resources development programme
- a local economic development programme
- processes pertaining to management of downscaling and retrenchment
- financial provisions to achieve the above.

Although the DME had circulated guidelines to assist mines in preparing their social and labour plans, mines have been struggling to obtain approval of their plans.

To assist the mines, the Chamber arranged a workshop with the DME in August 2006. During the workshop, mines were afforded an opportunity to table their concerns and air their questions about DME requirements. The DME was given an opportunity to respond and to provide clarity and guidance on what must be contained in the plans.

### Rural development

The social and labour plans of the mines as well as corporate social investment strategies are designed to add value and sustainable livelihoods to mining communities and the rural areas from which mining labour is drawn. In cases where collaboration and co-ordination will benefit most, the Chamber liaises and provides assistance to Teba Development. The initiatives emerging from this collaboration are mostly credited under the MPRDA and meet the obligations of the social and labour plans of the mines.



While many individual mine projects are successful, the industry is moving towards ever greater integration of projects. Agricultural development has been a prime focus and many initiatives are supported by the mines through Teba Development. Teba Development's Home Based Care Service was designed in response to the incidence of ill-health retirement amongst mineworkers, particularly as a result of HIV/AIDS. The programme has accelerated enormously and now covers the home regions of almost 200 000 mineworkers in the Eastern Cape, northern KwaZulu-Natal, the Free State, Lesotho and Gaza province in Mozambique.

In addition, the Food for Assets Programme financed by offshore donor agencies trains 4 800 households in sustainable crop production and homestead gardens in Lesotho. Water and irrigation projects focus on training people in borehole maintenance in the rural areas in South Africa and neighbouring states.

Large scale, individual agricultural ventures by some mines are directed towards the establishment of alternative enterprises that can offer future employment in regions where mining is downscaling and in labour sending areas. The Chamber presides over two main agricultural development programmes in Lesotho and the Eastern Cape managed by Teba Development on its behalf, which have been highly successful. The programmes have reached over 12 000 farmers.

As an adjunct to a major new initiative to reach, test and treat ex-mineworkers suffering from occupational diseases such as silicosis and to facilitate statutory compensation where applicable, a number of new social development projects are to be launched in areas where ex-mineworkers are concentrated. These may involve entrepreneurial opportunities, training, artisan skills, construction projects, agricultural extension. They will commence as soon as final agreement is reached with the Department of Health and the other stakeholders.

## **Collective bargaining and labour relations**

### **Wage increases**

The Chamber conducts wage negotiations on behalf of its gold and coal members. In 2005, it concluded two-year agreements for these two commodities.

The two-year wage agreement covering gold members stipulated that wages would be increased from 1 July 2006 with the average year-on-year CPIX increase over the six-month period October 2005 to March 2006, plus 1%, provided that the increase would not be less than 6% for Category 3-8 employees and 5.5% for Miners and Artisans and Officials. In the event, the CPIX average as calculated in terms of the agreement amounted to 4.1%.

As the calculated increases based on the averages came to less than the various guaranteed increases, the guaranteed increases applied.

The two-year wage agreement concluded in 2005 for coal covered Anglo Coal, Delmas Coal, Eyesizwe Coal, certain of the operations of Ingwe Collieries, Kangra Coal, Springlake Colliery and Xstrata Coal SA. The formula in the agreement for calculating the wage increase from June 2006 for most Officials and from July 2006 for other employees, specified an increase equal to the average monthly CPIX increase from March 2006 to May 2006 plus 1%, with a guaranteed increase of 6% (Delmas and Springlake) and 7% (other collieries). The inflation calculation amounted to 3.9%, which, together with the additional 1% stipulated in the agreement, amounted to a calculated wage increase of 4.9%. As the calculated wage increase came to less than the guaranteed minimum increases stipulated in the agreement, the guaranteed increases were applicable, namely 6% for employees of Springlake Colliery and Delmas Coal (based on minimum/actual wage rates and on all-inclusive packages) and 7% for all other employees covered by the agreement.

### **Industry retirement and risk benefits**

#### **Freedom of choice of retirement**

In the 2005 – 2007 gold and coal wage agreements, the parties agreed to a framework in terms of which employees would be able to exercise freedom of choice of funds. Thus, details were agreed upon such that freedom of choice would apply across all three of the recognition units and that it would be limited to the industry's three main funds, i.e. Mine Employees Pension Fund (MEPF), Mineworkers Provident Fund (MPF) and Sentinel.

By agreement, freedom of choice was implemented from 1 November 2005 in respect of employees who had previously been compelled to change funds upon promotion and also for new or newly promoted employees. An implementation date of 1 January 2006 was set for other employees. The deadline for exercising a decision to change funds was set at 31 December 2006, although in future all newly appointed employees as well as employees who get promoted from one recognition unit to another will be given a choice of funds at that time.

#### **Funeral cover for Officials and Miners and Artisans**

In terms of the 2005 – 2007 gold wage agreement, parties agreed to provide funeral cover to employees in the Miners and Artisans and Officials recognition units. The cover provides for a payment of R20 000 to an employee's nominated beneficiary upon the death of the employee concerned and R10 000 upon the death of the insured employee's nominated spouse.

#### **Increases in MPF contributions**

Further to the increases in retirement fund contributions for Category 3-8 employees that came into effect in July 2005, both the gold and the coal 2005 – 2007 wage agreements provided for further increases with effect from July 2006. Thus in the case of gold mining employees, employers contributed an additional 0.5% of monthly wages towards risk benefits from that date, while employees contributed an additional 0.5% towards retirement benefits. In the case of coal employers – other than Ingwe Collieries – an additional 0.5% was paid from July 2006 towards retirement benefits. The contributions payable by Ingwe Collieries in



respect of the membership of B and C band employees of the MPF and the RandCoal Provident Fund were increased by 1.5% from July 2006.

### **Ring-fencing of retirement contributions and separate coal and gold risk benefit arrangements in MPF**

Both the gold and the coal 2005 – 2007 wage agreements contained a provision that the trustees of the MPF be requested to consider a rule amendment to state explicitly that retirement contributions should not be used for risk benefits under any circumstances, in other words a ring-fencing of retirement contributions. In addition, in the coal agreement the parties had agreed that the trustees be requested to put in place coal-specific arrangements for the provision of the risk benefits provided by the MPF.

The MPF trustees declined to bring about an amendment to ring-fence retirement contributions in the manner envisaged and, by the end of the year under review, had not made a decision on coal-specific risk benefit arrangements. The Chamber has requested a written explanation for the decision not to implement retirement contribution ring-fencing

*Cosatu, joined by the NUM, marched on the Chamber in support of job creation*

and has urged the trustees to take a decision about putting in place coal-specific risk benefit arrangements.

### **Gold retirement fund summit**

The gold 2005 – 2007 wage agreement provided for a summit to be held before the middle of 2006 to develop long-term solutions for the sustainability of superannuation benefits in the context of the current risk profiles and to determine the appropriateness of existing benefit and contribution structures.

The summit was held on 29 June 2006. Principal officers from the three industry

retirement and provident funds as well as the head of pensions (Prudential Supervision) at the Financial Services Board attended the summit. The keynote speakers dealt with topics such as policy issues in considering pension reform in South Africa, international trends applicable to South Africa and the management of risk benefits in mining industry retirement funds. During the commission sessions, participants identified issues for consideration when determining the appropriate contribution and benefit structures. It was decided that a task team would be established to identify the various issues further and develop proposals on contribution and benefit structures for consideration by experts.

## Housing

Various stakeholders, including the Chamber, signed a social contract under the auspices of the Department of Housing in September 2005 for rapid housing delivery. The aim of the contract is to fast-track the provision of formal housing within settlements for the poor and for those who are able to afford rent or mortgages. In terms of the contract, the mining industry has committed itself to:

- ❑ promote the sustainable development approach of the Mining Charter including support for local entrepreneurs involved in housing
- ❑ interact at mine and/or regional level and with municipalities to ensure that there is alignment and integration in development of towns and housing units
- ❑ improve the standard of accommodation for mineworkers, including the upgrading and conversion of hostels into family units and other types of housing units in an economically feasible manner
- ❑ promote home ownership and other forms of tenure for all employees
- ❑ develop guidelines at mine level that regulate the utilisation of loaned monies for purposes of purchasing or building houses, and that encourages employees to use housing allowances and housing loans for accommodation purposes
- ❑ make agreed land available for housing development and facilitate access to mortgage loans and to improve access to affordable housing options.

The first meeting of signatories of the social contract took place on 15 March

2006 to develop an action plan and formulate an appropriate monitoring mechanism. Several task teams were established to deal with issues such as development planning, supply chain, inclusionary housing, consumer education and capacity building. A second meeting has been scheduled for September 2006.

## Employment equity

### Women in mining

The Coaltech 2020 Collaborative Research commissioned the CSIR to study the human and social issues influencing the incorporation of women into the mining workforce.

The CSIR released its report in February 2006. The report made a number of recommendations, including the following:

- ❑ Strategic planning: employers must adopt inclusive strategic gender repositioning of the organisation to ensure commitment and acceptance by all employees
- ❑ Physiological challenges: it will be necessary to determine the appropriate maximum lifting capacity for women
- ❑ Psycho-social issues: female employees should be given an opportunity to execute their tasks independently and without assistance from their male colleagues
- ❑ Personal protective equipment: suitable protective clothing should be allocated to female employees
- ❑ Physical infrastructure: the installation of permanent female change-rooms, located within reasonable proximity to work areas, should be expedited
- ❑ Pregnancy, maternity leave and breastfeeding: employment contracts should require that female employees report pregnancy as soon as they become aware that they are pregnant.

In March 2006, the Chamber hosted a workshop on women in mining. Various issues affecting women in the workplace were identified by the delegates. The Chamber was requested to conduct a survey among its members to track progress, specifically in terms of Mining Charter obligations and commitments made in the gold and coal 2003 Category 3-8 wage agreements and also to identify problems and possible solutions. The Chamber circulated a questionnaire to its members on these issues and is awaiting response.

*The Chamber hosted a dinner for Gwede Mantashe ex-general secretary of the NUM on the occasion of his retirement. From l to r: Zoli Diliza, chief executive of the Chamber, Gwede Mantashe and Lazarus Zim, president of the Chamber*



## Care for disabled employees

The gold and coal 2003 – 2005 Category 3-8 wage agreements provide that a joint task team will be formed to learn from best practices and to explore avenues for improved co-operation in caring for disabled workers. An employer working party met in April 2006. Gold members reported that substantial progress had been made with their various projects. Coal members indicated that they have a relatively small number of disabled employees and that these employees have all been gainfully employed in their operations.

## Bargaining council

The Chamber and the NUM agreed during the gold and coal 2003 – 2005 Category 3-8 wage agreements that they would appoint a team of experts to conduct an investigation into an appropriate bargaining dispensation for gold and coal. The joint investigation was concluded in July 2004 and the report was finalised in October 2004.

In March 2005, the Chamber and the NUM, the United Association of South Africa (UASA) and Solidarity held an industry conference on current and future collective bargaining in the industry. At the conclusion of the conference the parties agreed to establish a joint working team to develop the founding principles that would apply if a council were to be established.

