



CHAMBER OF MINES
of South Africa

INTEGRATED ANNUAL REVIEW **2017**

Making Mining Matter



MINERALS COUNCIL
SOUTH AFRICA

OUR MEMBERS

The Chamber of Mines represents more than 200 direct and indirect members who generate about 90% of South Africa's mineral production by value, employ approximately 450,000 people and contribute some R18 billion in taxes per annum.



GOLD

AngloGold Ashanti; Sibanye-Stillwater; Gold Fields; Harmony; DRDGOLD, Pan African Resources, Village Main Reef

Gold remains one of the world's most-coveted metals, revered for its beauty, symbolism and held as a store of value. This versatile metal is malleable, conductive and does not tarnish, making it ideal for use in jewellery and many industrial applications.



COAL

Anglo American Coal; South32; Kuyasa Mining; Kangra Coal; Siyanda Resources; Sasol Mining; Shanduka Coal; Glencore; Exxaro; Total Coal; African Rainbow Minerals (ARM) Coal; Jindal Africa; MC Mining, Msobo Coal; Mbuyelo Group; Ledjadja Coal; STA Coal; Dediccoal; Vaalbult; Umcebo Coal; Sumo Coal; Springlake Colliery

Coal is the largest component of mining by sales value and is a critically important source of primary energy (electricity and liquid fuels) that drives the South African economy.



DIAMONDS

De Beers; Petra Diamonds; Trans Hex; South African Diamond Producers' Association

Diamonds, arguably the ultimate luxury mineral, are made of an intricate lattice of carbon atoms, a crystalline structure that makes them harder than any other form in nature. This characteristic makes diamonds not only popular in jewellery, but also desirable in high-tech cutting, grinding and polishing tools.



PLATINUM

Anglo American Platinum; Lonmin; Impala Platinum; Ivanplats; Northam Platinum; ARM Platinum; Royal Bafokeng Platinum; Wesizwe; Platinum Group Metals; Mvelo Platinum; Sibanye-Stillwater; Glencore Platinum

Platinum group metals (PGMs) constitute six noble metals, all silvery-white in appearance – platinum, palladium, rhodium, ruthenium, osmium and iridium. Platinum, palladium and rhodium are the primary metals of significant economic value. They are used largely by the automotive and chemicals industries for their excellent catalytic properties. Other uses include jewellery, investment (coins and bars), fuel cells, and many other industrial purposes.



BASE MINERALS

and industrial minerals: Kumba Iron Ore; Richards Bay Minerals; Glencore Alloys; Imerys; Pretoria Portland Cement; Black Mountain Mining; Palabora Mining Company; Kalagadi Manganese; Cronimet Chrome; Vametco; Tshipi é Ntle Manganese; Asia Minerals Limited; United Manganese Kalahari; Dwarsrivier Chrome Mine

Chrome is known for its high corrosion resistance and hardness. It is an essential metal in the production of stainless steel, which accounts for 85% of its commercial use. Manganese has numerous industrial and metallurgical applications, particularly in the manufacture of steel. In various forms, manganese is used in the making of batteries and chemicals. Iron is among the most common elements on earth, comprising much of the planet's inner and outer core. However, it cannot be extracted at such depth and is mined in the earth's crust of which it comprises some 5% of the total. Most iron ore is used to manufacture steel, which is, in turn, used to manufacture machines, buildings and tools.



OTHER

Aveng Mining; Fraser Alexander; Atha Group; Murray and Roberts; Corobrik; Rio Tinto; Siyanda Resources; Thebe; Shanduka; Clay Brick Association; Aggregate and Sand Producers' Association of Southern Africa; Deilmann-Haniel (SA); Pegmin; South African Mining Contractors' Association; Amava

VISION

To ensure that mining matters for all South Africans.

The Chamber of Mines' vision is to reposition the mining sector as South Africa's foremost industrial sector. In partnership with our key stakeholders, we envisage an environment that is conducive to shaping policy and legislation to facilitate a significant increase in real investment in the mining sector by 2030. Such an outcome would be a positive and game-changing catalyst in helping the country achieve its economic growth, development and transformation targets as articulated in the National Development Plan (NDP).

MISSION

The Chamber of Mines is committed to taking a leadership position in the South African mining space, working with its members and key stakeholders in becoming the most-respected, capable and trusted advocacy organisation for the entire mining sector. In seeking to realise its vision of a positive turnaround in the mining sector, the Chamber works in problem-solving partnerships with its key stakeholders.

VALUES

Integrity, respect, transparency and accountability which in turn help create trust and responsible citizenry.

QUICK FACTS



464,667
direct jobs



Approximately
4.5 million
dependants supported



R126.0 billion
annual employee
earnings



COVER CAPTION

Sibanye-Stillwater and AngloGold Ashanti



Scan this QR barcode with your smartphone or tablet to download the Chamber of Mines Integrated Annual Review 2017.



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Strategy

 **CAPTION**
Sibanye-Stillwater – Driefontein

ABOUT THE CHAMBER OF MINES

The Chamber of Mines of South Africa (the Chamber) is a mining industry employers' organisation that supports and promotes the South African mining industry. The mining companies which are members of the Chamber collectively produce 90% of South Africa's minerals by value. These are large and small companies producing over 50 different minerals.

The Chamber serves its members and promotes their interests by providing strategic support and advisory input and represents its members in all key policy debates affecting mining. Key functions of the organisation are to facilitate interaction among mining employers, to examine policy issues and other matters of mutual concern, and to crystallise and define desirable industry standpoints. A variety of initiatives are in place to promote collaboration between members. Consultation and collaboration are voluntary and do not compromise the autonomy of members.

The Chamber also acts as a principal advocacy group, representing mining in South Africa to government and communicating major policies endorsed by its members. The Chamber also fulfils a vital function in co-ordinating and representing certain producers in centralised negotiations with organised labour.

The Chamber of Mines of South Africa is being formally renamed the Minerals Council South Africa (Minerals Council), unveiling a new logo and brand identity. A decision to rename the organisation was taken by the Chamber of Mines' Council in 2017, in line with its changing face, ethos and role. This report's cover reveals the Minerals Council logo.



CAPTION
Harmony – Bambanani

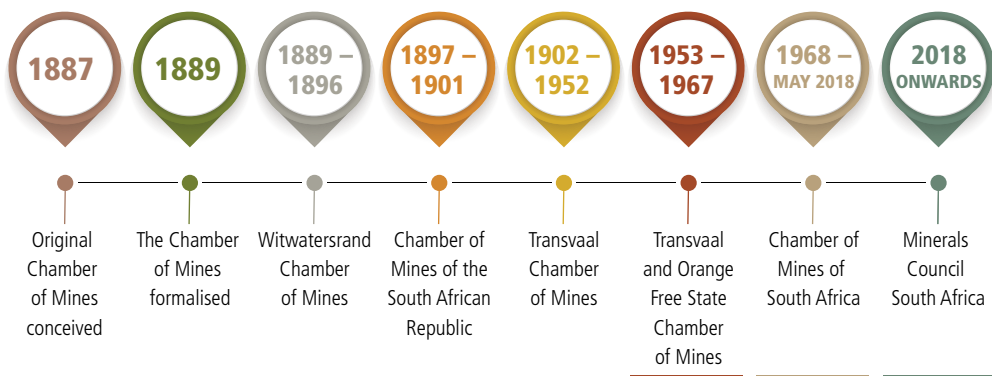
MORE THAN A CENTURY OF SERVICE, collaboration, advocacy and leadership



Chamber members produce 90% of South Africa's minerals (by value).

A BRIEF HISTORY

The Chamber has undergone a number of name changes in its history necessitated by mining and political developments in South Africa.



Mining is a 'SUNRISE INDUSTRY' and it remains the "flywheel" of the South African economy.

Research worldwide shows that due to better technologies used to explore for minerals and more efficient usage of commodities the importance of mining does not abate.

According to the national statistics compiled by the South African Reserve Bank, the inflation-adjusted monetary value of mining's contribution to the South African economy has not fluctuated much since 1960, remaining at an average of R350 billion per annum in 2017 numbers. The mining sector provided the base for the South African economy to industrialise and become a middle income country, far ahead of its African peers. Cyclical expansion and contraction does occur, however.

Indications (on balance) are that 2017 was a lower turning point for the mining sector. Due to higher economic growth in the world, the dollar prices of commodities started to recover, and were it not for the stronger rand exchange rate (10% appreciation), rand prices would have been higher too. Higher production (+3.4%), however, led to higher export sales (+7%). Value added to the South African economy increased by 4.6% but due to continuous and accelerating cost increases (from 5.5% in January to 7% in December), profitability remained

elusive and unpredictable (decline in net profits before taxes is estimated at 10% for 2017). Employment in the sector is estimated to have grown by about 1.6% from 2016 to 2017. Gross fixed investment improved by 16% after a historical low in 2016. These signals give hope of recovery.

The sector contributed as follows to the South African economy in 2017:

- Exports of R307 billion (R295 billion in 2016) representing 27% of the country's R1.1 trillion total
- Production rose to R630 billion (R574 billion in 2016) – 7.4% of R8.6 trillion South African production
- Value added rose to R334 billion (R307 billion in 2016) – 6.8% of R4.6 trillion South African value added
- Mining sector employment rose to 464,667 (457,290 in 2016) – 6.1% of private non-agricultural employment or 4.8% of total non-agricultural employment
- Gross fixed investment in mining grew to R80.9 billion (R67.6 billion in 2016) representing 18.2% of private and 10.8% of total fixed investment in the economy

This serves to illustrate that "mining really does matter for South Africa".



BUSINESS MODEL

This model illustrates what the Chamber of Mines does to achieve its objectives, the entities with which it engages, the means used and what was achieved in the past year.

INPUTS



HUMAN CAPITAL

- Applying the vast technical experience and expertise available among members and their employees to improve the effectiveness of the Chamber and the industry



INTELLECTUAL CAPITAL

- The industry has significant intellectual capital, which is applied to multidisciplinary issues
- Collaborating in R&D initiatives



SOCIAL AND RELATIONSHIP CAPITAL

- Engaging with business, Chamber members, government, research groups, trade unions, media, non-governmental organisations (NGOs), parliament and others



NATURAL CAPITAL

Implementing initiatives to:

- mainstream environmental sustainability
- mitigate and manage pollution
- optimise efficient use of natural resources (i.e. minimise water and energy usage, etc.)
- contribute to management of environmental legacies



FINANCIAL CAPITAL

- Chamber members contributing to and investing in industry-related initiatives – directly and indirectly



MANUFACTURED CAPITAL

- Creating platforms and opportunities for stakeholder engagement
- Enabling access to facilities and infrastructure



Impala Platinum – Rustenburg

WHAT WE DO



1



Engage effectively with stakeholders

2



Promote an understanding of our industry and enhance its image

PRIMARY STAKEHOLDERS WITH WHICH THE CHAMBER ENGAGES

GOVERNMENT	CHAMBER MEMBERS	TRADE UNIONS	SUPPLIERS AND RESEARCH GROUPS	INVESTMENT COMMUNITY	BUSINESS COMMUNITY	MEDIA	LEGISLATIVE
Including the Presidency and various government departments such as: Mineral Resources, Labour, Water and Sanitation, Trade and Industry, Environmental Affairs, Planning, Monitoring and Evaluation, Health and Higher Education	Established members and emerging miners	AMCU, NUM, Solidarity, UASA, Cosatu	Including existing and emerging suppliers, universities and NGOs	Local and international	BUSA, BASA, BLSA, CEO initiative, AgriSA, etc.	National and regional print, online and broadcasting media	Parliament (NCOP PPC, study groups, etc.)