The Chamber has identified the following issues to be addressed before it would be in a position to agree to the establishment of a council:

- The scope of a council
- Recognition criteria for council membership for unions and for employer organisations such as the Chamber
- Levels of bargaining and the topics that would be negotiated at the various levels
- The definition of small and marginal mines and how best to protect their interests
- How contractors would be dealt with in a council
- The extension of council agreements to non-parties
- The process for exemption from council agreements
- The dispute-resolution function of a council
- The appointment of an inspectorate to monitor and enforce compliance with council agreements by non-parties of the council.



Since its establishment, the joint working team has met on a number of occasions and progress has been made on some of the above issues.

### ***Cosatu protest action***

In May 2006, Cosatu notified Nedlac that it would embark upon a further round of protest action against the retail industry. BUSA, at the behest of the Chamber, addressed a letter to Nedlac in which it was pointed out that, as the issues contained in the memorandum that Cosatu handed to organised business during the protest action had never been raised at Nedlac and had thus not been subject to consideration by all the parties as prescribed by law, the protest action of 18 May had, strictly speaking, been unprotected. In addition, BUSA expressed reservations about the lack of proportionality between the aim of the protest action and the harm that it caused.

The facts indicated that only 1% of the employees in the retail industry participated in the protest action. On the other hand, 50% of the NUM's members in the mining industry participated and the stay-away cost the mining industry R300-million in lost revenue and R70-million in lost wages. It further indicated that the proportionality issue became even more skewed when one considers that the mining industry is far removed from the retail industry and can exercise virtually no influence on that industry's employers to engage Cosatu.

Following rumours that Cosatu might embark upon further protest action in June 2006, the Chamber's Executive Council briefed senior office bearers to discuss the issue of the NUM's participation in such protest action with union officials with a view to limiting financial losses. The matter was raised with NUM office bearers. However, it was not discussed in any depth as the NUM indicated that it was unaware of further protest action planned by Cosatu.

## **Other interaction**

### ***Business Unity South Africa***

#### **Standing Committee for Social Policy**

Chamber officials represent the mining industry on the Standing Committee for

Social Policy where they have played a key role in task teams established to develop positions on labour market issues, such as atypical work, the labour law review in terms of the Accelerated Shared Growth Initiative for South Africa (ASGISA), government's proposals for amendments to its national social plan and employment equity objectives in terms of the Growth and Development Summit Agreement.

#### **Standing Committee for Transformation Policy**

Chamber officials represent the mining industry on the Standing Committee for Transformation Policy. The committee spearheaded the process of collating organised business' response on the second phase codes of good practice in term of the Broad-based Black Economic Empowerment Act. The committee also drafted BUSA's position documents on Mining Charter facilitation and fronting. These documents were handed to government at the BUSA Presidential Working Group meeting held in July 2006.

### ***Nedlac's Labour Market Chamber***

A Chamber official is the business convener in the Labour Market Chamber of Nedlac, which deals with a number of labour market issues critical to business.

#### **Future of the labour courts**

Subsequent to the tabling of the Superior Courts Bill in 2003, the Department of Justice and Constitutional Development entered into negotiations on the Bill with Nedlac. The department informed Nedlac that government was no longer in favour of specialist courts such as the labour courts as they are too expensive. Nedlac agreed to the consolidation of the labour courts into the High Court and the labour appeal courts into the Supreme Court of Appeal.

The department introduced further amendments to the Bill in 2005. One of the most important of which was the creation of a number of specialist courts, called special divisions of the High Court.

Nedlac insisted that the department retain the labour court as a specialist court. Subsequent to interactions by the social partners with the Deputy President (in her capacity as the head of government business) the Bill was withdrawn from the Parliamentary Portfolio Committee: Justice and Constitutional Development's agenda. The portfolio committee has since invited further public comment on the Bill. The Chamber drafted a commentary on the Bill on behalf of BUSA and Nedlac.

#### **Investigation into atypical work**

Following a demand by organised labour at one of the Presidential Labour Working Group meetings in 2004 for the examination of atypical work and abuses by employers, the Department of Labour commissioned research into the matter.

Late in 2004, the department tabled a summary of the various research reports in Nedlac's Labour Market Chamber and requested proposals from the social partners. Business submitted its proposals in January 2005 whereas labour only submitted its proposals in February 2006. Nedlac created a one-a-side task team to consider the proposals by the social partners. A Chamber representative represents business on the task team.

## **ASGISA's labour law review**

The State asked a number of academics to research the impact of current labour legislation on small businesses and job creation. Government arranged two roundtable discussions under the auspices of the minister of labour to consider the research and to afford the social partners an opportunity to table their suggestions to assist small business and to create jobs. At the end of the second roundtable discussion, the minister stated that he wished to conduct bilateral meetings with business, labour and the community. The BUSA task team met the minister on 24 August 2006. Although business' issues were primarily focused on small business, it also tabled a number of issues that have a wider ambit. Some of the issues tabled were:

- the exclusion of dismissal laws, other than those that regulate automatically unfair dismissal, for a period of 12 months from date of employment
- that the Labour Relations Act must state unequivocally that there is no need for a formal disciplinary hearing in a misconduct case, that legal representation is not permitted during the workplace enquiry and that a lesser amount of compensation should be awarded for procedural unfairness as opposed to substantive unfairness
- that the minister's discretion to extend bargaining council agreements should be limited in its application to protecting small business rights
- that councils should develop criteria for their exemptions bodies to decide whether or not to grant exemption from council agreements
- that councils should be free to determine whether they would bargain actual or only minimum wages
- that the status quo for collective bargaining be maintained so that it remains voluntary
- discouragement of 'bad' referrals to the Commission for Conciliation Mediation and Arbitration (CCMA) through more rigorous implementation of cost orders
- that the temporary employment industry (labour brokers) should self-regulate, possibly through the Confederation of Associations in the Private Employment Sector; which recently became a member of BUSA.

Once the minister has completed his bilateral talks with the social partners, the areas of agreement and of disagreement between them will be determined. The social partners will then resume their discussions.

## **Protest Action Committee**

The Protest Action Committee, a sub-committee of Nedlac, considers all notices of intended protest action by unions on socio-economic issues.

## **Employment Conditions Commission**

The main function of the Employment Conditions Commission is to conduct investigations and make recommendations on conditions of employment and minimum wages for workers in sectors that are not organised. The minister then prescribes minimum terms and conditions of employment through sectoral determinations.

In the past year the commission investigated both the retail and agricultural industries. It has also recently considered the review of wages in the private security sector.

## **Commission for Employment Equity**

In May 2006, the minister of labour published amendments to the

Regulations issued in terms of the Employment Equity Act under Government Notice No. R480 in the Government Gazette. The amendments are largely aimed at addressing so-called unintended consequences flowing from the previous set of regulations, as well as other issues that have come to the fore. Certain corrections to these new regulations were made in August 2006.

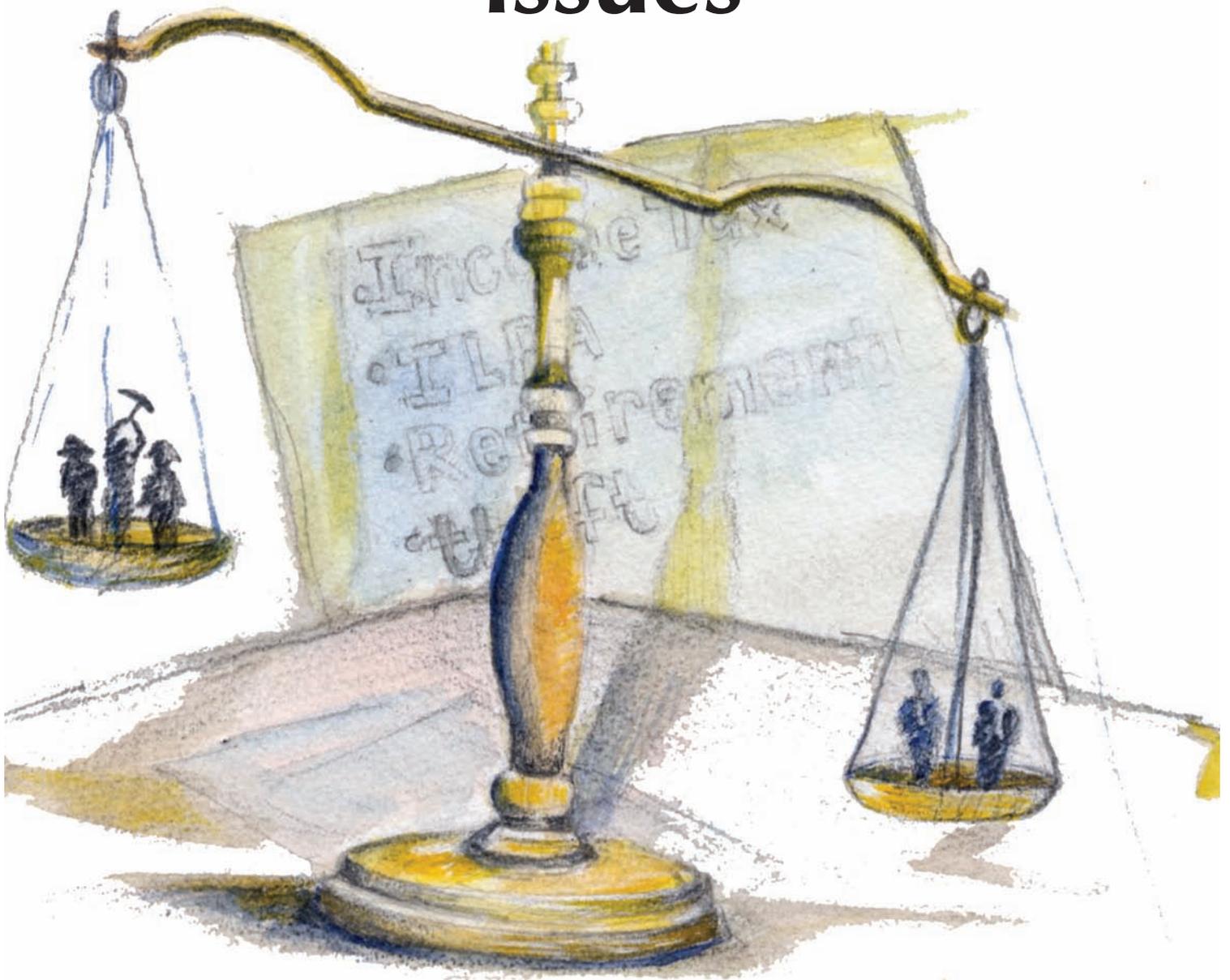
One of the most important amendments is the restriction of the definition of designated groups (i.e. black people, women and people with disabilities) to citizens by birth or descent; or citizens by naturalisation before the commencement date of the Constitution of 1993; or persons who became citizens after the commencement date of the Constitution of 1993 but who, were it not for Apartheid policies, would have been entitled to acquire citizenship by naturalisation prior to that date.

Practically speaking, this 'narrowing' of the definition means that black people from other African countries, even if they now become South African citizens through naturalisation, cannot be reflected in employment equity reports as designated persons in the employ of the employer. This might pose a serious problem for the mining industry, which still employs large numbers of foreign workers from neighbouring countries in terms of inter-governmental agreements.