BUSINESS MODEL continued

WHAT WE DO (CONTINUED)



OUTPUTS 2017

3

Design and implement a positive contribution model

4

Create an enabling environment for a successful and sustainable mining industry

5

Develop and share best practice

- Significant effort to rebrand and reposition the Chamber leading to the renaming and rebranding
- Modernised the Chamber strategy and budget processes
- Modernised HR practices and improved governance
- Modernised and rejuvenated the Chamber offices
- Reduced our environmental footprint including rooftop agriculture and improved energy efficiency
- Three-year coal wage agreement negotiated and concluded
- Tackled government on illegitimate Reviewed Mining Charter
- Played a leading role in standing against unethical leadership, bad governance and state capture
- Drove multiple court cases to hold government to account



(See Strategy on page 8)

DESIRED OUTCOMES



HUMAN CAPITAL

- Safe mining
- Improved employee engagement and communication
- Enhance training and development
- Transformation
- Addressing legacy issues



INTELLECTUAL CAPITAL

- Promotion of research and development (R&D) unlock full potential of mining sector
- Increased innovation to create the mines of tomorrow



SOCIAL AND RELATIONSHIP CAPITAL

- Improved, responsive stakeholder relationships
- Enhanced understanding and awareness of the South African mining industry



NATURAL CAPITAL

- Improved resource management to ensure efficient use of resources



FINANCIAL CAPITAL

- Increased investor confidence, leading to greater investment in the mining sector



MANUFACTURED CAPITAL

- Profitable, sustainable mining
- Improved technology and mining practices (modernisation)

STRATEGY

The Chamber rigorously implemented its strategic plan during the year.



This plan is reviewed and amended annually to take into account the prevailing socio-economic climate and specific issues raised by members.

In 2017, the strategic plan was reviewed by the office bearers and a revised strategic plan was approved by Council. The goals include:



STRATEGIC GOAL 1

Playing a leadership role in pressing the reboot button for the mining industry

Transformative change, ethical leadership and good governance	P11, 36, 41, 60 and 76
Complete the industry's vision for competitiveness and growth	P11, 14 and 60
Ensure enhanced communications and promotion of a positive image	P44, 52, 76 and 77
Successfully resolve a significant portion of legacy issues	P12 and 77
Form alliances with key business, labour, community, state, parliament, religious groupings	P77
Effectively engage members including emerging miners	P63 and 81
Facilitate legacy payments from pension/provident funds	P12, 13 and 51
Implement Ex-mineworkers Project	P51
Address environmental legacies	P84 to 91
Rebrand, rename and reposition the Chamber	P3
Engagement with government	P78



Glencore – Tweefontein

STRATEGY continued



**STRATEGIC
GOAL 2**

Creating an enabling policy, legislative, regulatory and operating environment for a sustainable and successful mining industry

President's Framework Agreement for a Sustainable Mining Industry	P33 to 36
Mining Industry Growth, Development and Employment Task Team (MIGDETT)	P62
Mineral and Petroleum Resources Development Act (MPRDA) Amendment Bill	P64
Participate in the integration of Compensation for Occupational Injuries and Diseases Act (COIDA) and Occupational Diseases in Mines and Works Act (ODMWA)	P51
Mining Charter	P62
Climate change and carbon management tools	P85, 86 and 90
Deputy President's Labour Relations Declaration (Nov 2014) and National Economic Development and Labour Council (NEDLAC) Technical Task Teams dealing with labour legislation on national minimum wage (NMW) and violent and prolonged strikes	P36
One Environment System	P86 to 89
Classification of Mine Residue Deposits and Stockpiles (MRDS) as hazardous waste and National Environment Management Act (NEMA) Regulations on Financial Provisions	P85
Skills Education Training Authority (SETA) Grant Regulations	P68 to 69
Illegal mining	P92 to 95
Wage negotiations	P33



**STRATEGIC
GOAL 3**

Chamber and its members to implement a positive socio-economic contribution model (including contributing to the NDP)

Promote local economic and community development	P61
Promote mining innovation and research and development (R&D)	P73
Help expand a cost-competitive and efficient infrastructure base for mining	P23 and 28



**STRATEGIC
GOAL 4**

Lead by example – demonstrate progress on transformation, safety, social and environmental imperatives (including through sharing best practice)

Promote zero harm (safety and health)	P37 to 53
2014 health and safety milestones	P37 to 53
Promote and enable effective transformation	P60 and 61
Reduce mining industry's environmental footprint	P84 to 91



**STRATEGIC
GOAL 5**

Continually improve the effectiveness and performance of the Chamber

Filter external issues and ensure alignment with Chamber strategic plan	P8 to 9
Implementation of a modernised human resources strategy: internal performance management	P31
Enhancing communication	P44, 52, 76 and 77
Continue modernisation of the Chamber offices, policies and procedures	P31 to 32
School information programme	P80

LEADERSHIP AND GOVERNANCE

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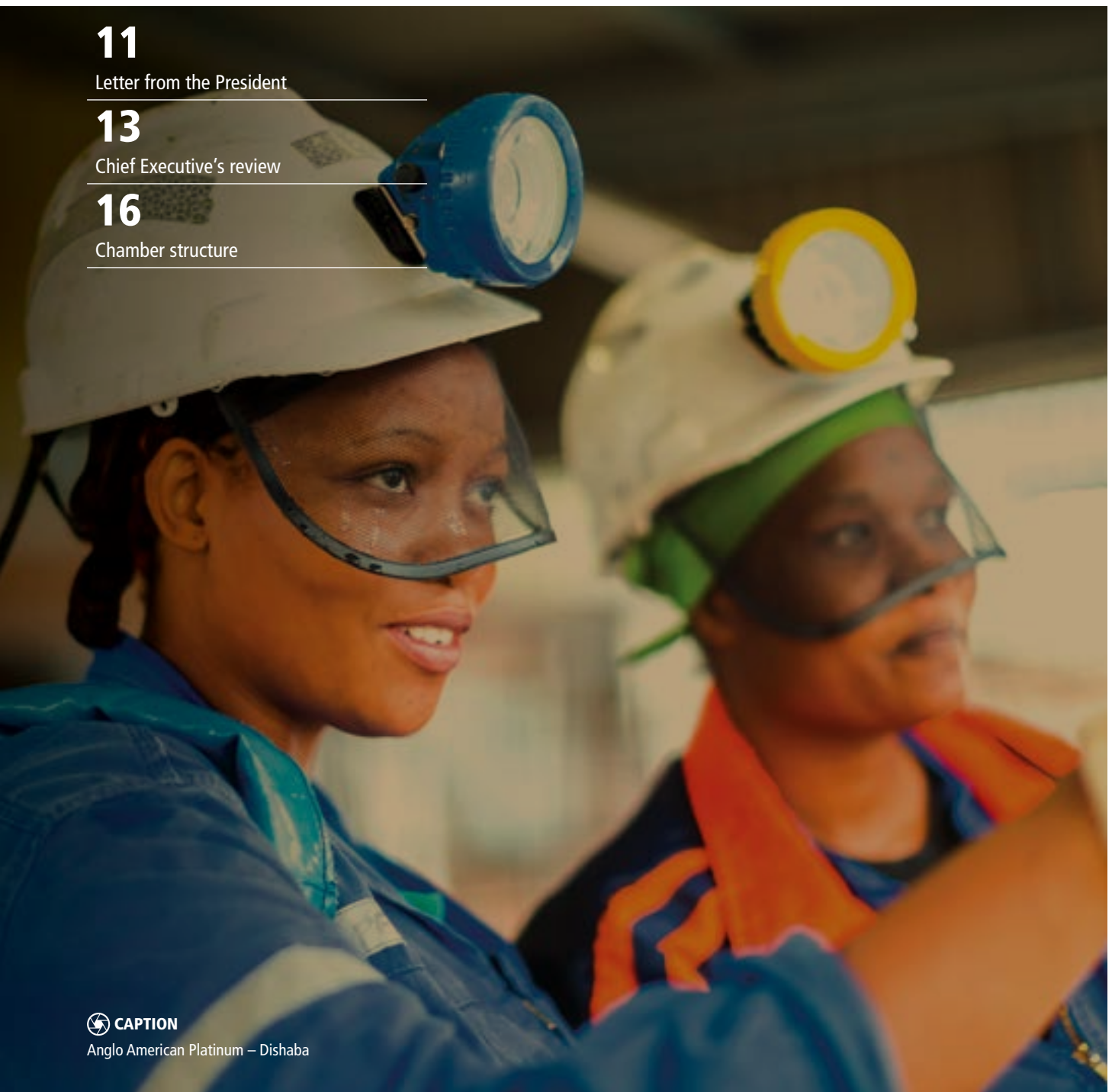
Letter from the President


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Chief Executive's review

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Chamber structure



 **CAPTION**
Anglo American Platinum – Dishaba

LETTER FROM THE PRESIDENT



The overriding objective is to press the “reboot” button with stakeholders.

MXOLISI MGOJO
President – Chamber of Mines

The year 2017 ended on a positive note for South Africa’s mining industry. The election of a new ruling party president, who a few weeks later was elected President of the country, and his subsequent appointment of Gwede Mantashe as Minister of Mineral Resources along with several other highly competent appointments elsewhere in cabinet’s economics cluster, opens up new possibilities, not only for the mining industry but for South Africa as a whole.

PRESSING THE ‘REBOOT’ BUTTON

The Chamber’s vision and mission has not changed. We remain on a quest to reposition the South African mining sector as South Africa’s pre-eminent industrial sector. This we seek to do through the creation of a competitive and transforming industry that realises the country’s mineral wealth for the benefit of South Africa. The overriding objective is to press the “reboot” button with stakeholders and work together towards building a new trust-based social pact with them. We want to work together to build a positive policy, regulatory, investment, innovative and operating environment. We want South Africa to emerge into an investment destination of choice for mining.

The mining sector has significant multiplier effects into almost all other sectors. A growing, vibrant, competitive, innovative, productive and transforming mining sector can materially contribute to realising the National Development Plan (NDP) vision of higher, more inclusive, economic growth.

The new political environment offers far more positive conditions in which to seek to achieve these goals. In recent years the political terrain has been extremely rough as we, and much of the rest of the country and its economy, were involved in a painful battle against a government leadership and regulator that, in large part, was focused on the corrupt enrichment of a few selected entities at the cost of the rest of the citizenry, including our industry.

Today we can say with relief that, while the attainment of those goals will still be complex and challenging, we are not going to be struggling against enemies of growth and transformation.

Still, we must recognise that the industry enters this new era in severe crisis. At last count, the country was ranked 47th out of 91 mining jurisdictions in the Fraser Institute Survey for its investment attractiveness. In the past three years greenfields investment has largely been placed on hold, and in 2016 real mining GDP was smaller than that recorded in 1994.

Organised business as a whole has a central role to play in working with government and other stakeholders to revive SA’s economy. The Chamber will continue to work with Business Unity SA, Business Leadership SA and others playing the kind of assertive role that was forced upon us by the travails of recent years.

DEVELOPING A COMMON CAUSE

Whatever our differences, it has also been good to see the common cause that developed between the industry and other stakeholders, including organised labour and civil society, in resisting the damage that was being done to our economy and our society by many in the leadership of the previous administration.

While the industry has a long history of engagement with organised labour in respect of collective bargaining on conditions of employment, and they sat at the table in previous Mining Charter negotiations, links with civil society have been less developed. We should not allow the foundations that were built with both sets of stakeholders during the country’s governance crisis to be wasted. We need to develop these relationships further in the quest for a social pact.

For the industry, this social pact needs to embody smart policy, greater regulatory certainty and good governance driving the competitiveness and transformation of the mining sector. For us, these are mutually reinforcing imperatives. This is the basis on which we are approaching the talks on the charter.

LETTER FROM THE PRESIDENT continued

ADDRESSING LEGACY ISSUES

We are completely open and willing to hear the issues that other stakeholders would want to raise as their basis for embracing a social pact.

We would expect that this would involve, among other things, the Chamber and the industry continuing to address legacy issues. While we know that our country's troubled history means that it will take time for all these to be addressed, we would hope that the efforts made in recent times to accelerate the pay out of retirement fund holdings of ex-miners is one example of what can be done with good co-operation and careful strategic planning. We are particularly proud of the efforts of our gold mining colleagues in the remarkable work they have done with their stakeholders to resolve the large silicosis challenge. They have settled the class action litigation which is now awaiting High Court approval; they have worked tirelessly, as has the Chamber, to improve the administration of the compensation fund operated through the Department of Health; and they are working in concert with the Chamber to improve for the future compensation for those who contract occupational lung disease. For them, as for the rest of us, continuing improvements in dust management remains critical so as to mitigate all occupational lung disease.

By far my biggest regret about 2017 is that it is the first time in 23 years that the industry's safety performance has deteriorated, at least when measured by the most important factor, the number of people who died in mining accidents. The details of this are dealt with in other sections of this report.

The overall message from the industry's leadership must be that we remain committed to get back on the path of continuing safety improvement, for as long as it takes to reach our goal of zero harm. Our employees and the public need to know that we take that commitment with every piece of seriousness that we can muster.

THANKS

On behalf of the Council and members, I would like to extend our thanks to CEO, Roger Baxter, and his formidable team that have ensured that the Chamber has been on the front foot during this tumultuous time. I would also like to make special mention of Dr Elize Strydom, who was Senior Executive leading Employment Relations and Legal, and who retired at the end of February 2018.

Finally, I thank my fellow office bearers who have shared the load with me in the year under review, and have ensured that – whenever and wherever it has been needed – the Chamber has represented members well.

CONCLUSION

In conclusion, we look forward to the year ahead. We have no doubt that we face many challenges. But we also know that we have entered a far more positive political environment than we have experienced in recent years. And we know that our members are committed to mining in an effective and responsible manner that will ensure fair returns to investors while other stakeholders, too, will benefit from our efforts. Our newly renamed Minerals Council South Africa will surely be there with even greater energy, both for our members and for the people of South Africa as a whole.



MXOLISI MGOJO

President – Chamber of Mines

11 May 2018

CHIEF EXECUTIVE'S REVIEW



A major focus of our work in 2017 related to the fight for ethical leadership and good governance.

ROGER BAXTER
Chief Executive Officer

The year 2017 proved to be one of the most eventful in the industry's post-apartheid history. For the first time in several years, thanks to political developments in the ruling African National Congress and their impact at national government level, the year ended with a great deal of scope for hope for the future of the industry and our country.

HEALTH AND SAFETY

However, before turning to these positive developments, it is necessary to acknowledge and lament the one area where the industry's efforts can only be described as disappointing. After a 23-year period of consistent improvement, the industry saw a deterioration in its safety performance, as measured by the number of accident fatalities. There were 88 fatalities in 2017 compared with 73 the previous year. The Chamber extends its condolences to the families and friends of those who lost their lives.

I know that the CEOs of our members have recommitted themselves to the quest for zero harm. In 2012, the Chamber established the CEO Zero Harm Forum (formerly called the CEO Elimination of Fatalities Forum) to visibly lead by example, to drive health and safety initiatives and to share experiences to help address key challenges. Among the priorities have been

the development and management of critical controls for fatal risks, and instilling a culture in the industry that will change the behaviour of people at all levels to enhance their compliance and agility for change.

A more positive development in the health and safety sphere was the work that continued last year among current and former gold companies in the quest for solutions to the challenges of occupational lung disease (OLD). An historic class action settlement was reached on 3 May 2018, resulting from three years of extensive negotiations. This agreement provides meaningful compensation to all eligible former employees suffering from silicosis and/or tuberculosis from 12 March 1965 to date.

In further pursuit of this, the Chamber, together with the OLD Working Group, has been working with the Compensation Commissioner to support his efforts to improve the quality of administration of the Occupational Diseases in Mines and Works Act (ODMWA) compensation fund. The Chamber's members have contributed several hundred millions of rands to support the improvement of processes to ensure that compensation, already provided for, actually reaches its intended beneficiaries. The mining groups are also working with other stakeholders to integrate the country's two compensation systems – ODMWA and the Compensation for Occupational Injuries and Diseases Act (COIDA) – in a process led by the Deputy Mineral Resources Minister.

REGULATORY AND RELATED POLITICAL ISSUES

A major focus of our work in 2017 related to the development of a new Mining Charter and resistance to the efforts of former Mineral Resources Minister Mosebenzi Zwane to impose on the industry and on the country a charter that, if implemented, would have seriously damaged the industry and the national economy.

Our worst fears – expressed in this letter a year ago – were realised when a so-called Reviewed Mining Charter (RMC17) was published in the Government Gazette for immediate implementation.

The Chamber immediately brought an interdict to prevent the RMC's implementation. The Minister agreed to suspend implementation pending a review hearing which was scheduled to be heard, first in December 2017 and subsequently in February 2018.

That was not the end of litigation against the Minister. The Chamber was forced to bring yet another interdict after he threatened to stop processing new mining and prospecting rights applications pending the finalisation of the charter case. Again, in apparent recognition of the illegality of his gazetted threat, he agreed to suspend that course of action too.

These developments persuaded the Chamber that there was no purpose in further engaging the Minister. The Chamber stated that the industry had "lost confidence in the then Minister to lead

CHIEF EXECUTIVE'S REVIEW continued

the DMR". The Chamber also decided that there was no point in further engagement with the Minister after the publication of the unilateral charter, believing that litigation was the only worthwhile course of action.

However, though there were some risks attached to our approach, we believe that subsequent developments bear out the validity of the strategy we adopted. As is now known, Minister Zwane was replaced as Mineral Resources Minister by Mr Gwede Mantashe in the country's new President's first cabinet reshuffle.

As is also known, the RMC litigation was eventually postponed after a commitment by new President Cyril Ramaphosa to engage on a new charter. The new charter is being developed through a process of negotiation between all stakeholders. And while it will not be an easy process with many divergent perspectives of the industry, we trust the ultimate outcome will be – as in 2004 and 2010 – a consensual one that takes account of broader transformational competitiveness and sustainability imperatives. The Chamber remains committed to playing its part in this regard. At the time of writing this report, the Chamber continues to participate in the two technical task teams established by the Minister of Mineral Resources – one on transformation and the Mining Charter and the other on competitiveness and inclusive growth – as well as the Committee of Principals – with a view to developing a new Mining Charter that will facilitate the further transformation and sustainability of the industry.

The other key piece of litigation was the application for a declaratory order in respect of the recognition of the continuing consequences of previous transactions. This action was initiated before the Zwane era, and was initially a joint initiative of ourselves and Zwane's predecessor Ngoako Ramatlhodi.

We are gratified that the North Gauteng High Court found in favour of the Chamber's interpretation on this matter. It is absolutely critical to the industry's future in SA. We note that the Minister and the DMR have initiated an appeal against this majority judgment, and we respect their right to do so.

On a separate matter, the Chamber has agreed to join, as a respondent, the application brought by attorney Hulme Scholes which challenges, amongst others, the validity of both the 2004 and 2010 Mining Charters. The Chamber does not share this view. The Chamber participated in the development of the original Mining Charter in 2004 and its revision in 2010, and views these as important instruments for achieving the transformation of the sector.

There are other regulatory issues still pending, including the amendments to the MPRDA. However, we are confident that the new rational and consultative approach means that a fair and constitutional outcome is assured.

We join much of the rest of South Africa in looking forward to a new era that we hope has begun under the new government and its leader, President Ramaphosa.

Towards the end of 2017 the Chamber published a report based on a survey of members which showed that, should South Africa introduce changes to its mining regulatory regime that put the country again into the world's top 25% of global mining jurisdictions, planned investment over the next 5 years would be some 84% higher than was planned at that stage, with consequent improvements in employment and all the other factors to which mining contributes.

These findings resonate well with the initiative announced by President Ramaphosa in April regarding the quest for an additional US\$100 billion in investment. We seriously trust that this is where we are headed in these new circumstances, and the industry looks forward to playing its part.

MINING ECONOMICS

There are also some positive signs for the industry internationally as the global economy begins to show some signs of recovery.

The weighted dollar commodity price index (coal, iron ore, gold and platinum) for South Africa hardly moved between 2016 and 2017. In dollar terms, this is due to the lacklustre price trend for gold (+0.8%) and the decline in platinum prices (-4%), negating the increases in the prices of coal (+28%) and iron ore (+22%). The equivalent rand index also hardly moved (given differential price movements and weights). Total sales of commodities exported increased by nearly 7% (in real terms) in 2017 on 2016. Total production of commodities increased by 3.5% between 2016 and 2017.

On average the rand strengthened against the dollar by 10% over the same period. The rand has continued to strengthen since the beginning of 2018 due to a renewal of political confidence, though the currency movements are a double-edged sword for the industry's exports.

In Rand terms, each major commodity exhibits unique trends, which in general can be explained by the differential recovery in markets for South Africa commodities:

- The **gold** price declined by more than 8% between 2016 and 2017, mainly driven by geopolitical uncertainties subsiding during 2017. Sales of gold were up by about 1%, but production declined by 3%.
- **Platinum** prices declined by over 12% over the same period, mainly due to environmental issues and the uncertainty regarding the pace and technological direction of electric vehicle development. Platinum sales grew by 0.5% (in real terms) but production declined by 4.1% over the period.

CHIEF EXECUTIVE'S REVIEW continued

- **Coal** export prices improved by 17% between 2016 and 2017, and are more or less on par with the prices achieved during the 2008 commodities price peak. The volume of coal sold declined slightly (-1%) over the period, but production increased by 1.5%. India seems to have an insatiable demand for South African coal.
- **Iron ore** prices increased by over 12% between 2016 and 2017. The high quality iron ore puts South Africa in the 'higher tier' price range due to the Chinese environmental concerns which has forced lower quality iron ore prices to decline. The volume of sales of iron ore increased by more than 5% and production by 12% over the period.
- The two star performing commodities were **chromium** and **manganese**. Sales of the former increased by over 6% and production by over 14% during the period. Chromium prices increased by 63% over the period. Manganese sales jumped by nearly 140% and production by nearly 40% between 2016 and 2017. Manganese prices accelerated by 20% over the same period. These movements are also related to the pace and technological direction of electric vehicle development.

RESPONSE TO UNCTAD'S "MISINVOICING" REPORT

In February the Chamber published a second report from independent economic consultancy group, Eunomix, which we had commissioned. We believe that the two reports strongly refute any suggestion that misinvoicing and other illicit financial flows are at all substantial or systemic where SA's mining industry is concerned.

The industry would support any strengthening of SARS or other financial authority's capacity to monitor and enforce the comprehensive systems designed to prevent illicit financial flows. And we hope that where these have occurred, particularly on a criminal basis, that the perpetrators are appropriately punished and/or required in other ways to remedy their misdoings.