## **Assistance to Chamber members**

In addition to the direct services provided to gold and coal members for whom the Chamber conducts collective bargaining, the Industrial Relations Services department of the Chamber also assisted and advised all members with general queries and requests for information. For instance, members were alerted to new legislation and regulations in the labour field and provided with information on comparative employment conditions and labour market developments in other industries and nationally. This was done mainly through circulars, monthly meetings of its Labour Policy Committee, dedicated task teams and its quarterly *Labour Policy Digest*.

# Legal issues



# Legal issues

## Review of South Africa's mining tax system

The Chamber's 2004/2005 annual report made mention of announcements in the Medium Term Budget Policy Statement of October 2004 and the Budget Review of February 2005 that the current mining tax dispensation was under review within the National Treasury. During the course of the year under review the Chamber continued its examination of various mining income tax topics in preparation for discussions that might arise from such a review.

By year's end, no recommendations for changes to the system of mining taxation had been issued by government.

## Draft MPRDA Amendment Bill, 2005

Recent annual reports mentioned the concerns that the Chamber had raised with the DME about various provisions in the MPRDA that require improvement. These concerns were raised in the light of an analysis of the MPRDA prepared for the Chamber by a team of senior counsel. As reported in 2004/2005, the DME was preparing a bill that would address some of these concerns.

In General Notice No. 1666 published in Government Gazette No. 27987 of 31 August 2005, the DME announced that the minister of minerals and energy intended to introduce into Parliament during 2005 a bill to amend the MPRDA. A draft of the proposed bill was attached to the notice. The notice also announced that written comments on the draft bill should be addressed to the DME and be received by no later than 23 September 2005.

With some exceptions, the draft bill was concerned with amendments and corrections of a largely technical nature. Only some of the criticisms of the MPRDA previously raised by the Chamber in the light of senior counsels' analysis were addressed in the draft bill.

On 22 September 2005, following an examination of the draft bill within the Mining Titles Committee, the Chamber submitted detailed comments to the DME. No further version of the draft bill had yet been issued or introduced in Parliament.

## SARS' discussion paper on tax avoidance

During November 2005 the South African Revenue Service (SARS) invited comments on a discussion paper in which proposals were made for amendments to the Income Tax Act, 1962 to combat abusive tax avoidance schemes.

Following consideration of the discussion paper within the Taxation

Committee, the Chamber submitted to BUSA a memorandum on the discussion paper for inclusion in a BUSA submission to South African Revenue Service (SARS) on behalf of organised business. BUSA submitted a memorandum to SARS in February 2006 that harmonised and covered concisely the range of views and points raised by BUSA's members – among them the Chamber – on the discussion paper.

## Precious Metals Act and Regulations

A Precious Metals and Diamonds General Amendment Bill was published in April 2004. It was revised during the second half of 2004 to take account of comments received from various parties, including the Chamber. The bill was introduced into Parliament during January 2005, but around the middle of 2005 it was decided that it should be split into two bills: one dealing with precious metals and the other with diamonds.

The revised Precious Metals Bill was introduced into Parliament on 7 September 2005. It differed fundamentally from the bills published during April 2004 and the one introduced into Parliament in January 2005. Various parties, including the Chamber, made presentations on the bill to Parliament in October 2005. The Chamber welcomed and supported the provisions





aimed at discouraging illegal activities and suggested that further improvements to them should be made.

Although the Chamber supports the aims of the bill to provide greater downstream beneficiation opportunities and assist towards government's implementation of its broad-based socio-economic empowerment programme, it believes that the provisions in the bill aimed at implementing these aims are problematic and will not achieve the stated aims. The bill was passed by Parliament in December 2005 without major changes.

The Precious Metals Act will come into force on a date to be advised in the Government Gazette.

Before the Precious Metals Act can come into force, a precious metals and diamonds regulator must be established and become functional, and the regulations necessary for the implementation of the Act must be finalised and brought into operation. To this end the Chamber arranged for two workshops to be held with the DME during March 2006, before the department commenced drafting the regulations, to appraise the DME of the various products produced and services rendered by the gold and platinum industries, the various commercial arrangements relating thereto and on uncertainties and concerns surrounding the Precious Metals Act.

Draft regulations under the Precious Metals Act were published in the Government Gazette of 30 June 2006 and interested parties were requested to provide written submissions by 31 July. The Chamber submitted written comments by the deadline, and followed those up with a meeting with the DME to discuss its concerns. At the meeting it was agreed that the Chamber would provide the DME with additional documentation explaining the commercial arrangements relating to the beneficiation and import and export of precious metals, which were the main areas of concern for the industry regarding the draft regulations.

It is hoped that further discussions with the DME will be held before the regulations are finalised.

## Regulations under the Explosives Act

Draft regulations were published in 2005 regulating various issues relating to explosives, including the delivery of explosives to mines. It was unclear which of the regulations would apply to the mining industry and to what extent.

The Chamber held meetings with the South African Police Services' (SAPS) legal advisers to discuss these concerns. The SAPS' legal advisers undertook to amend the draft regulations to provide clarity on this matter. They also undertook to provide the Chamber with a further opportunity to comment on the revised draft regulations before they are published.

## Product theft

The theft of precious metals and copper from mines continues to be a major problem in the mining industry.

In addition to various initiatives at mine and regional level, the industry, through the Chamber and its members:

- participates in the activities of the national precious metals forum and regional precious metals forums established between the mining

industry and the South African Police Service (SAPS) to address the problem of product theft

- ❑ participates in the activities of the National Non-Ferrous Theft Combating Committee – commonly known as the national forum on copper theft
- ❑ assists the SAPS' Forensic Science Laboratory to establish and maintain a fingerprinting database for precious metals
- ❑ commissioned the Institute for Security Studies to undertake an independent study on the nature and extent of the problem of product theft at mines. The report from the institute was finalised in August 2006
- ❑ participates in the crime combating forum co-ordinated by Business

Against Crime

- ❑ participates in the activities of the Security Industry Alliance, an initiative in terms of which all the major role players in the security industry have formed an alliance to create cohesion in, and a united voice for, the security industry
- ❑ participates, through BUSA, in the activities of the national anti-corruption forum.



# Safety & sustainable development



# Safety & sustainable development



## Safety

Safety continues to be a major challenge for the mining industry. In 2005, the chief executives of 22 companies made a commitment to the targets and 10-year milestones that were agreed to during the 2003 Mine Health and Safety Summit.

### Industry Target

Zero rate of fatalities and injuries

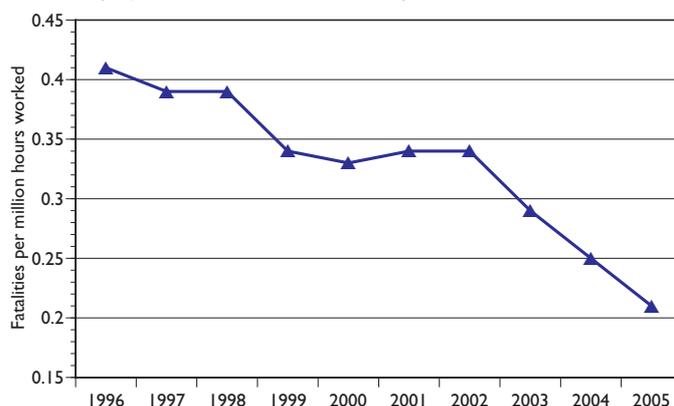
### Milestones

- ❑ In the gold sector: By 2013 achieve safety performance levels equivalent to current international benchmarks for underground metalliferous mines, at the least
- ❑ In the platinum, coal and other sectors: By 2013 achieve constant and continuous improvement equivalent to current international benchmarks, at the least.

Through an evaluation of the mine safety performance in Australia, Canada and the United States, the Chamber converted the 10-year milestones into a 20% annual improvement objective. This made the milestones specific and measurable on an annual basis. The Chamber evaluated the safety performance of the industry using the internationally accepted indicator of fatality frequency rate i.e. fatalities per million hours worked.

The fatality frequency rate in 2005 improved 16% from 0.25 to 0.21. This was not only the lowest fatality frequency rate ever recorded, but also the best annual improvement that the industry has achieved.

Figure 1: Industry's performance over the last 10 years



However, the 16% improvement is still below the 20% annual improvement objective.

### Commodity performance

The commodity fatality frequency rate performance since 2003 is summarised in Table 2 together with the estimated 10-year milestones. The shaded blocks indicate where the annual targets have not been achieved.

The table highlights that the gold mines continue to face the biggest challenge. Whilst gold has been driving the performance improvement in mining for many years, this was not the case in 2005. The non-gold sector made a major advance in safety during the past year.

Figure 2 shows the gold and non-gold performance against their 20% improvement objective. Unlike the gold sector, the non-gold sector is still on target to meet the 10-year milestones.

### Serious accidents

Figure 4 illustrates the number of accidents resulting in more than four fatalities and the number of people who lost their lives in these accidents. Two such accidents occurred in 2005:

- ❑ Mine: Harmony Gold Mine, Virginia  
Date of Accident: 07/03/2005  
Number of fatalities: 4

Table 1 Fatalities for the various commodities from 1996 to 2005

| Commodity  | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 | 1998 | 1997 | 1996 |
|------------|------|------|------|------|------|------|------|------|------|------|
| Gold       | 104  | 108  | 146  | 172  | 182  | 173  | 207  | 252  | 277  | 315  |
| Platinum   | 49   | 65   | 60   | 53   | 49   | 46   | 39   | 44   | 53   | 45   |
| Coal       | 16   | 20   | 22   | 20   | 19   | 31   | 28   | 42   | 40   | 45   |
| Chrome     | 6    | 16   | 4    | 4    | 2    | 2    | 1    | 2    | 10   | 6    |
| Diamonds   | 7    | 15   | 17   | 26   | 11   | 12   | 7    | 2    | 10   | 29   |
| Copper     | 0    | 2    | 2    | 1    | 2    | 2    | 6    | 5    | 3    | 3    |
| Clay       | 4    | 3    | 2    | 2    | 5    | 5    | 5    | 5    | 2    | 2    |
| Iron ore   | 2    | 1    | 1    | 2    | 2    | 1    | 4    | 3    | 7    | 0    |
| Granite DS | 0    | 2    | 0    | 1    | 2    | 3    | 2    | 0    | 2    | 2    |
| Limestone  | 5    | 3    | 0    | 1    | 5    | 2    | 2    | 2    | 0    | 0    |
| Other      | 9    | 11   | 18   | 8    | 9    | 8    | 8    | 9    | 11   | 15   |
| Total      | 202  | 246  | 270  | 290  | 288  | 285  | 309  | 366  | 415  | 463  |