COMMODITY STRATEGIES

As part of intensifying the industry's leadership approach, the Chamber is overseeing, in consultation with relevant member companies, the development of strategies in respect of a number of key commodities.

The first to be completed regards coal which, notwithstanding environmental concerns, remains a key part of South Africa's energy mix and that of numerous other major economies. A national strategy for the platinum industry has also been developed, and is to be the next focus of our attention in this respect.

MINING COMMUNITIES

Another new area of Chamber endeavour is our work in mining communities. While our members have widespread programmes in place for community engagement, conflict between mines and their communities is a concern. The Chamber has implemented

on-the-ground pilot engagements and programmes at Emalahleni and in the Northern Cape, where we hope that the work we do will be helpful in itself and that the lessons we learn will be valuable to the industry as a whole.

NEW NAME, NEW BRAND

In 2017, following extensive research and introspection, the Chamber's Council agreed that the organisation should rethink its identity and its name, to be more reflective of what it is and what it wants to be. So, it is with great pleasure that we will announce at the 2018 Annual General Meeting that this 128-year-old entity will be renamed the Minerals Council South Africa. And as the Minerals Council, in its more modernised state, will reflect the promise of a prosperous, safe, transformed and progressive organisation for the future, and hence we have unveiled a new logo to reflect that.

In looking forward, we are not refuting our industry's difficult past. We acknowledge that while the mining industry has contributed significantly to the development of South Africa, our impact on the country and its people has not always been positive, and we are committed to addressing the negative impacts of our legacy. And to building a new legacy of which all South Africans can be proud. We believe that significant progress has been made in addressing legacy issues (such as OLD and pension payments) and transforming the industry.

THANKS

It falls to me to sincerely thank Chamber President, Mxolisi Mgojo, for the wise leadership he has displayed during this most eventful of years when delicate and tough decisions have had to be made with ongoing regularity. He has been ably supported by his Vice Presidents, Andile Sangqu, Neal Froneman and Steve Phiri. As always, my thanks go, too, to the Chamber Council, to our executive team and the Chamber's entire staff for all the progress and hard work we have seen in the period under review.

The year ahead will bring forth, I am sure, different kinds of challenges and hopefully fewer crises. Nonetheless, the period will require continuing hard work, dedication and enlightened decision making. I am confident that the new Minerals Council will progress further in its task of representing and assisting its members as we look forward to a new dawn for South Africa's mining industry and for the country itself.



ROGER BAXTER
Chief Executive Officer

11 May 2018

CHAMBER STRUCTURE

The Council of the Chamber of Mines comprises representatives of member companies. As the highest-ranking body in the Chamber, the Council guides and directs strategy. Council members nominate and elect four office bearers – the President and three Vice Presidents.

OFFICE BEARERS

MXOLISI MGOJO

President

(appointed in May 2017)

BSc (Hons) (Energy Studies); MBA; Advanced Management Programme (Wharton)

Mxolisi Mgojo was appointed as CEO of Exxaro Resources Limited on 1 April 2016. Previously he served as Exxaro's Executive Head of Coal and Executive Head of Operations. He was also responsible for the base metals and industrial minerals commodity business of Exxaro. Previously, Mxolisi served as Head of Group Marketing of Eyesizwe Coal.

ANDILE SANGQU

Vice President

(appointed in May 2015)

BCom (Acc); BCompt (Hons); CTA; Higher Diploma Tax Law; MBL

Andile Sangqu is currently executive head of Anglo American South Africa. He has also held senior positions in various government departments and currently serves as a non-executive director in a number of companies. Andile has provided the Chamber with leadership and guidance in various strategic areas including financial restructuring and development, strategic planning, organisational transformation and change-management processes.

NEAL FRONEMAN

Vice President

(appointed in May 2016)

BSc Mech Eng (Ind Opt), University of the Witwatersrand; BCompt, University of South Africa; PrEng

Neal Froneman has been at the helm of Sibanye-Stillwater since January 2013 and has some 30 years of operational, corporate development and mining industry experience. Previously, he was CEO of Afilease Gold and Uranium One, and CEO of Afilease Gold Limited. Prior to joining Afilease Gold, Neal held executive and senior management positions at Gold Fields of South Africa Limited, Harmony Gold and JCI Limited. He currently serves as a non-executive director in a number of companies.

STEVE PHIRI

Vice President

(appointed in May 2017)

BJuris; LLB; LLM; Dip Corp Law

Steve Phiri has been the CEO of Royal Bafokeng Platinum since April 2010. Prior to this, he was the CEO of ferrochrome producer Merafe Resources Limited. He previously headed up the Royal Bafokeng Nation's corporate and legal affairs, which included negotiations with entities such as Merafe and Impala Platinum Limited. He is admitted as an attorney of the High Court of South Africa.



1

2

3

4

1. Neal Froneman

2. Andile Sangqu

3. Mxolisi Mgojo

4. Steve Phiri

CHAMBER STRUCTURE continued

CHAMBER EXECUTIVES



FROM LEFT TO RIGHT

1. Roger Baxter
2. Tebello Chabana
3. Nikisi Lesufi
4. Harry Groenewald
5. Sietse Van Der Woude

ROGER BAXTER

Chief Executive Officer

BCom (Hons)

Roger Baxter joined the Chamber in 1992 and was appointed CEO in 2015. He has 27 years of high level advocacy and strategy experience in the business and mining sectors. He was involved in the first mineral policy discussions with the ANC in 1992 and has participated (and often led) discussions on all aspects of mining, economic, investment, transformation and tax policy with government. He previously chaired the BUSA Econpol and Growth Task Team. Roger has played a key leadership role in rejuvenating the Chamber brand and brings material leadership, governance, strategy, investment and transformation skills to the table. He is a member of the Chamber Council, the BUSA Board, and the TEBA Trust; and chairs the World Platinum Investment Council. He is vice-chairman of both the international Associations Working Group and MIASA.

TEBELLO CHABANA

Senior Executive: Public Affairs and Transformation

BA (Law); LLB

Tebello Chabana joined the Chamber in July 2016 following his departure from Anglo American South Africa. He began his legal career at Deneys Reitz Attorneys, then joined Anglo American South Africa as a Legal Advisor and served in a range of positions, ending as Head of Public Affairs South Africa. Tebello also spent time at Kumba Iron Ore as Executive Head of Public Affairs.

NIKISI LESUFI

Senior Executive: Environment, Health and Legacies

BSc (Hons); MSc

Nikisi Lesufi joined the Chamber in 2002 as an environmental adviser. He was appointed to his current position in 2008.

He previously lectured at University of the North (now University of Limpopo) and also served the Department of Water Affairs and Forestry (DWAF) in various capacities such as Deputy Director: Water Quality, Director: Water Resources Management and head of the regional office of DWAF in the Free State.

HARRY GROENEWALD

Senior Executive: Finance and Administration

BCom; MBL

Harry Groenewald's career in the mining industry started in 1985 when he joined Rand Mines. Prior to joining the Chamber, Harry was involved with copper and cobalt projects in the Democratic Republic of the Congo with ENRC, a Kazakhstan-based mineral resources company.

SIETSE VAN DER WOUDE

Senior Executive: Modernisation and Safety

MSc; MBL

Sietse van der Woude joined the Chamber in 2004 as a safety and sustainable development manager. He previously led the implementation of a regulatory framework for radiation safety in the mining industry at the National Nuclear Regulator.

CHAMBER STRUCTURE continued

SENIOR MANAGEMENT



1. Stephinah Mudau
Head: Environment

2. Dr Thuthula Balfour
Head: Health

3. Stanford Mamoshito Malatji
Head: Learning Hub

4. Jeannette Hofsajer-Van Wyk
Head: Administration

5. Dr Sizwe Phakathi
Head: Safety and Sustainable Development

6. Motsamai Motlhamme
Head: Employment Relations

7. Mustak Ally
Head: Skills Development

8. Henk Langenhoven
Chief Economist

9. Ursula Brown
Head: Legal

 **CAPTION**
Lonmin – K3

The Chamber continuously looks for ways to advance the position of and make improvements in the South African mining industry and participates in various initiatives and projects in areas relating to health, education, policy and regulations.



CHAMBER STRUCTURE continued

DEPARTMENTS

 <p>The Economics team provides input on matters affecting investment in the South African mining industry and issues facing the mining industry which have an economic impact. The team's function includes collating and analysing data and information on behalf of the industry, and advising industry on responses and positioning in respect of critical issues.</p>	 <p>The Employment Relations team provides service excellence to members in the field of labour relations, including labour market issues, collective bargaining, employment equity and social security.</p>	 <p>The Safety and Sustainability team actively promotes safety and health in the workplace for mineworkers as well as effective environmental management, and has identified areas in which the organisation can initiate positive change.</p>	 <p>The Health team provides service excellence to members in the field of occupational health, including occupational medicine and occupational hygiene and ventilation, as well as advocacy and advice on TB, HIV and AIDS.</p>	 <p>The MOSH (mining industry occupational safety and health) Learning Hub was established by the Chamber in 2009 to encourage and enable mining companies to learn from the safety and health expertise and leading practices that exist in the industry.</p>	 <p>The Finance and Administration team provides the internal financial and administrative structures and support to ensure the smooth running of the Chamber's internal processes.</p>
 <p>The Chamber's Public Affairs and Transformation team seeks to engage and inform all mining industry stakeholders through multi-channel communications and networking systems.</p>	 <p>The Chamber's Emerging Miners' Desk provides advice and support, and acts as a resource centre for the smaller Chamber member companies.</p>	 <p>The Skills Development team facilitates an environment that enables the mining industry to deliver skilled and trainable employees for deployment and advancement. A skills development initiative represents members in the areas of education and human resources development and associated policy and legislation.</p>	 <p>The Environmental team provides advisory services, guidance and strategic leadership on environmental sustainability in a manner that enhances members' contribution to sustainable development. This is achieved through the department's leadership in engagements in the development of position papers for policy formulation and implementation.</p>	 <p>The Legal team provides the legal advice necessary to act on behalf of members in influencing legislative and other measures affecting members' interests. The focus is on constructive policies that are consistent with the national interest.</p>	 <p>The Illegal Mining team assists in addressing challenges that have arisen as a result of the increase in illegal mining in South Africa.</p>

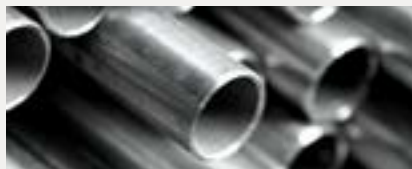
CHAMBER STRUCTURE continued

CHAMBER COUNCIL – as at 31 December 2017



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

- | | | | |
|---|--|---|--|
| <p>1. Mxolisi Mgojo
Chamber of Mines: President
Exxaro: CEO</p> | <p>4. Steve Phiri
Chamber of Mines: Vice President
Royal Bafokeng Platinum: CEO</p> | <p>8. Michael Fraser
South32 Africa:
President and COO</p> | <p>12. Lucky Kgatle
Sasol Mining: MD</p> |
| <p>2. Andile Sangqu
Chamber of Mines: Vice President
Anglo American South Africa:
Executive Head</p> | <p>5. Roger Baxter
Chamber of Mines: CEO</p> | <p>9. Chris Griffith
Anglo American Platinum: CEO</p> | <p>13. Ben Magara
Lonmin Platinum: CEO</p> |
| <p>3. Neal Froneman
Chamber of Mines: Vice President
Sibanye-Stillwater: CEO</p> | <p>6. Ayanda Bam
Kuyasa Mining:
Executive Chairman</p> | <p>10. Nick Holland
Gold Fields: CEO</p> | <p>14. Maboko Mahlaole
Palabora Mining Company:
GM: Human Resources</p> |
| | <p>7. Paul Dunne
Northam Platinum: CEO</p> | <p>11. Murray Houston
Glencore Coal: COO</p> | <p>15. Daphne Mashile-Nkosi
Kalagadi Manganese: Chairperson</p> |



CHAMBER COMMITTEES

PLATINUM LEADERSHIP FORUM

DIAMOND LEADERSHIP FORUM

COAL LEADERSHIP FORUM

MANGANESE LEADERSHIP FORUM

CEO ZERO HARM FORUM

EMERGING MINERS' LEADERSHIP FORUM

CHAMBER STRUCTURE continued

CHAMBER COUNCIL



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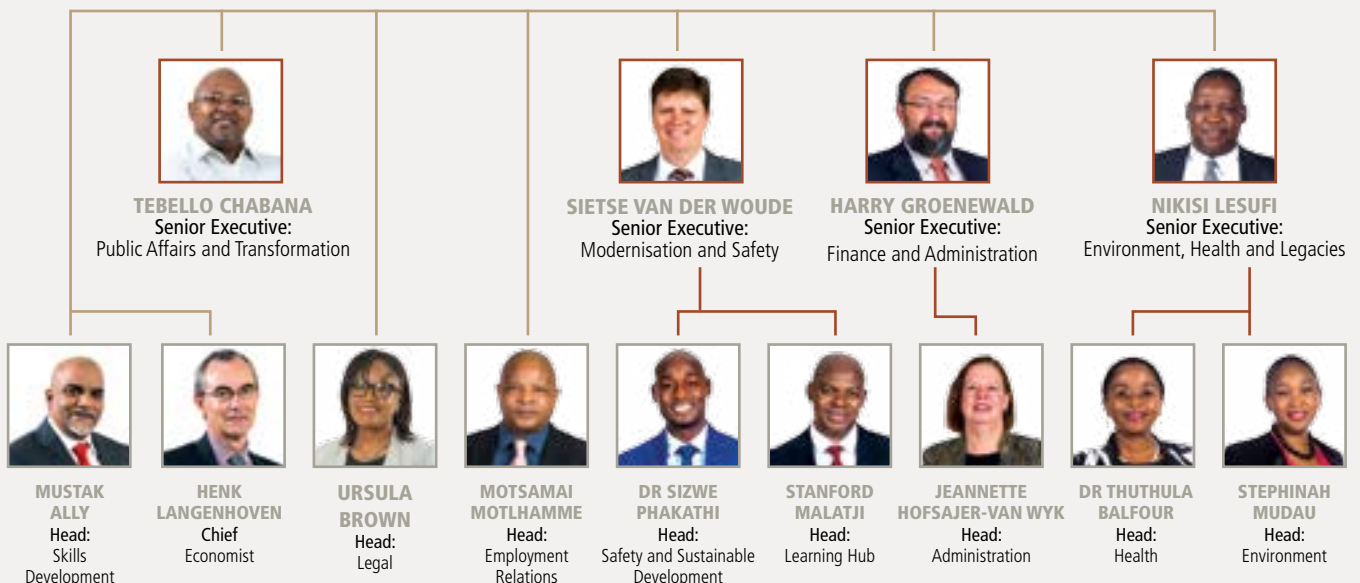
- | | | | |
|--|--|--|--|
| 16. Zanele Matlala
Merafe Resources: CEO | 20. Nico Muller
Impala Platinum: CEO | 24. Willie Potgieter
Glencore Alloys: CFO | 28. Mike Teke
Dedicoal: CEO |
| 17. Billy Mawasha
Richards Bay Minerals: CEO | 21. July Ndlovu
Anglo American Coal: CEO | 25. Niël Pretorius
DRDGOLD: CEO | 29. Srinivasan (Venkat) Venkatakrishnan
AngloGold Ashanti: CEO |
| 18. Norman Mbazima
Anglo American South Africa:
Deputy Chairman | 22. Barend Petersen
De Beers Consolidated Mines:
Chairman | 26. Mike Schmidt
African Rainbow Minerals: CEO | |
| 19. Themba Mkhwanazi
Kumba Iron Ore: CEO | 23. Nico Pienaar
Aspasa: Director | 27. Peter Steenkamp
Harmony: CEO | |

CHAMBER MANAGEMENT

As at 31 December 2017



ROGER BAXTER
Chief Executive Officer



OPERATING ENVIRONMENT

23

Economics



 CAPTION
Harmony – Tshepong

ECONOMICS



1. **Bongani Motsa**
2. **Christian Teffo**
3. **Henk Langenhoven**
4. **Tafadzwa Chibanguza**

The year 2017 marked 10 years since the global financial crisis and the collapse of the commodity price cycle. Countries that responded with appropriate economic policies have recovered whereas others, like South Africa, failed to provide a policy environment conducive to growth.

As world economic growth has recovered with concomitant resumption of growth in international trade and higher demand (and prices) for commodities, the mining sector has responded positively.

International geopolitical tensions eased towards the end of 2017 with the US returning to a 'Monroe doctrine'-like self-imposed isolation and, although brash, it was not cause for instability.

Renewed world economic growth resulting in higher demand for commodities seems to indicate that the commodity cycle has reached the lower turning point of the cyclical trough and will slowly recover from here on.

South Africa's dismal economic growth performance was fuelled by a crescendo (towards the end of 2017) of contradictory and inappropriate economic policies stifling growth with almost complete focus on redistribution as opposed to growth. In many cases, there was brazen looting of assets from private and public coffers. The mining sector was at the face of this onslaught, and suffered greatly from uncertain policies towards it, causing costs to rise dramatically and loss of competitiveness. The sector grew unattractive to investors.

The mining sector's share of the South African economy is estimated to have been 6.8%, marginally down from the 7% of overall gross domestic product (GDP) recorded in 2016. This despite the fact that growth resumed from the dismal decline (-4.3%) in 2016 to an expansion of about 4.6% in 2017, contributing R312 billion to GDP.

Due to higher mining production, employment is estimated to have increased by 1.6% to 464,667 during 2017. This has finally arrested the rate of job losses which stood at 30,000 jobs between 2014 and 2017. Among the major commodities, estimates point to the gold sector having shed another 4,000 jobs between 2016 and 2017 while the PGMs, iron ore, diamonds, chrome and manganese sectors employed more people in 2017 than in 2016. Mining employment represents 6.1% of private non-agricultural employment and 4.8% of total non-agricultural employment.

The sector contributed R80.9 billion to fixed investment in 2017, which constituted 18.2% of private-sector fixed investment and 10.8% of the country's total fixed investment for the year. In the decade between 2007 and 2017, the mining industry's fixed investment has been on a downward trajectory. The recovery in fixed investment is a sign of better prospects for the sector, but it still hung in the balance at the end of 2017.

The industry exported R307 billion worth of produce, which is 27% of the country's R1.1 trillion export book. The 10% strengthening of the rand against the US dollar in 2017 adversely affected the rand receipts for exports. On a US dollar equivalent basis, exports increased by 16.1%, but only by 7% in Rand terms.

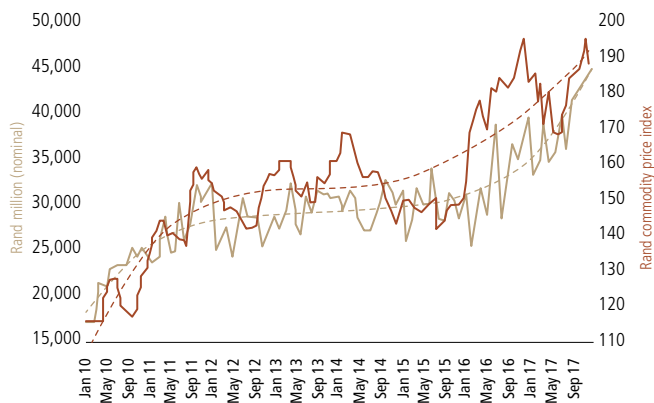
In the 2016/2017 fiscal year, the industry paid R5.8 billion in royalties, representing a 56% increase on the previous year. The industry paid R16 billion in taxes over the same period.

The state of mining in 2017 was again influenced by a complex set of dynamics. The sales performance of the sector is largely determined by the dollar commodity price trends translated into 'landed' rand prices.

CAPTION
Rand Refinery



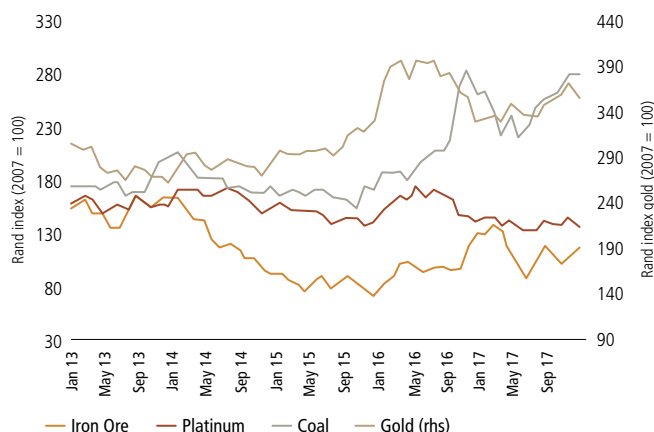
Rand commodity price index and nominal sales: 2010 – 2017



Source: World Bank, South African Reserve Bank and Chamber of Mines

The overall weighted **dollar** commodity price index (coal, iron ore, gold and platinum) for South Africa hardly moved between 2016 and 2017. In dollar terms, this was due to gold’s lacklustre price trend (+0.8%) and the decline in the platinum price (-4%), negating increases in the price movements of coal (+28%) and iron ore (+22%). The equivalent rand commodity price index also hardly moved (given differential price movements and weights). Please see the graph on annualised production versus rand commodity price trends in this section for details; a rise during 2016 was negated by a decline during 2017, leaving the average prices virtually unchanged.

Rand commodity price indices: 2013 – 2017



Source: World Bank, South African Reserve Bank and Chamber of Mines

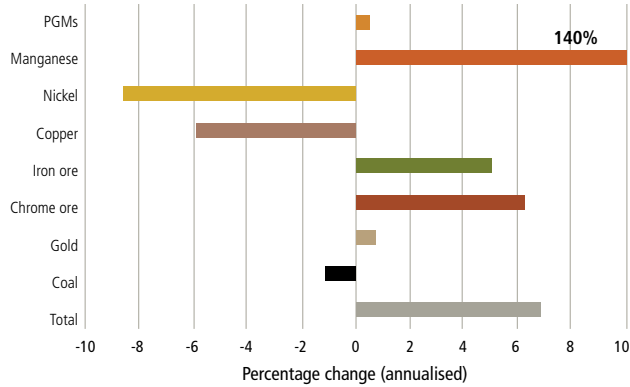
Each major commodity exhibited unique trends (in rand terms), which could, in general, be explained by the differential recovery in markets for South African commodities.

Each commodity had specific drivers. Please see pages 14 and 15.

Overall sales of commodities exported increased by nearly 7% (in real terms) in 2017 on 2016.