Table 2 Fatalities for the various commodities

| Sector              | 2003 | 2004<br>(% yr on yr improvement) | 2005<br>(% yr on yr improvement) | 2013          |
|---------------------|------|----------------------------------|----------------------------------|---------------|
| Gold – actual       | 0.36 | 0.28 (22)                        | 0.30 (-7)                        | not available |
| – target            |      | 0.29                             | 0.23                             | 0.05          |
| Platinum – actual   | 0.24 | 0.12 (13)                        | 0.15 (29)                        | not available |
| – target            |      | 0.19                             | 0.15                             | 0.03          |
| Coal – actual       | 0.20 | 0.19 (5)                         | 0.13 (32)                        | not available |
| – target            |      | 0.16                             | 0.13                             | 0.03          |
| Diamonds – actual   | 0.43 | 0.37 (14)                        | 0.16 (57)                        | not available |
| – target            |      | 0.34                             | 0.28                             | 0.03          |
| Copper – actual     | 0.20 | 0.22 (-10)                       | 0 (100)                          | not available |
| – target            |      | 0.16                             | 0.13                             | 0.03          |
| Chrome – actual     | 0.16 | 1.10 (-588)                      | 0.35 (68)                        | not available |
| – target            |      | 0.13                             | 0.10                             | 0.03          |
| Iron ore – actual   | 0.07 | 0.06 (14)                        | 0.12 (-100)                      | not available |
| – target            |      | 0.06                             | 0.04                             | 0.03          |
| Granite DS – actual | 0    | 0.37 (?)                         | 0 (100)                          | not available |
| – target            |      | 0                                | 0                                | 0.03          |
| Limestone – actual  | 0    | 0.40 (?)                         | 0.5 (-25)                        | not available |
| – target            |      | 0                                | 0                                | 0.03          |
| Clay – actual       | 0    | 0.13 (?)                         | 0.14 (-8)                        | not available |
| – target            |      | 0                                | 0                                | 0.03          |
| Other – actual      | 0.35 | 0.21 (40)                        | 0.15 (29)                        | not available |
| – target            |      | 0.28                             | 0.22                             | 0.03          |
| Non-gold – actual   | 0.23 | 0.24 (-10)                       | 0.15 (38)                        | not available |
| – target            |      | 0.18                             | 0.15                             | 0.03          |
| Total – actual      | 0.29 | 0.25 (14)                        | 0.21 (16)                        | not available |
| – target            |      | 0.23                             | 0.19                             | 0.03          |

Note: All targets are based on 20% year-on-year improvements

☐ Mine: Driefontein Consolidated Gold Mine

Date of Accident: 10/05/2005

Number of fatalities: 5

The numbers of accidents equalled those of the previous year, but the number of fatalities dropped. The latter is comparable with the lowest ever number recorded in 1998.

From the above, it can be concluded that major improvements have been achieved, but that more is required to achieve the targets and milestones to which the industry is committed.

**Performance improvement initiatives**

Figure 2: Sector-based Fatality Frequency Rate

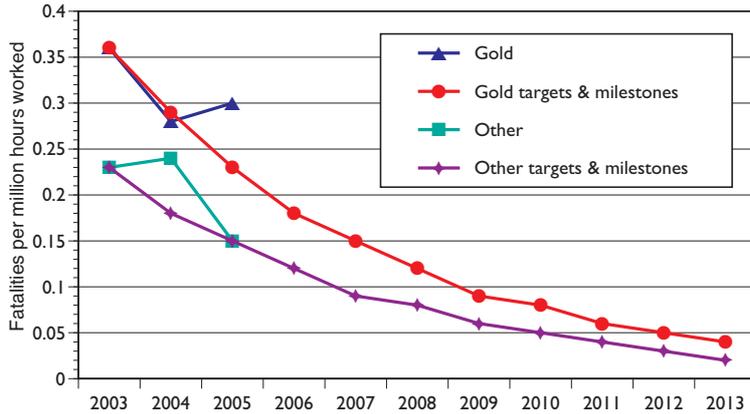


Figure 3: Percentages of fatalities attributable to various causes

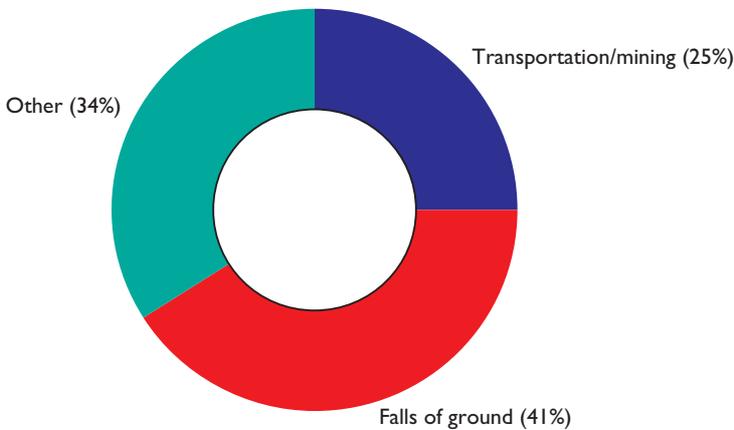
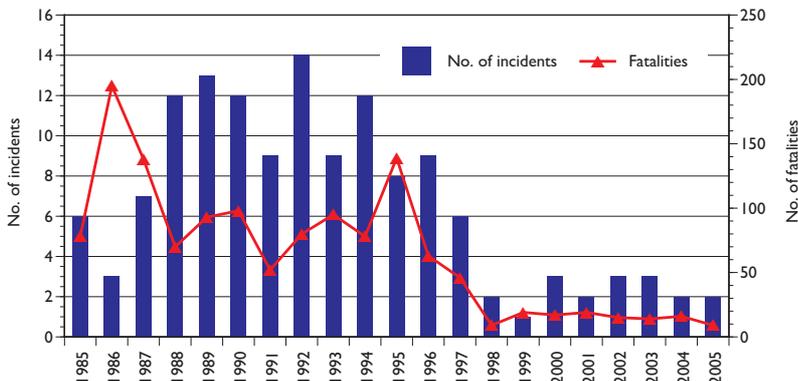


Figure 4: Incidents with more than four fatalities in the SA mining industry



Whilst the achievement of the targets and milestones vests with individual mining companies, the Chamber plays a facilitative role in industry-level aspects. The Chamber hosts an annual employer health and safety summit that focuses on the achievement of the targets and milestones.

Following the first summit in 2004, the Chamber developed and implemented an employer programme of action, which aims to create greater awareness of the industry goals, provide accurate information on progress and develop innovative industry-level initiatives, including:

- ☐ the identification of key mine-level strategies for safety improvement in a 10-tick report
- ☐ the development of a mechanism to support smaller mines in improving their safety performance
- ☐ global-level research into a suitable regulatory framework for mine health and safety
- ☐ the advocacy of a more focused mining sector health and safety research programme that emphasises the role of human factors in improved safety performance
- ☐ deliberations about safety capacity in the industry.

The 2005 employer health and safety summit provided an opportunity to review the industry's safety performance and share good practices. The summit concluded that improvements have been achieved, but that more must be done.

The Chamber leadership subsequently agreed to establish a high-level task force to develop industry-level strategies for its members' approval. Experience gained through visits to Australia and Canada is expected to aid this task force.

**Mine Health and Safety Council**

The Chamber represents employers on the MHSC, a tripartite body with equal representation from employers, employees and the state. It continues to be an outstanding example of social dialogue among key stakeholders and its strategic priorities include:

- ☐ support for the achievement of the milestones of the 2003 summit to promote the prevention of death, injury

- and disease within the mining industry
- ❑ to promote and drive the legislative review
- ❑ advise the minister on mining health and safety issues
- ❑ promote and facilitate the development of a preventative culture to drive the health and safety agenda
- ❑ promote and facilitate the development of capacity to drive the health and safety agenda
- ❑ to ensure the effective and efficient operations of the MHSC.

## Legislation

The MHSC advises the minister of minerals and energy on legislation. After the promulgation of the Mine Health and Safety Act, the MHSC initiated a process whereby all previous regulatory mechanisms, such as regulations, guidelines and codes of practice, were reviewed and new ones developed. Seventy-six topics were identified for this legislative review process, which is expected to be completed by the end of 2006.

The Chamber plays an active role in the process and continues to advocate a performance-based, non-prescriptive approach that emphasises the responsibility of an employer to assess and manage all health and safety risks. The approach is consistent with the recommendations of the Leon Commission on Mine Health and Safety that were made around 1995. Regulations developed using this approach specify performance standards without prescribing how such standards should be achieved.

The MHSC recognises that aspects related to the regulation of persons working in the industry were a bottleneck in the completion of many of the outstanding regulations. Previous regulations contained various provisions for the regulation of persons who were responsible for health and safety in mines. For example, it prescribed the management structure of a mine, enabled the issuing of certificates of competence for numerous occupations and enabled the Mine Health and Safety Inspectorate to revoke the certificates of competence.

The Chamber, in collaboration with the Mine Professional Associations, formulated a position on this matter. The Chamber agreed that competence issues in the

mining sector should be aligned with the National Qualifications Framework, whereby accredited training institutions or SETA's would issue certificates of competence, rather than the DME or the Chamber.

It also agreed that the licence to practice should be separated from the statement of competence and that such licences could be in the form of registration with a professional body. However, consistent with its preference for a performance-based approach, it suggested a minimal level of prescription on these matters. The MHSC is expected to make a decision on these matters during 2007.

## Research

The MHSC continues to oversee an annual health and safety research programme of approximately R40-million. The programme is funded by the industry through a levy on companies that is related to their safety and health risk. In line with a previous decision of the MHSC that the programme should include larger, multi-year strategic projects, projects on rock falls and rock bursts were approved, because the associated risks continue to be major challenges for the industry, despite the improvements that have been achieved.

The Chamber participates in the structures that oversee the programme, including the SIMRAC and its technical advisory committees. Apart from an ongoing involvement in the development and implementation of the research programme, the Chamber focused its advocacy efforts during the past year on three key issues, namely human factors, small-scale mines and research implementation.

Recognising that human factors are critical to further improvement in safety performance, the Chamber advocates greater emphasis on these issues in the research programme. The Chamber investigated work done internationally and was instrumental in the agreement of the MHSC to develop a specific project covering these factors and to establish an ad hoc committee to progress this matter further.

Analysis conducted by the Chamber found that smaller mines have a poorer safety record than larger mines. Small mines have their own unique challenges in assessing and managing the safety risk. The Chamber advocated the development of research that would specifically address the needs of smaller mines. With the assistance of smaller Chamber members, an initial project for small-scale diamond producers was proposed. This project is expected to serve as a model to help other types of smaller mines.

Research implementation continues to be a major challenge. Too many projects are completed and the recommendations never implemented. The Chamber strongly proposes a project to review past SIMRAC research. The primary objectives of this project would be to identify research findings that may make a major difference in the achievement of safety objectives if implemented successfully.

The MHSC appointed a project team and approved a methodology to undertake this project. Since this project has the potential to be a watershed, the Chamber suggested that it should have a strong capacity-building element that would benefit up-and-coming researchers from historically disadvantaged groups.

## Mine Health and Safety Summit

The MHSC has a statutory obligation to arrange a biennial Mine Health and Safety Summit to review the performance of the industry. The 2005

Summit was arranged through a tripartite structure in which the Chamber participated.

The Chamber developed a summit programme that stressed the human side of death and disease, leadership participation and the shared responsibility of all stakeholders for health and safety. A number of issues were identified for the MHSC to consider further, such as:

- ❑ the establishment or improvement of systems to fill the information gaps that still exist, particularly in respect of health performance
- ❑ recognition of the size and commodity diversity of the mining industry in the development of legislation and the implementation of the research programme
- ❑ better implementation of research findings
- ❑ measures to manage contractors in the industry effectively.