ECONOMICS continued

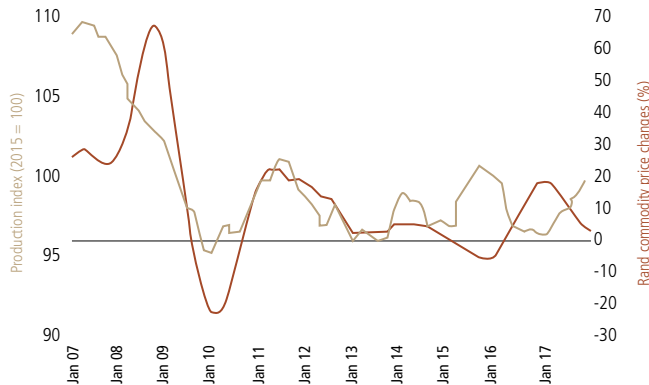
Sales performance of various commodities in 2017



Source: Statistics South Africa and Chamber of Mines

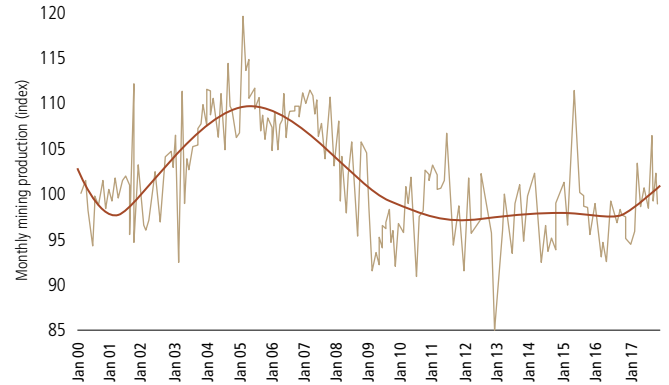
Total production of commodities increased by 3.5% between 2016 and 2017. On average the rand appreciated against the dollar by 10% over the same period. It is clear that production trends do not directly correlate with commodity price movements, as depicted in the graph below. A lag of one year to 18 months is evident between the two variables over recent years.

Annualised production versus rand commodity price: 2007 – 2017



Source: World Bank, South African Reserve Bank, Statistics South Africa and Chamber of Mines

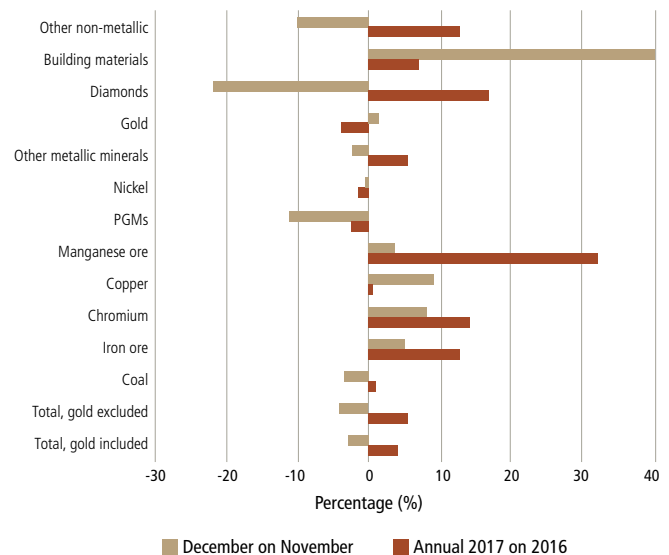
Index of monthly mining production: 2000 – 2017



Source: Statistics South Africa

The varied production performance by each commodity in the sector is shown in the following graph.

Production performance by commodity: 2017



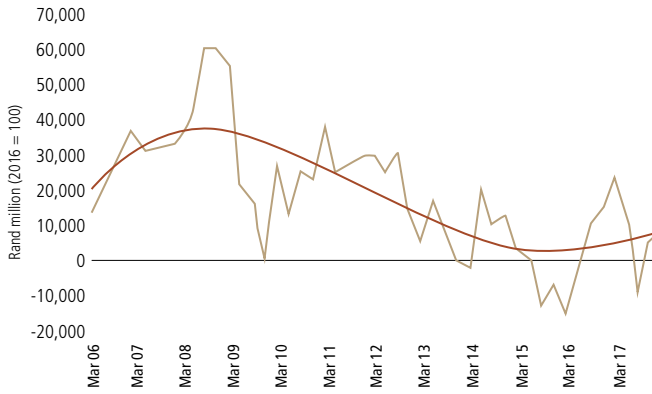
Source: Statistics South Africa and Quantec 2017

Mining production rose to
R620 billion
in 2017

The sector as a whole struggled to remain profitable. This was mainly due to commodity prices not improving strongly and domestic costs continuously rising. Mining input costs increased by nearly 6% over the same period.

ECONOMICS continued

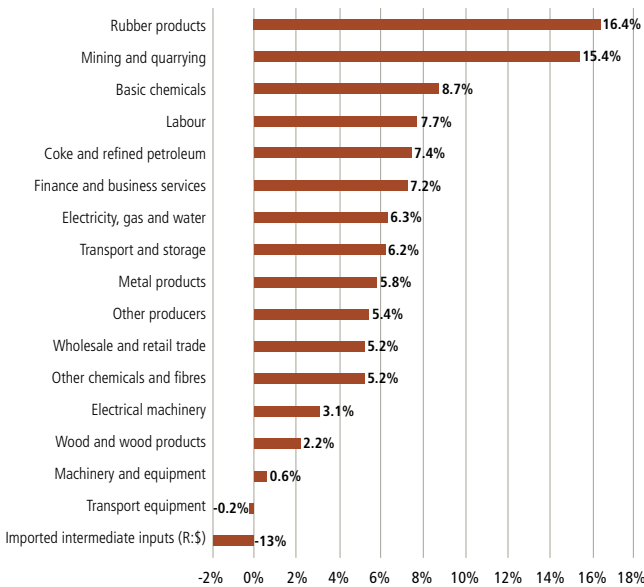
Quarterly net profit and losses before taxes: 2006 – 2017



Source: Statistics South Africa: Quarterly Financial Surveys 2017

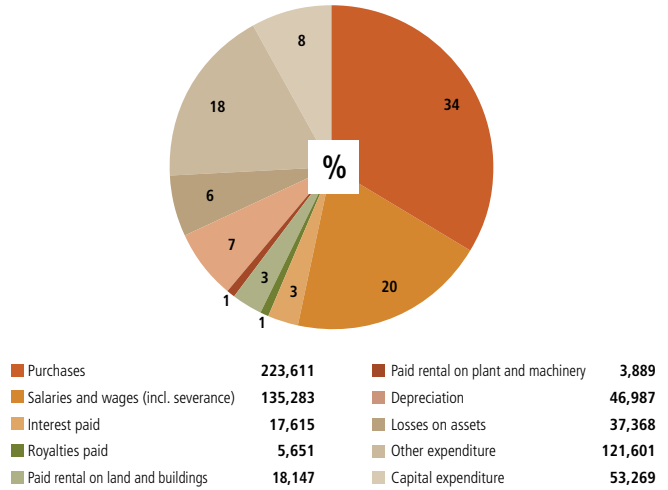
The Economics Department developed a mining input cost index. Based on this research, the contribution of intermediate inputs was 69.5% and labour 30.5% during 2017. The split of intermediary input cost is depicted by the graph below. The graph was developed from the estimated input-output tables for mining, augmented by company data as reported in their published reports. More than 50% of these costs (petroleum, electricity, transport and storage) are determined by administered prices.

Differential increases in cost components: 2017



Source: Chamber of Mines

Mining industry expenditure 2017 (R million)



Source: Statistics South Africa: Quarterly Financial Surveys 2017; Chamber of Mines

Rapidly rising costs, a large proportion of which are completely out of mining companies' control, keep eroding profitability in the sector. Apart from costs eroding profitability, they also have a direct impact on employment. As an example, the potential job losses related to the attempted 20% electricity tariff increase by Eskom would have cost 48,000 mining job opportunities. NERSA only awarded a 5.2% tariff increase after serious opposition from the Chamber and other private sector organisations.

The uncertain, and sometimes openly hostile, domestic policy environment has had a direct and negative impact on the mining sector (see case study on page 28). The cabinet reshuffle, which included firing Finance Minister Pravin Gordhan in March and April 2017, and the subsequent downgrading of South Africa's sovereign credit rating, had a negative impact on the sector's cost of capital. Lingering uncertainty regarding the revised Mining Charter weighed heavily on investor confidence and mining share prices, which countered the optimism of commodity prices stabilising and, for some commodities, rising. These factors, if not rectified, will continue to have a negative impact on fixed investment in mining and may therefore result in the country's mining sector losing out on the next commodity price cycle upturn.

The mining sector continued to provide significant employment in South Africa. Total employment for 2017 was 464,667 people, which is slightly higher than it was in 2016.

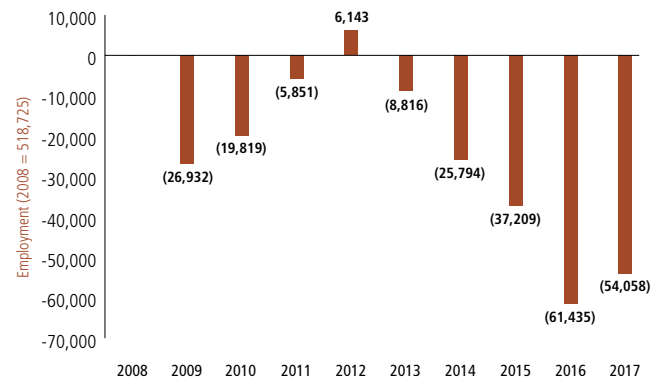
ECONOMICS continued

Number of employees and earnings: 2017

Commodity	Employment	Total earnings (R 000s)
Gold	112,200	29,027,067
PGMs	175,770	48,258,265
Iron ore	21,794	5,791,755
Chrome	17,535	4,775,778
Manganese	8,314	2,437,046
Diamonds	18,227	5,243,203
Coal	81,962	22,415,572
Aggregate and sand	7,390	1,244,248
Other mines and quarries	21,475	6,817,005
Total	464,667	126,009,944

Source: Department of Mineral Resources

Employment losses: 2008 – 2017



Source: Statistics South Africa and Chamber of Mines

The graph above shows the impact of all the factors discussed above on employment since 2008.

CAPTION

Kumba Iron Ore – Kolomela



CASE STUDY: WHAT IF



CASE STUDY

MINING HAS POTENTIAL TO UPLIFT BUT NEEDS STATE SUPPORT

In 2017, we conducted a survey among our members in an attempt to understand the investment and employment potential of the mining sector in the event of a return to best practice in policy, legislation and regulation formulation.

We asked: “What if the South African mining sector could get back into the top 25% of investment attractiveness rankings, which is where our potential suggests we should be?” Altogether, 16 companies responded to the survey, representing a cross-section of the various commodities and making up the overwhelming bulk of mining production in South Africa.

The South African mining industry’s real GDP in 2017 was 3.9% lower than that recorded in 1994. The financial services industry has in contrast grown by 168% over the same period. The question is whether this divergence is due to lack of potential or the negative effects of the regulatory environment. The responses to the survey present an indication of the effect of the regulatory environment of which the Chamber has been highly critical.

South Africa has consistently fallen short on the Fraser Institute investment attractiveness index (with regard to best practice policy, legislation, regulation and operating environment). In contrast, the same Institute ranks South Africa in the top quartile for its mineral potential. Clearly, there is a fundamental mismatch between the potential and the current outcomes.

Mine development has long lead times so certainty and a conducive policy environment are important determinants of hurdle rates for return on investment. In an adverse environment, hurdle rates have to be reviewed constantly and repriced upwards as the risk premium associated with the operating environment increases. In an unstable environment, the probability of potential investment not taking place significantly increases, rendering projects unviable.

Some companies stressed that investment generally depends on a wider variety of determinants than the political and policy stability of the operating environment. For example, the commodity price cycle and forecast price assumptions are important in making investment decisions. The aim of the survey was an attempt to isolate the effect on investment of the policy environment from the operating environment.

To understand the potential positive effect of policy certainty, we quantified the amount of current capital expenditure already in the system. Company reports, the 2017 Nedbank report on Capital Expenditure Project Listings, Statistics South Africa and South African Reserve Bank numbers were used in this regard.

The estimated current capital spending in the mining sector (stretching over the next four years) amounts to more than R145 billion. The potential capital expenditure in a more certain and conducive environment (covering at least another three years) could amount to an additional outlay of more than R122 billion.

Capital expenditure on mining projects could therefore be 84% higher than the current R145 billion. The positive effect on employment creation, according to the survey results, would be nearly 48,000 people.

Much of the planned investment is to ‘stay in business’. Investment in new mines halved from 2012 to 2016 and that was before the 2017 publication of the reviewed Mining Charter. The survey clearly indicated that this adversely affected the trend.


Five companies indicated that potential new investment was not being considered, while one company is contemplating divesting from South Africa. These respondents could either not see worthwhile investment opportunities or the adverse environment had shifted their focus to other geographies.

An interesting finding is that the relative contribution to investment of the R122 billion potential spend does not correlate with the relative employment effect. For example, the coal sector has the highest investment potential, representing 42% of the total potential investment, but only 31% of the employment potential.

The converse is true of the gold sector, which has the highest employment potential (62% of the total potential jobs) but only 31% of the capital spend. Of the current capital expenditure, the PGM subsector is spending the most, or nearly 46% of the total.

Based on these findings, the mining industry certainly has significant investment and employment potential, but unlocking this potential will require a nurturing environment to stimulate long-term investment. It will also require the support of a pro-business regulator in creating partnerships for growth in order to foster investor confidence.



 **CAPTION**
Northam – Booyensdal

2017 AREAS OF FOCUS

31

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Safety

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Health

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MOSH Learning Hub

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Transformation

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Skills development

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Modernisation

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Stakeholder relations and communication

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Environment

92

Illegal mining

 **CAPTION**

Impala Platinum – Rustenburg

FINANCE AND ADMINISTRATION



Finance and
administration



1 2 3 4 5 6 7 8 9 10 11

Finance

1. **Juanita Broderick**

2. **Faye Khota**

3. **Patrick Mathibela**

4. **Harry Groenewald**

Administration

5. **Maria Rodrigues**

6. **Andrew Netshikweta**

7. **Jeanette Hofsaier-Van Wyk**

8. **Bediliah Morris**

9. **Carmen Brown**

10. **Sipho Phakade**

11. **Kevin Spadonie**

In support of the Chamber's strategy of renewal and continuous improvement in effectiveness and performance, the Finance and Administration department focused on the following aspects during the year under review:

MODERNISATION AND REJUVENATION OF THE CHAMBER BUILDING

Since the 1920s, the Chamber of Mines' home has been located at No 5 Hollard Street in Johannesburg. The programme to rejuvenate and modernise the building is in keeping with our strategy to be forward thinking, modern and to proactively ensure the most effective use of the Chamber's assets.

The modernisation process is selective and carefully applied. Outdated and inefficient facilities and equipment are being renewed and replaced. All public areas, board rooms and conference facilities are in the process of being upgraded and modernised, in order to create an environment which is conducive to efficient and productive work, and to boost employee morale.

INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) MODERNISATION

ICT is critical to the functioning of the modern workplace. Inadequate ICT security could present legal, reputational and business risks. In line with regular de-risking programmes, the Chamber has embarked on project Chamber 4.0, to upgrade and modernise the IT infrastructure and architecture, thereby providing a platform for staff to streamline, automate and simplify tasks with the aid of IT. Various security measures have also been introduced to combat cybercrime and data security or loss.

HUMAN RESOURCES AND CULTIVATING A HIGH PERFORMANCE CULTURE

Following a remuneration benchmarking exercise and a review of our remuneration policy and performance management system in 2017, the Chamber introduced a modernised HR strategy. In terms of this strategy, which seeks to differentiate between top and poor performers, annual remuneration increments are informed by the outcomes of the performance management system and incentive programmes.

FINANCE AND ADMINISTRATION continued

Within the total remuneration framework, the Chamber also offers a competitive reward programme which focuses on the attraction, engagement, motivation and retention of skilled professionals to drive the Chamber's strategic plan for the benefit of the mining industry.

The Chamber embraces a culture of health and safety, and implements a risk-based management approach which ensures a safe working environment while promoting various healthy internal employee wellness programmes, including a gym. Developments in health and safety are communicated on a regular basis.

GOOD GOVERNANCE

The Chamber has various mechanisms in place in order to prevent breaches of governance, and to reinforce a culture of acting responsibly and ethically. The Chamber adopts a zero tolerance approach to any form of bribery, fraud and corruption. The following governance structures are in place to oversee the governance function:

- The Audit and Risk Committee
- An ethics policy (which requires annual declarations of interest)
- The Remuneration Committee
- An ethics hotline

REDUCING OUR ENVIRONMENTAL FOOTPRINT

Along with its member companies, the Chamber is committed to responsible environmental stewardship and resource conservation.

By making use of energy-saving technology, the Chamber has made the following modifications to its offices:

- Installation of new energy-efficient lifts and air conditioners
- Standardisation of LED lighting
- Scrutiny of all equipment to ensure maximum energy efficiency
- Installation of an atmospheric water generator: This is a device which extracts water from ambient humid air. The water vapour is condensed by cooling it to below dew point exposing it to desiccants and rendering the water potable

The imminent carbon tax in South Africa poses both risks and opportunities for South African business. Carbon offset credits are an example of such opportunities, in terms of which carbon tax-paying entities may purchase carbon credits to offset up to 10% of taxable emissions, thereby reducing their overall tax liability.

Fuel cell projects in South Africa are eligible to be registered as carbon offset projects. The Chamber has the only 100kW, natural low pressure gas, base load and commercial fuel cogeneration/trigeneration plant at a commercial site in South Africa. This project has been registered under the United Nations Framework Convention on Climate Change (UNFCCC) "Programme of Activities 9437: Cogeneration and/or trigeneration at commercial sites". This will allow the Chamber of Mines to generate carbon credits which can be sold into the South African carbon market once the tax is promulgated.

With this project the Chamber of Mines is acting as a first mover in South Africa, carrying out the necessary learning to register fuel cell projects under the UNFCCC's Clean Development Mechanism for carbon offset credits in South Africa. In this way the Chamber hopes that many other fuel cell projects will follow in our footsteps and similarly register their projects.

In a CSI initiative during the past year, the Chamber participated in and funded a pilot project to assess the feasibility of growing herbs and vegetables on the rooftops of inner city buildings, including the rooftop of the Chamber building. This shows that a building is never too old for innovative ideas - the Chamber building is 94 years old.

The first crop was planted on the rooftop of the Chamber building for the benefit of agripreneur, Nhlanhla Mpati. A successful basil crop has already been harvested and sold to the Johannesburg Fresh Produce Market and surrounding cafés and coffee shops.

Given the success of this pilot project the Department of Small Business Development (DSBD) has agreed to fund the start-up costs of another 24 projects in the inner city of Johannesburg – helping to provide sustainable employment to 24 small-scale farmers. The DSBD will review the entire project in 2018 with the possibility of further funding becoming available.

EMPLOYMENT RELATIONS



1. **Jerry Selala**

2. **Paula Martins**

3. **Motsamai Motlhamme**

4. **Erissa Martin**

The Chamber's Employment Relations Department strives to make a positive contribution to the creation and maintenance of a stable employment relations environment in the mining industry, and to create practical and sustainable value for key mining industry stakeholders in the employment relations sphere by:

- Promoting and fostering sound and constructive relationships with key stakeholders, particularly government and labour
- Providing a credible platform for knowledge development and sharing in critical areas with potential impact on employment relations in the mining industry and South Africa generally
- Being the trusted voice of the mining industry on employment relations-related policy and legislative matters
- Identifying and addressing key issues with labour relations implications for the mining industry

WAGE NEGOTIATIONS

Gold

The three-year wage agreement signed in 2015 is in effect until 30 June 2018. During the year under review, the signatories to this wage agreement focused on implementing the various commitments contained in it.

The task team established to investigate extending the retirement age for mineworkers, and underground artisans and officials, from the current 60 years to 63 years agreed that the Mine Health and Safety Council (MHSC) should commission research to determine the health and safety impacts on employees who opt to extend their retirement age to 63 years. The MHSC has begun work on this research project and will provide the parties with progress reports.

The Association of Mineworkers and Construction Union (AMCU) chose not to be part of the 2015 wage agreements, challenging them on various grounds:

- Variations of the Basic Conditions of Employment Act No 75 of 1997, contained in the wage agreement and granted by the Department of Labour, will be heard in 2018.
- AMCU referred an alleged unfair discrimination case to the Labour Court, arguing that the differences in wages between Category 4 to 8 employees, miners, artisans and officials constituted unfair discrimination based on race. The parties argued their various preliminary points in court while the Chamber and UASA argued their exceptions to AMCU's pleadings. We await the court's decision on the preliminary points.

Coal

In 2017, for the first time, we negotiated and concluded a three-year agreement with the unions on wages, and terms and conditions of employment, on behalf of our participating coal members. With the exception of one company, this was achieved without strike action.

Most Category 4 to 8 employees received increases of R1,100 per month on basic pay for the first year, staggered over a period, and guaranteed increases of 7.5% for years two and three. Most employees in the higher categories received increases of 7.5% for each year of the wage agreement. Significant increases were also effected to the medical incapacity payment.

The wage agreement was signed by the National Union of Mineworkers (NUM), UASA and Solidarity. Regrettably, the National Union of Metalworkers of South Africa (NUMSA), which was participating in the coal negotiations for the first time, did not sign the wage agreement. NUMSA subsequently referred a dispute of mutual interest to the Commission for Conciliation, Mediation and Arbitration (CCMA) where it is being processed.

EMPLOYEE INDEBTEDNESS

Indebtedness remains a concern in all spheres of South African society, and is intensified as economic circumstances deteriorate

EMPLOYMENT RELATIONS continued

and job losses rise. Ironically, mining employees are vulnerable to formal and informal lenders as they have a stable, good income, and access to banking systems and other documentation.

Chamber members continued to provide financial literacy programmes to address employee indebtedness, including retirement workshops to educate employees about financial planning and budgeting processes. These workshops were open to employees of all ages to encourage them to plan for retirement as early as possible. The financial programmes ran throughout the year and included assistance with legal queries, home loan applications, and budget and debt consolidation.

MIGRANT LABOUR

Stakeholder engagements on immigration challenges continued in 2017, focusing on the following key issues:

- Temporary residence permits: The Department of Home Affairs, the Chamber, TEBA, NUM and AMCU agreed to explore the possibility of TEBA being given the authority to issue temporary residence permit stickers at the ports of entry. This alternative temporary residence permit process would obviate the need for foreign mineworkers to apply for their permits at foreign missions in their countries of origin. This would result in massive cost savings, remove unnecessary delays and ensure that foreign employees report back at work on the agreed dates. The stakeholders also agreed to explore the feasibility of issuing temporary residence permits for a three-year duration instead of the current 12 months.

TEBA and the Department of Home Affairs have had continuous engagements to resolve issues concerning the integration of systems, and to ensure data security and integrity.