### **Operational effectiveness and efficiency**

Through its participation in the MHSC, the Chamber has an important role to play in ensuring that the research levy, which is another administered price on the industries, is scrutinised. The Chamber keeps a watching brief to ensure that proper measures are implemented on the financial implications of MHSC decisions, to control operational expenses and to use any interest on unspent research funds.

During the year under review, the MHSC completed the restructuring process that was initiated following the 2004 strategic review. During this process, it decided that the effectiveness and efficiency of the research must be improved.

The Chamber is considering key elements such as the accountability for the quality of research, the strengthening of the peer review mechanisms, the roles of the various structures and individuals involved in the research process as well as the determination of the optimum size of the research programme.

### ***National integration of occupational health and safety***

Cabinet decided in 1999 that occupational health and safety structures should be integrated. The Department of Labour leads this integration process and is developing draft legislation to give effect to the integration. The Chamber was informed in 2005 that this process was nearing completion. The Chamber is concerned about the impact that this integration could have on morale and the effectiveness of the Mine Health and Safety Inspectorate.

The Chamber has established a structure to consider the matter and has commissioned research into key issues of concern including institutional arrangements, funding mechanisms and compensation. The research will consider international experience and practices.

### ***International health and safety initiatives***

The Chamber represents BUSA on a project of the International Labour Organisation aimed at helping small and medium enterprises to improve their health and safety record. The best practices identified through this project are expected to help smaller mines and small enterprises that provide services to the mining industry.

The Chamber continues to participate in the health and safety initiatives of the ICMM. One of the ICMM's key health and safety projects is the development of a safety, health, environment and community

database. The primary aim of the database is to enable benchmarking at mine level, something that cannot be done through the review of publicly available company reports. Apart from database, the working group facilitates the formulation of harmonised definitions of performance indicators.

## **Sustainable development**

Sustainable development is a notoriously elusive concept for which many definitions have been proposed. The definition of the 1987 Brundtland Report is generally accepted: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.

It is argued by some that mining is inherently unsustainable, whereas the Chamber believes that whilst the mining of a single ore-body may not be sustainable, mining in general can make a sustainable contribution to employees, shareholders, governments and society.

The Chamber actively engages both locally and internationally in programmes aimed at achieving sustainable development through mining. It supports Chamber members in improving their sustainable development performance and in countering unwarranted negative perceptions about the benefits that mining can bring to a sustained better life for all its stakeholders.

### ***Sustainable development conference***

The Chamber hosts a biennial sustainable development conference. The theme for the 2005 conference was 'Extracting more benefit for Africa', which relates to the need for Africa to receive the maximum benefit from its rich natural resources. More than 300 delegates from industry, government, labour, NGOs and consulting groups attended the conference.

The objectives of the conference were to take stock of the benefits all stakeholders have been receiving from mining and to provide a platform for sharing best



practices. Papers that integrated the various components of sustainable development were presented.

There was less focus on the philosophy of sustainable development and more on practical solutions to challenges associated with skills development, HIV/AIDS, community development, climate change, the Mining Charter, beneficiation, reporting, tailings management, silicosis, safety, water and infrastructural constraints.

The Chamber commissioned research in preparation for the conference, which achieved a number of objectives, such as,

- ❑ consolidating 'sustainable development through mining' initiatives. Whilst this could help to improve the image of the industry it could also assist the Chamber in advocating against the proliferation of new initiatives
- ❑ providing practical recommendations on improving management training for improved sustainable development performance
- ❑ identifying tools that could be used, particularly by new entrants into the industry, to enhance their sustainability performance
- ❑ demonstrating the gaps between mine plans and local authority development plans, and made practical recommendations on how to improve local economic development through mining.

At the end of the conference, various stakeholders, including the Chamber, the

South African Mining Development Association, trade unions and NGOs expressed their support for the DME's Sustainable Development through Mining Programme.

### ***Sustainability and transformation report***

During the year under review the Chamber prepared its first sustainability and transformation report. The report was prepared using international sustainability reporting guidelines and the Mining Charter. *The South African Mining Industry Sustainability and Transformation Report 2005* is the first of its kind in South Africa and one of the few reports of this nature internationally.

The main objective of the report is to take stock of the progress that the mining industry has made towards sustainable development and transformation in the last few years. The report summarises the improvements that have been made and the initiatives that have been launched. It also highlights the major challenges ahead and the various targets that have been set to overcome many of these.

The lack of quantitative, comparable information and the absence of systems to collect mining industry information made the preparation of a credible report of this kind difficult.

Since accurate information on the industry's sustainability and transformation performance could help to improve the image of the industry and could support the Chamber's advocacy efforts, the Chamber is exploring better ways to acquire this information in future.

### ***Sustainability framework***

In the global market for capital, skills and land, mining has to compete with other industries and South Africa has to compete with other countries. Countries such as Australia and Canada have developed sustainability frameworks to assist their mining companies to improve their sustainability performance and countries like Brazil and India are considering similar initiatives.

A Chamber representative visited Australia and Canada to investigate how these frameworks were developed and what they entail. The Chamber will take this into account during its own consideration of mechanisms to facilitate performance improvement in the industry.

### ***National sustainable development initiatives***

The DME's Sustainable Development through Mining Programme has been launched to fulfil World Summit on Sustainable Development commitments to report on mining in 2010. The programme aims to develop:

- ❑ a shared vision on sustainable development through mining
- ❑ creative and pragmatic ways to deal with the historic legacy of mining
- ❑ a framework and monitoring system for responsible mining.

The Chamber has expressed its support for the programme, but emphasises the need for strong stakeholder engagement as a key success factor.

The DEAT is developing a national strategy for sustainable development as part of government's broad commitment to sustainable development. The Chamber is participating in the process and is encouraging the recognition of existing initiatives and frameworks.

## ***International sustainable development initiatives***

### **European legislation, REACH**

The EU released draft legislation on REACH during 2003. Whilst REACH was conceived for synthetic and organic chemicals, its scope includes mining products such as ores, concentrates, minerals, metals and alloys.

The legislation was a response to the World Summit on Sustainable Development's commitment that chemicals will be managed properly by 2020. Other countries are expected to develop similar legislation.

In recent years, the mining industry has embraced the concept of materials' stewardship. The concept encourages the assessment of health and environmental impact of mining products used in consumer articles even beyond their useful life. In this context, the Chamber supports the human health and environmental protection objectives of REACH.

The Chamber, however, strongly advocates the exclusion of ores, concentrates and minerals from the scope of the legislation. These materials are generally processed in installations that are already strictly regulated through existing EU human health and environmental protection legislation.

An impact study undertaken by the Chamber indicates that the inclusion of these materials in REACH could have severe, unintended consequences for many countries in Africa that are largely dependent on the export of mining products to sustain their economies. The Chamber brought this impact to the attention of government and actively supports government in its advocacy and lobbying efforts on REACH. These efforts are targeted at the EU Commission of Technocrats, the EU Parliament consisting of more than 700 members and the EU Council of 25 member states.

At the end of the first reading in the EU Parliament, the EU decided to exempt ores, concentrates and minerals from the registration and evaluation requirements, but not from the authorisation requirements. The exemption would reduce substantially the direct cost burden of REACH on the mining industry. This was a step in the right direction, for which South Africa received widespread credit. The impact of the authorisation requirements remains a major concern since it is these requirements that could stigmatise mining products and encourage substitution by alternatives. The Chamber has concluded that further lobbying work is required.

The EU launched a study into the impact of REACH on developing countries. Unfortunately, the report ignores the impact of authorisation requirements and hence concludes that the impact is minimal. The Chamber raised its concerns about this study during a meeting of the EU that considered the study.

In preparation for the second reading of REACH in the EU, the Chamber commissioned a study into the impact of the authorisation requirements. The report concludes that the variable nature of ores, concentrates and minerals could seriously undermine the efficacy of REACH. The Chamber has since led a delegation of technical experts to meet the EU for an in-depth discussion on the implications of REACH for ores, concentrates and minerals. The Chamber accepts that mining products such as metals and alloys could be subject to the requirements of REACH. These products are used in consumer articles and their risks are not adequately regulated through existing EU legislation. The Chamber

is helping its members who produce these products to prepare for compliance with REACH. A REACH industry group was established to share information on aspects such as the REACH implementation projects, which the EU has launched to interpret the various legislative requirements. The Chamber has developed an implementation guide and web-based information pack to help companies comply with the legislation.

### **ICMM**

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 good practice guidelines.

A pilot assurance system was approved by the ICMM during the year under review. More good practice guidance documents were prepared. These include a community development toolkit and guidance on mining and biodiversity. These documents were showcased during workshops held in conjunction with the Chamber's sustainable development conference.

The ICMM completed the first phase of the Resource Endowment Project to counter arguments of the Resource Curse theory. This theory suggests that countries rich in mineral wealth are cursed by corruption and bad governance. Projects on integrated closure and abandoned mines have also been initiated.

The Chamber continues to contribute to the activities of the ICMM. A successful Chamber-ICMM workshop, held in February 2006, was aimed at leveraging greater benefit of the ICMM's work for members of the Chamber.

### ***Global Reporting Initiative***

The Gold Reporting Initiative is a multi-stakeholder body that develops sustainability reporting guidelines. During the first part of 2006, the initiative released a draft of the next generation of reporting guidelines for comment. The Chamber commented on these guidelines through the ICMM.

# Skills development



# Skills development



## Advocacy and lobbying

Skills Development staff have continued to play a leading role in lobbying on behalf of business on national education and skills development legislation. The unit continues to make a valuable contribution to the Social Policy Committee of BUSA and a Chamber representative was retained as the chairperson of the sub-committee on education and training. The Chamber made a presentation on 'Youth Unemployment' to the Portfolio Committee on Labour and on the 'State of Education' on behalf of business at a Nedlac executive council meeting.

Lobbying moved from influencing the formulation of policy and legislation to shaping the implementation agenda of the National Skills Development Strategy (NSDS). A Chamber representative serves on the National Skills Authority (NSA). As an executive member of the NSA a Chamber's representative chairs the sub-committee that is responsible for SETA implementation. It is at these strategic committees that the Chamber influences the NSDS implementation agenda.

## Challenges

The challenge of the newly established NSA is to forge appropriate relationships with its various constituencies and to create a common understanding of its goals, which include:

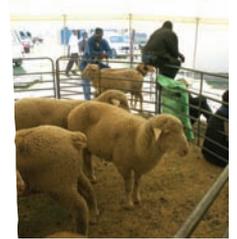
- developing a common work plan for the NSA
- building relations with Department of Labour officials who perform the secretariat function for the NSA
- revising the constitution of the NSA for approval by the minister of labour
- developing the terms of reference of the various NSA committees.

BUSA's sub-committee on education and training developed national strategic imperatives for a more effective delivery of the NSDS by the NSA. Amongst others the imperatives include:

- Creating a high-level stakeholder leadership forum of government, business and labour to assist in ensuring quick implementation of the NSDS
- Reviewing the national funding model and ensuring that the National Skills Fund is utilised appropriately
- Removing unnecessary bureaucracy in the implementation of skills development for the benefit of both the employed and the unemployed
- Making the NSA work more effectively and efficiently.

These proposals were presented on behalf of BUSA by a Chamber representatives to the President of South Africa. This culminated in the Presidency forming a Joint Implementation on Priority Skills Acquisition (JIPSA) task team to identify delivery blockages and to propose solutions. Chamber representatives serve on the technical working group of JIPSA

to advise on appropriate measures to be taken to accelerate skills delivery.



## Education Advisory Committee

The Chamber's Education Advisory Committee deals with policy and strategic issues relating to skills development. These range from adult basic education and training (ABET) to further and higher education and training. The committee provides input for national bodies such as the NSA and the South African Qualifications Authority (SAQA). It also mandates Chamber officials to present mining industry views at BUSA's sub-committee on education and training. The committee plays a critical role in directing the skills development activities of the Chamber and formulating education and training policy in general.



The mining industry is hugely affected by the need to implement effective teaching and assessment of the fundamental unit standards. To ensure proper implementation of the teaching and assessment of these standards, the committee embarked on an investigation to identify appropriate methodologies and the best partners. Some of the further education and training colleges were invited to assist with this investigation. Chamber officials are leading this investigation to develop appropriate policy implementation that will enable



Students from the first graduating class of the Soweto Jewellery School from left to right: Nelson Zwane, Thando Ndaba, Jabulani Tsoetsi with the director of the school, Isaac Nkwe

mining industry employees to obtain full qualifications at National Qualification Framework (NQF) levels 2 to 4.

JIPSA has identified the need to train more people in artisan skills if the economy is to grow at 6% a year by 2014. This target challenges all industries to respond to the need for skills development. The Education Advisory Committee is developing an artisan training proposal endorsed by the Chamber's Executive Council, and work is underway to establish an artisan training plan for the mining industry. Once the plan is finalised, funds will be requested from the National Skills Fund to support the mining industry initiative.

The mining industry began implementing an assessment system that was supported through the Mining Qualifications Authority (MQA) discretionary grant. When this grant ceased the Education Advisory Committee developed a proposal to continue with the implementation of the personal digital assessments (PDA) where companies would pay a levy based on the number of assessors in each company. Chamber

officials played a leading role in the development of the PDA proposal, which was fully supported by both Chamber management and its members. Implementation of the PDA proposal is underway and companies will continue to use it until the MQA is able to take over the funding of the project.

## National Qualifications Framework

The issue of the National Qualifications Framework (NQF) review remains unresolved as the ministerial task team has not yet released a report for comment by the public. The Chamber aligned itself with broader business through BUSA to raise concerns about the uncertainty created in education and training as the review has not been resolved. BUSA continues to raise this matter with the ministers of labour and of education.

Chamber officials also play a role in SAQA, including participating in workshops that debated the National Skills Fund as a credit accumulation transfer system and how the South African experience compares with other countries that use a qualifications' framework. The Chamber has argued that the framework can be used as a social construct linking various communities of quality assurance. It firmly believes that the NQF must include:

- the equivalence of formal and non-formal education certificates
- the progression and relevance of lower NQF level certificates for access to institutions of higher learning
- an appropriate combination of fields of study and credits to warrant a qualification.

The mining industry still has many employees requiring qualifications at NQF level 1, thus all stakeholders constantly review the curriculum to see how it can best be aligned with the NQF. Chamber officials are directly involved in the review of NQF level 1 for the mining industry.

## Higher education

The Chamber's involvement in tertiary education activities has been reduced. The Tertiary Mining Education Committee (TMEC) took a leading role through supporting the retention of lecturers at the various universities. It also conducts visits to the universities to assess the needs and pass rates at these institutions and to determine the extent of support to be provided. The Chamber was invited to be part of the TMEC panels that visit the universities.

The placement of students wishing to pursue a mining engineering qualification for practical training at companies remains a challenge. The Chamber has always informed tertiary institutions that there needs to be an appropriate ratio of students to available vacancies for practical training at companies.

Chamber officials participate in discussions at JIPSA on proposals to increase the number of engineering graduates to qualify each year to meet economic growth challenges. The Chamber will continue to ensure that appropriate policies are in place to guarantee:

- the delivery of world-class tertiary mining engineering education by pooling scarce resources and by attracting leading mining engineering educators to the universities
- that the mining industry is enabled to compete globally through the provision of suitable engineers and mining research.

## Further education and training

The recapitalisation of further education and training colleges by the Department of Education started when 50 colleges were revamped. Chamber officials aligned themselves with broader business to lobby the minister of education on the recapitalisation process. Business raised concerns about the curriculum development process and how the graduates of the new programmes will be absorbed by the labour market.

The Chamber co-ordinated the identification of technical experts within the mining industry to assist in the development of the curriculum for the new National Vocational Certificate programmes. Concerns were raised about how they relate to the apprenticeship training process. Business representatives appealed to department officials to embark on a road show to discuss the vocational programmes with subject experts in the various industry sectors and to explain their purpose.

The mining industry continues to request the department to implement transitional measures to ensure continuous provision of N-2 courses whilst clarifying the role of the new vocational programmes in the apprentice training programme. The industry is yet to meet with the department to discuss its concerns about the new vocational programmes.

The Chamber plays a leading role in ensuring that a proper collaboration between a few select further education and training colleges and the gold mining companies is established to develop special skills programmes geared for the mining industry. Through this college collaboration initiative, research was conducted on the uptake of the

N-programmes. The mining industry is working with the colleges to explore the best way of developing the fundamental unit standards (NQF 1-3) and their related programmes.

## Mining Qualifications Authority

Employer inputs are presented by the Chamber at the MQA. The MQA Systems Caucus, a sub-committee of the Chamber's Education Advisory Committee assisted with the following contributions to the MQA:

- Identification of appropriate personnel to participate in the task reference groups of the MQA
- Amendments to the MQA bursary policy
- Assessment of the fundamental literacy and numeracy unit standards of a qualification
- Identification and provision of personnel to develop the learning materials' development project.

Chamber officials assisted MQA staff in developing the new workplace skills plan forms in line with the SETA grant regulations. This eliminated unnecessarily confusing forms and made it easy for companies to submit their skills plans in time to receive their full mandatory grants.

Chamber officials sitting on the MQA board continue to influence the setting of the MQA targets to ease undue pressure on employers to deliver beyond their capability. Through the intervention of Chamber officials, the MQA was also able to develop a business plan that met the requirements of the Department of Labour.

The MQA experienced a striking increase in the number of learners registered for various learnerships. This meant that it had to review its entire grants programme and re-allocate more funds for learnerships. Chamber officials were involved in this exercise and companies were informed about the reduction of learnership grants. A review of the five-year forecast of the MQA income and expenditure showed that the MQA will not have enough funds to honour all its obligations. Employers are developing proposals to influence the MQA to focus



most of its financial resources on its core deliverables namely, grants for mining-related learnerships and skills programmes.

The implementation of ABET remains a contested debate between labour and employers. All stakeholders at the MQA agreed to undertake research to identify blockages in ABET implementation. It is envisaged that the outcome of the research will lead to a joint commitment on the acceleration of ABET implementation and increase the number of learners.

Chamber officials participating in the various committee structures of the MQA have contributed towards the improvement of governance procedures within the MQA. The MQA received an unqualified report from the auditor general.

## Learnerships

The grants for learnerships were reduced to R20 000 a year for a three-year learnership owing to a sudden increase in the uptake of learnerships. The grant may be further reduced if the MQA is unable to get further funds from the National Skills Fund.

The MQA will limit its grants to mining related learnerships. In spite of the financial

challenges experienced at the MQA, Chamber officials continue to ensure that employers benefit from learnership grants available at the MQA.

## Quality assurance

Employers continue to strive for the provision of quality education and training by participating in the Education and Training Quality Assurance Committee (ETQA) of the MQA. In the year under review employers ensured that more employees benefitted from the following grants:

- International Standards Organisation grant
- Moderator assessor grant
- Education and Training Development Practices grant
- Use of the PDA for assessment grant.

When the MQA stopped the PDA grant because of insufficient funds, employers developed a proposal to introduce some form of levy to continue with the development of software for the PDA.

The MQA continues to assess training providers to assist them to obtain full accreditation. The success of training provider assessment has always depended on the expertise of employer representatives participating at the MQA-ETQA committees.

The SAQA conducted a quality assurance audit of the MQA and it is commendable that the MQA was granted an accreditation licence for a further three years.



*A jewellery school pupil learning her trade at Sishen*

## Licence to practice

Employers and their stakeholders at the MQA and the MHSC continued to discuss the implications of the identification of engineering areas of work and a licence to practice. This culminated in a discussion document by the DME to which all stakeholders had to respond by submitting comments and agreeing on a way forward.

Chamber officials held a road show with member companies to explain the DME document and gather employer mandates on professional registration for engineering work, certificated engineers and licence to practice, all of these areas of work affect employees in categories 5-8 qualifications. The road show included some of the mining professional associations and resulted in a better understanding of the proposed legislation.

The employer position was adopted by the Occupational Health and Safety Policy Committee and presented to a joint meeting of the MQA and the MHSC.

## Learning materials development initiative

The Learning Materials Development Project continues to produce learning materials. Its continued success led to its being requested to coordinate further materials not within its scope.

The project yet again performed beyond expectation. However, predictions for the next year are that the quantities of learning materials developed will slow because of financial constraints experienced at the MQA. Employers continue to play a key role in the success of the project by releasing technical experts to participate in learning materials development.

By the end of June 2006, 829 unit standards had been allocated to accredited training providers for learning material development across different disciplines. The table below illustrates the quantities of learning packs that were received and sent to the technical review groups for final approval.

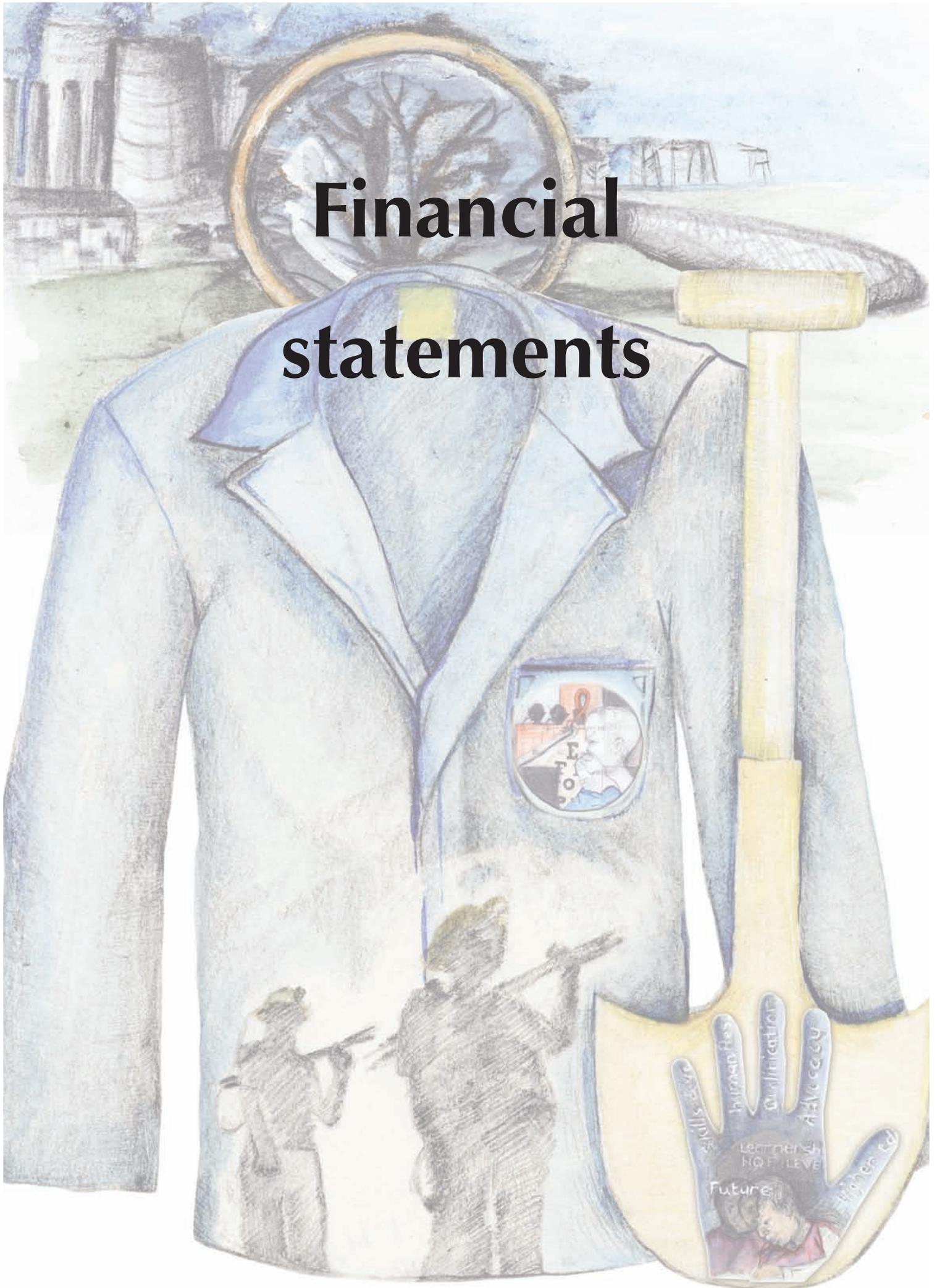
The MQA had paid a total of R11.4-million for delivery of learning packs for the project by June 2006.

Employers expressed their confidence in the project manager by requesting him to lead the development of a proposal for the PDA project. Chamber management has already approved the project provided that it is self-sustaining.

*Change in learning packs developed from year to year – 2004 to 2006*

| Discipline                   | July 2004 – June 2005 | July 2005 – June 2006 |
|------------------------------|-----------------------|-----------------------|
| Analytical services          | 35                    | 48                    |
| Diamond processing           | 5                     | 27                    |
| Engineering                  | 175                   | 208                   |
| Jewellery manufacturing      | 5                     | 23                    |
| Metallurgy                   | 133                   | 217                   |
| Underground coal mining      | 17                    | 22                    |
| Underground hard rock mining | 20                    | 68                    |
| Surface mining               | 37                    | 47                    |
| Occupational hygiene         | 4                     | 5                     |
| Occupational safety          |                       | 5                     |
| Rock engineering             | 8                     | 33                    |
| Surveying                    | 12                    | 18                    |
| Small-scale mining           | 3                     | 4                     |
| Small-scale business         | 1                     | 1                     |
| <b>Total</b>                 | <b>455</b>            | <b>726</b>            |

# Financial statements



# Financial statements

## Chamber of Mines of South Africa Annual Financial Statements for the year ending 30 June 2006

*The following reports and statements are presented:*

*Executive Council's responsibility for financial reporting*

*Report of the independent auditors*

*Annual financial statements:*

*Balance sheet*

*Income statement*

*Statement of changes in equity*

*Cash flow statement*

*Accounting policies*

*Notes to the annual financial statements*

## ***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 Generally Accepted Accounting Practice. The Chamber's independent, external auditors, Deloitte & Touche, have audited these financial statements.

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 were approved by the Executive Council on 13 September 2006 and are signed on their behalf by:



P L Zim  
President



M G Diliza  
Chief Executive

## ***Report of the independent auditors 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 for the year ended 30 June 2006. These annual financial statements are the responsibility of the Executive Council. Our responsibility is to express an opinion on these annual financial statements based on our audit.

We conducted our audit in accordance with statements of International Standards of Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance that the financial statements are free of material misstatement. An audit includes assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation.

We believe that our audit provides a reasonable basis for our opinion. In our opinion, the annual financial statements fairly present, in all material respects, the financial position of the Chamber of Mines of South Africa at 30 June 2006 and the results of its operations and cash flow 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.



Deloitte & Touche  
Registered auditors

Per AJ Zoghby  
Partner  
Johannesburg

## Balance sheet as at 30 June 2006

|                                    |       | 2006              | 2005              |
|------------------------------------|-------|-------------------|-------------------|
|                                    | Notes | R                 | R                 |
| <b>Assets</b>                      |       |                   |                   |
| <b>Non-current assets</b>          |       |                   |                   |
| Equipment                          | 1     | 793 523           | 328 398           |
| Inventory                          |       | 271 923           | 281 847           |
| Investments                        | 2     | 7 469 872         | 12 609 456        |
|                                    |       | <u>8 535 318</u>  | <u>13 219 701</u> |
| <b>Current assets</b>              |       |                   |                   |
| Accounts receivable                | 3     | 8 809 793         | 12 151 607        |
| Administered funds                 | 4     | 10 173 433        | 14 239 701        |
| Bank and cash                      | 4     | 18 998 224        | 9 251 500         |
|                                    |       | <u>37 981 450</u> | <u>35 642 808</u> |
| <b>Total assets</b>                |       | <u>46 516 768</u> | <u>48 862 509</u> |
| <b>Funds and liabilities</b>       |       |                   |                   |
| <b>Funds</b>                       |       |                   |                   |
| Accumulated funds                  |       | 6 521 247         | 6 521 247         |
| Project funds                      | 5     | 11 814 197        | 14 725 504        |
|                                    |       | <u>18 335 444</u> | <u>21 246 751</u> |
| <b>Current liabilities</b>         |       |                   |                   |
| Funds under administration         | 10    | 10 171 433        | 14 239 701        |
| Accounts payable                   | 6     | 14 446 066        | 9 813 376         |
| Short-term loan                    | 7     | 3 563 825         | 3 562 681         |
|                                    |       | <u>28 181 324</u> | <u>27 615 758</u> |
| <b>Total funds and liabilities</b> |       | <u>46 516 768</u> | <u>48 862 509</u> |

## Income statement for the year ended 30 June 2006

|  |   |                    |                  |
|--|---|--------------------|------------------|
| Revenue                                | 8 | 41 438 162         | 44 243 162       |
| Administrative and operating costs     | 9 | (41 207 695)       | (44 031 781)     |
| Surplus before depreciation            |   | 230 467            | 211 381          |
| Depreciation                           |   | (230 467)          | (211 381)        |
| Operating surplus                      |   | —                  | —                |
| Project income                         | 5 | 635 000            | 6 589 869        |
| Project expenditure                    | 5 | (3 546 307)        | (4 991 724)      |
| (Decrease)/increase in project funding |   | <u>(2 911 307)</u> | <u>1 598 145</u> |

## Statement of changes in equity for the year ended 30 June 2006

|  |   | Project funds      | Accumulated funds  | Total funds       |
|--|---|--------------------|--------------------|-------------------|
| Balance at 30 June 2004                  |   | 13 127 359         | 6 521 247          | 19 648 606        |
| Increase in project funding for the year |   | —                  | 1 598 145          | 1 598 145         |
| Transfer to project funds                |   | <u>1 598 145</u>   | <u>(1 598 145)</u> | —                 |
| Balance at 30 June 2005                  |   | 14 725 504         | 6 521 247          | 21 246 751        |
| Decrease in project funding for the year |   | —                  | (2 911 307)        | (2 911 307)       |
| Transfer from project funds              |   | <u>(2 911 307)</u> | <u>2 911 307</u>   | —                 |
| Balance at 30 June 2006                  | 5 | <u>11 814 197</u>  | <u>6 521 247</u>   | <u>18 335 444</u> |

## Cash flow statement for the year ended 30 June 2006

|   | Notes | 2006<br>R         | 2005<br>R          |
|---|-------|-------------------|--------------------|
| <b>Cash flows from operating activities:</b>              |       |                   |                    |
| Net cash outflow from operating activities                | 11    | (118 806)         | (50 365 835)       |
| <b>Cash flows from investing activities:</b>              |       |                   |                    |
| Additions to equipment                                    | 12    | (695 592)         | (103 810)          |
| Disposals of equipment                                    |       | —                 | 118 000            |
| Investment income   |       | 1 355 270         | 1 182 868          |
| Decrease/(increase) in investments                        |       | <u>5 139 584</u>  | <u>(1 842 524)</u> |
| Net cash inflow/(outflow) from investing activities       |       | <u>5 799 262</u>  | <u>(645 466)</u>   |
| Net increase/(decrease) in cash and cash equivalents      |       | 5 680 456         | (51 011 301)       |
| <b>Cash and cash equivalents</b> at beginning of the year |       | <u>23 491 201</u> | <u>74 502 502</u>  |
| <b>Cash and cash equivalents</b> at end of the year       | 13    | <u>29 171 657</u> | <u>23 491 201</u>  |

## Accounting policies for the year ended 30 June 2006

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 instrument 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.

### 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 |

### 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.

## Notes to the Annual Financial Statements for the year ended 30 June 2006

### I. Equipment

| <b>2006</b>            | <b>Cost<br/>R</b> | <b>Accumulated depreciation<br/>R</b> | <b>Net book value<br/>R</b> |
|------------------------|-------------------|---------------------------------------|-----------------------------|
| Motor vehicles         | 1 283 193         | 856 367                               | 426 826                     |
| Computer equipment     | 618 059           | 366 882                               | 251 177                     |
| Furniture and fittings | 283 755           | 168 235                               | 115 520                     |
|                        | <u>2 185 007</u>  | <u>1 391 484</u>                      | <u>793 523</u>              |
| <b>2005</b>            |                   |                                       |                             |
| Motor vehicles         | 904 148           | 761 354                               | 142 794                     |
| Computer equipment     | 340 895           | 308 629                               | 32 266                      |
| Furniture and fittings | 269 085           | 115 747                               | 153 338                     |
|                        | <u>1 514 128</u>  | <u>1 185 730</u>                      | <u>328 398</u>              |

### 2006

#### Reconciliation of movement:

|                                     | <b>Motor vehicles<br/>R</b> | <b>Computer equipment<br/>R</b> | <b>Furniture and fittings<br/>R</b> | <b>Total<br/>R</b> |
|-------------------------------------|-----------------------------|---------------------------------|-------------------------------------|--------------------|
| Net book value at beginning of year | 142 794                     | 32 266                          | 153 338                             | 328 398            |
| Additions                           | 379 045                     | 301 877                         | 14 670                              | 695 592            |
| Depreciation                        | 95 013                      | 82 966                          | 52 488                              | 230 467            |
| Net book value at end of year       | <u>426 826</u>              | <u>251 177</u>                  | <u>115 520</u>                      | <u>793 523</u>     |

### 2005

#### Reconciliation of movement:

|                                     | <b>Motor vehicles<br/>R</b> | <b>Computer equipment<br/>R</b> | <b>Furniture and fittings<br/>R</b> | <b>Total<br/>R</b> |
|-------------------------------------|-----------------------------|---------------------------------|-------------------------------------|--------------------|
| Net book value at beginning of year | 340 879                     | 105 673                         | 115 254                             | 561 806            |
| Additions                           | —                           | 7 429                           | 96 381                              | 103 810            |
| Depreciation                        | 80 085                      | 80 836                          | 50 460                              | 211 381            |
| Disposals                           | 118 000                     | —                               | 7 837                               | 125 837            |
| Net book value at end of year       | <u>142 794</u>              | <u>32 266</u>                   | <u>153 338</u>                      | <u>328 398</u>     |

**2006  
R**

**2005  
R**

### 2. Investments

|  |                  |                   |
|--|------------------|-------------------|
| Rand Mutual Assurance Company Ltd        | 20               | 44                |
| 1 share @ R20 (2005: 1 share @ R20 each) |                  |                   |
| Executive valuation R 20 (2005: R 20 )   |                  |                   |
|  | <u>20</u>        | <u>44</u>         |
| Term Deposits:                           |                  |                   |
| Industry Task Force Radiation fund       | 657 862          | 944 911           |
| Disaster Relief fund                     | 740 000          | 740 000           |
| Insurance Claim fund                     | 880 000          | 880 000           |
| Rural Development fund                   | 1 638 892        | 3 465 719         |
| Research fund                            | 79 910           | 304 910           |
| HIV/AIDS project                         | 445 820          | 445 820           |
| Parliamentary Liaison fund               | 124 554          | 171 048           |
| Repositioning Chamber fund               | —                | 422 755           |
| Occupational Lung Disease                | 866 803          | 887 249           |
| Barnard Jacobs Mellet                    | 1 857 638        | 4 347 000         |
| ICMM                                     | 46 896           | —                 |
| Sludge Treatment                         | 27 800           | —                 |
| IUCN World Conference                    | 103 677          | —                 |
|  | <u>7 469 872</u> | <u>12 609 456</u> |

**Notes continued**

|  |                    | <b>2006</b>        | <b>2005</b>         |
|--|--------------------|--------------------|---------------------|
|  |                    | <b>R</b>           | <b>R</b>            |
| <b>3. Accounts receivable</b>  |                    |                    |                     |
| Accounts receivable – members  |                    | 7 949 531          | 12 475 459          |
| Accounts receivable – non members  |                    | <u>1 414 416</u>   | <u>590 053</u>      |
|  |                    | 9 363 947          | 13 065 512          |
| Less: Provision for Doubtful debts   |                    | <u>(554 154)</u>   | <u>(913 905)</u>    |
|  |                    | <u>8 809 793</u>   | <u>12 151 607</u>   |
| <b>4. Bank and cash</b>  |                    |                    |                     |
| Administered fund  |                    | <u>10 173 433</u>  | <u>14 239 701</u>   |
| Cash at bank and on call   |                    | 26 468 076         | 21 860 912          |
| Amounts classified under investments   |                    | <u>(7 469 852)</u> | <u>(12 609 412)</u> |
| Bank and cash  |                    | <u>18 998 224</u>  | <u>9 251 500</u>    |
| <b>5. Project funds</b>  |                    |                    |                     |
| <i>Rural Development</i>   |                    |                    |                     |
| Balance at 1 July 2005   | 3 465 719          | 1 638 892          | 3 465 719           |
| Expenditure  | <u>(1 826 827)</u> |                    |                     |
| Balance at 30 June 2006  | <u>1 638 892</u>   |                    |                     |
| <i>Disaster Relief</i>   |                    |                    |                     |
|  |                    | 740 000            | 740 000             |
| <i>Insurance</i>   |                    |                    |                     |
|  |                    | 880 000            | 880 000             |
| <i>Research</i>  |                    |                    |                     |
| Balance at 1 July 2005   | 304 910            | 79 910             | 304 910             |
| Expenditure  | <u>(225 000)</u>   |                    |                     |
| Balance at 30 June 2006  | <u>79 910</u>      |                    |                     |
| <i>Industry Task Force Radiation Fund</i>  |                    |                    |                     |
| Balance at 1 July 2005   | 944 911            | 657 862            | 944 911             |
| Expenditure  | <u>(287 049)</u>   |                    |                     |
| Balance at 30 June 2006  | <u>657 862</u>     |                    |                     |
| <i>General Fund</i>  |                    |                    |                     |
| Other  |                    | 500 000            | 760 000             |
| Legal opinion  |                    | 196 700            | 196 700             |
| Building repairs and essential maintenance   |                    | 596 523            | 596 523             |
|  |                    | <u>1 293 223</u>   | <u>1 553 223</u>    |
| <i>HIV/AIDS Project</i>  |                    |                    |                     |
|  |                    | 445 820            | 445 820             |
| <i>Parliamentary Liaison</i>   |                    |                    |                     |
| Balance at 1 July 2005   | 171 048            | 124 554            | 171 048             |
| Expenditure  | <u>(46 494)</u>    |                    |                     |
| Balance as at 30 June 2006   | <u>124 554</u>     |                    |                     |
| <i>Repositioning the Chamber</i>   |                    |                    |                     |
| Balance at 1 July 2005   | 422 755            | —                  | 422 755             |
| Expenditure  | <u>(422 755)</u>   |                    |                     |
| Balance as at 30 June 2006   | <u>—</u>           |                    |                     |
| <i>Occupational Lung Disease</i>   |                    |                    |                     |
| Balance at 1 July 2005   | 887 249            | 866 803            | 887 249             |
| Expenditure  | <u>(20 446)</u>    |                    |                     |
| Balance as at 30 June 2006   | <u>866 803</u>     |                    |                     |
| <i>Project funding recovery</i>  |                    |                    |                     |
| This amount primarily relates to the recovery from the Chamber's insurers, of irregular expenditure that |                    | 4 908 760          | 4 909 869           |

**Notes continued**

|  | <b>2006</b>       | <b>2005</b>       |
|--|-------------------|-------------------|
|  | <b>R</b>          | <b>R</b>          |
| occurred in the previous two financial years.<br>(2004: R2 996 364) (2003: R1 803 380). This expenditure has been included in the respective prior year annual financial statements.   |                   |                   |
| Recoveries   | 4 799 744         |                   |
| Other  | 110 125           |                   |
| 2006 legal fees  | <u>(1 109)</u>    |                   |
|  | <u>4 908 760</u>  |                   |
| <b>Sludge treatment</b>  | 27 800            | —                 |
| Amount received  | 200 000           |                   |
| Expenditure  | <u>(172 200)</u>  |                   |
| Balance as at 30 June 2006   | <u>27 800</u>     |                   |
| <b>ICMM</b>  | 46 896            | —                 |
| Amount received  | 200 000           |                   |
| Expenditure  | <u>(153 104)</u>  |                   |
| Balance as at 30 June 2006   | <u>46 896</u>     |                   |
| <b>IUCN World Conference</b>   | 103 677           | —                 |
| Amount received  | 150 000           |                   |
| Expenditure  | <u>(46 323)</u>   |                   |
| Balance as at 30 June 2006   | <u>103 677</u>    |                   |
| <b>National Nuclear Regulator</b>  | —                 | —                 |
| Amount received  | 85 000            |                   |
| Expenditure  | <u>(85 000)</u>   |                   |
| Balance as at 30 June 2006   | <u>—</u>          |                   |
|  | <u>11 814 197</u> | <u>14 725 504</u> |
| <b>6. Accounts payable</b>   |                   |                   |
| Accounts payable – members (Refund BUSA subscription)  | —                 | 200 000           |
| Other accounts payable   | 14 446 066        | 9 613 376         |
|  | <u>14 446 066</u> | <u>9 813 376</u>  |
| <b>7. Short-term loan</b>  |                   |                   |
| Chamber of Mines Building Company (Pty) Ltd  | 3 563 825         | 3 562 681         |
| This loan is unsecured, interest free and payable on demand.   |                   |                   |
| <b>8. Revenue</b>  |                   |                   |
| Contribution from members  | 36 077 573        | 40 024 685        |
| Interest   | 1 355 270         | 1 182 868         |
| Administration fees  | 859 447           | 922 285           |
| Other income   | 3 145 872         | 2 113 324         |
|  | <u>41 438 162</u> | <u>44 243 162</u> |
| <b>9. Administrative and operating expenditure</b>   |                   |                   |
| Auditors' remuneration   | 174 002           | 264 800           |
| – Current year   | <u>174 002</u>    | <u>150 000</u>    |
| – Other services   | —                 | 114 800           |
| Staff costs  | 28 783 253        | 28 139 039        |
| Operating costs  | <u>12 250 440</u> | <u>15 627 942</u> |
|  | <u>41 207 695</u> | <u>44 031 781</u> |
| <b>10. Funds under administration</b>  |                   |                   |
| The Chamber administers and invests surplus funds of associated entities. Income received on these funds is distributed to the depositors. At 30 June 2006 funds under administration amounted to R 10 171 433 (2005: R 14 239 701). |                   |                   |

## Notes to the cash-flow statement for the year ended 30 June 2006

|  | <b>2006</b>        | <b>2005</b>         |
|--|--------------------|---------------------|
|  | <b>R</b>           | <b>R</b>            |
| <b>I I.Reconciliation of increase/(decrease) in project funding for the year to net cash flow from operating activities:</b> |                    |                     |
| (Decrease)/increase in project funding for the year  | (2 911 307)        | 1 598 145           |
| Adjustment for:  |                    |                     |
| Depreciation   | 230 467            | 211 381             |
| Loss on assets written off   | —                  | 7 837               |
| Interest received  | (1 355 270)        | (1 182 868)         |
| <i>Operating (deficit )/funding before working capital changes</i>   | <u>(4 036 110)</u> | <u>634 495</u>      |
| <i>Working capital changes</i>   |                    |                     |
| Decrease/(increase) in accounts receivable   | 3 341 814          | (885 649)           |
| Decrease in funds under administration   | (4 068 268)        | (50 996 682)        |
| Decrease in accounts payable   | 4 632 690          | 872 467             |
| Increase in loans  | 1 144              | 2 061               |
| Decrease in inventory  | <u>9 924</u>       | <u>7 473</u>        |
|  | <u>3 917 304</u>   | <u>(51 000 330)</u> |
| <i>Net cash outflow from operating activities</i>  | <u>(118 806)</u>   | <u>(50 365 835)</u> |
| <b>I2. Additions to equipment</b>  |                    |                     |
| Motor vehicles   | (379 045)          | —                   |
| Computer equipment   | (301 877)          | (7 429)             |
| Furniture & fittings   | <u>(14 670)</u>    | <u>(96 381)</u>     |
|  | <u>(695 592)</u>   | <u>(103 810)</u>    |
| <b>I3. Cash and cash equivalents</b>   |                    |                     |
| Administered funds   | 10 173 433         | 14 239 701          |
| Bank and cash  | <u>18 998 224</u>  | <u>9 251 500</u>    |
|  | <u>29 171 657</u>  | <u>23 491 201</u>   |