- Corporate visas: During the period under review, the various stakeholders explored mechanisms to simplify the corporate visa application process for the mining industry, given that it is a big employer of foreign migrant labour. The proposals included legal ways to avoid burdensome requirements for the granting of corporate visas. A draft memorandum of understanding was finalised and referred to the parties' principals for consideration.

LABOUR POLICY COMMITTEE

The Employment Relations Department oversees and co-ordinates the Chamber's Labour Policy Committee (LPC), a forum that

brings together senior employment relations and human resources managers from Chamber members across all commodities, including mining contracting companies.

The forum seeks to influence policy and legislation affecting the mining industry through advocacy initiatives, engagements and participation in relevant debates and processes. The LPC develops and mandates industry positions on relevant issues, which in turn feed into national debates and processes, either directly or through other structures such as Business Unity South Africa (BUSA) and the National Economic Development and Labour Council (Nedlac).

A number of key issues discussed and mandated by the LPC during the period under review include social security and retirement, migrant labour and Sunday work.

When we became aware of a CCMA matter between one of the bargaining councils and a mining contractor working for some of the Chamber's members, we applied to the CCMA to join as a co-respondent as some of the issues presented for arbitration would have an impact on the mining industry and some of our members. The following arguments advanced in the arbitration were of particular concern to us:

- In order for a company to conduct business in the mining industry, the entity must participate in all four activities of "winning, extracting, processing and refining of minerals".
- Some activities classified in the bargaining council's Constitution, under civil engineering, were only of a civil engineering nature and character, and could therefore not fall under mining although also performed in the mining industry.

We presented written and oral arguments to the CCMA against the submissions mentioned above. The CCMA decided in our favour on both issues as follows:

- Where an employer performs activities closely related to the mining industry, the employer does not form part of the civil engineering industry even though the activities are of a civil engineering character.
- In order to be classified as mining, an entity need only perform any one of the four activities of "winning, extracting, processing and refining of minerals", and does not have to perform all four.

EMPLOYMENT RELATIONS continued**MINERALS AND PETROLEUM BOARD**

The Chamber has representation on the Minerals and Petroleum Board. Most of the board's work is devoted to the processing of Section 52 notices. These notices are presented to the Minister of Mineral Resources when the profit to revenue ratio of mining companies falls below 6% or where the anticipated downscaling of operations is likely to result in the retrenchment of 10% of the workforce or 500 employees, whichever is the greater. In the period under review, the board processed 19 notices, conducted consultations and investigations, and prepared reports for the Minister of Mineral Resources on these notices.

The board also finalised terms of reference and guidelines for the Regional Mining Development and Environmental Committees (RMDECs) established in terms of the Mineral and Petroleum Resources Development Act No 28 of 2002 as committees of the board.

PARTICIPATION IN BUSA AND NEDLAC

In the execution of the Employment Relations Department's advocacy and lobbying functions, the department was involved in BUSA's Standing Committee on Social Policy and Transformation (SOCPOL) and Nedlac's Labour Market Committee (LMC).

During 2017, BUSA's SOPOL focused on various policy issues affecting business in general, including engagements with other social partners on the White paper on International Migration and the Private Members Bill, which culminated in the publication of the Labour Laws Amendment Bill 2017. The Bill seeks to introduce new forms of parental and adoption leave, and to increase the number of parental leave days.

The Chamber also represented overall business on the Nedlac Section 77 Committee, which hears and pronounces on applications by organised labour to participate in socio-economic protest action.

CAPTION

Kumba Iron Ore – Kolomela





CASE STUDY

TRANSFORMATION OF THE LABOUR RELATIONS ENVIRONMENT

The National Minimum Wage Panel drafted proposed legislation to implement a national minimum wage and the National Minimum Wage Act, 2017 is under discussion at Nedlac.

The Code of Good Practice: Collective Bargaining, Industrial Action and Picketing, as well as draft amendments to the Labour Relations Act No 66 of 1995 to address the issue of violent and protracted strikes, have been sent by the Department of Labour to the State Law Adviser for consideration. Once the State Law Adviser is satisfied with the code and the proposed Labour Relations Act amendments, the same will be referred to Parliament.

A multi-stakeholder Nedlac technical task team was created to implement the various objectives set out in the declaration. The Chamber's Employment Relations Department is involved in the task team, which began its work in January 2015 and was engaged in negotiations until the end of 2016. Labour pushed for a national minimum wage to be introduced. The then Deputy President, Cyril Ramaphosa, established a panel of experts tasked with the necessary research and preparation of a report with recommendations. The panel presented its findings to the Deputy President in December 2016 and inter alia recommended a national minimum wage of R3,500 per month. The findings will be considered by the Committee of Principals, including leadership of business and labour.

Following two years of negotiations through Nedlac, the task team ultimately developed codes of good practice on collective bargaining and on industrial action, aimed at promoting respectful and professional negotiations as well as peaceful industrial action. Amendments to the Labour Relations Act, providing for advisory arbitration by an independent panel in the event of prolonged and/or violent strike action, have also been drafted. These proposed amendments are supported by all the parties in Nedlac.

It is hoped that the proposed amendments to the Labour Relations Act will be passed by Parliament in the first half of 2017.

The Nedlac task team finalised and signed off its report in 2017.

The three Bills intended to deal with the national minimum wage, and violent and prolonged strikes, were tabled in Parliament and approved by Cabinet in 2017. The Bills were published for public comment in November 2017.

The National Minimum Wage Bill makes provision for the introduction of a minimum wage of R20 per hour.

The Basic Conditions of Employment Amendment Bill seeks to introduce amendments to the Basic Conditions of Employment Act in line with the provisions of the National Minimum Wage Bill. The primary amendments seek to repeal sections of the Act relating to sectoral determinations, and the powers and functions of the Employment Conditions Commission. The Bill also seeks to regulate monitoring and enforcement of the labour inspectorate to ensure compliance with the national minimum wage. The jurisdiction of the CCMA has been extended to include enforcement procedures and claims for underpayment in terms of the Basic Conditions of Employment Act and the national minimum wage.

The Labour Relations Amendment Bill seeks to strengthen collective bargaining and to introduce advisory arbitration mechanisms to resolve strikes that are intractable, violent or may cause a local or national crisis. The amendments to the Labour Relations Act will be accompanied by a Code of Good Practice on Collective Bargaining, Industrial Action and Picketing. The code is intended to provide practical guidance on collective bargaining, resolution of disputes of mutual interest and industrial action.

It is hoped that the Bills will be processed in Parliament as one package, as agreed at Nedlac.

SAFETY



Safety



1. **Dr Sizwe Phakathi**

2. **Shanaaz Waja**

3. **Lerato Tsele**

4. **Sietse Van Der Woude**

We and our member companies remain committed to the industry's goal of zero harm for all people working at our operations – permanent and contractor employees. The Chamber continues to be actively involved in a number of initiatives and partnerships aimed at eliminating fatalities and injuries in the mining industry.

Our Safety and Sustainable Development Department plays an important facilitative and co-ordinating role in the implementation of the 2024 milestones for mine safety and health in a manner that accelerates the achievement of the industry's goal of zero harm. We achieve this through engagement with the Chamber's Occupational Health and Safety Policy Committee (OH&SPC), the MOSH Learning Hub and the CEO Zero Harm Forum. We also engage with regional associations, including the Association of Mine Managers of South Africa (AMMSA) and the South African Colliery Managers' Association (SACMA), the Department of Mineral Resources (DMR) and organised labour, through the Mine Health and Safety Council (MHSC), and with international industry bodies through the Chamber's membership of the International Council on Mining and Metals (ICMM).

SAFETY PERFORMANCE AND TARGETS

During the 2014 MHSC Summit, all stakeholders agreed that we needed to accelerate the elimination of fatalities. The occupational safety milestone was therefore set to eliminate fatalities by December 2020, while recognising that every fatality was one too many.

A total of 88 fatalities were reported in 2017, compared with 73 fatalities recorded during the corresponding period in 2016. This marks an increase of 17% in fatalities, the first regression in 10 years. The provisional safety statistics for 2017 indicate that falls of ground were the largest contributor to fatalities in 2017 at 36%, followed by 'general' accidents at 30%, and transport and mining causes at 27%. Fall of ground-related fatalities increased from 24 in 2016 to 26 in 2017. The regression in fall of ground fatalities was compounded by multiple fatalities resulting from seismic events associated with deep-level mining.

The 2014 MHSC Summit occupational health milestone says that up to December 2016, there should be a 20% reduction in serious injuries every year, while from January 2017, there should be a 20% reduction in lost time injuries (LTIs).

The overall provisional number of serious injuries reported was 2,534 compared with 2,785 during the same period in 2016. Although below the annual milestone reduction target of 20%, this is an improvement of 9%, which marks a second consecutive reduction in the number of serious injuries.

Since the last quarter of 2017, the Chamber and its members have taken the following steps in response to the regression in mine fatalities:

- On 20 September 2017, the MOSH Learning Hub facilitated a 'day of learning' workshop on seismicity so that lessons could be shared and relevant research needs identified to effectively manage seismic events. The participants (from the platinum and gold sectors) unanimously expressed the need for preconditioning research as mine depths continue to increase.
- On 3 November 2017, upon reflection on the year-to-date occupational health and safety performance, the CEO Zero Harm Forum sent a letter to the Acting Chief Inspector of Mines and organised labour, expressing disappointment at the regression and highlighting some of the steps being taken by the CEO Zero Harm Forum to hasten the journey to zero harm.
- The Chamber issued a media statement expressing disappointment at the increase in the number of fatalities.

SAFETY continued

- On 7 November 2017, the Chamber CEOs met with the Deputy Minister of Mineral Resources to discuss the regression as well as a proposal to accelerate an improvement in the industry's occupational health and safety performance.
- The Chamber supported the MHSC Tripartite Leadership event in December 2017 to identify initiatives that would lead to reductions in fatalities, and greater compliance and collaboration.
- The Chamber, the South African Mining Development Association (SAMDA), the DMR and organised labour and the MHSC issued a joint media statement expressing grave concern about the regression in the rate of fatalities despite progress and successes achieved by the industry over the past 23 years towards improving the industry's occupational health and safety performance.

Despite the regression in fatalities in 2017, the South African coal mining sector still compares favourably, in terms of fatality rates, with developed mining nations such as the United States (US) – in 2017 the South African coal mines recorded nine fatalities compared to 15 fatalities recorded by the coal mines in the US. The progress achieved in workplace safety is a tribute to the 2014 Mine Health and Safety Tripartite Summit and continued engagement with the DMR and organised labour through the MHSC.

In 2018, the MHSC will host a tripartite Mine Health and Safety Summit to review progress being made in the implementation and achievement of 2024 milestones on occupational health and safety.

CAPTION

Glencore – Mashishing



SAFETY continued**CEO ZERO HARM FORUM**

Established in 2012, the Chamber's CEO Zero Harm Forum seeks to visibly lead by example, to drive occupational health and safety initiatives, and to share experiences to help address key challenges in a manner that will enable the industry to achieve the 2024 milestones and accelerate the industry's journey to zero harm.

The CEO Zero Harm Forum comprises Chamber member companies: Anglo American Platinum, AngloGold Ashanti, Anglo American Coal, African Rainbow Minerals, De Beers, Glencore Coal, Glencore Alloys, Gold Fields, Harmony, Impala Platinum, Kumba Iron Ore, Sasol Mining, Sibanye-Stillwater and South 32. The CEOs meet every quarter of the year to:

- Develop a model for industry leadership at CEO level
- Model visible leadership behaviour and demonstrate commitment
- Share company experiences and help each other deal with and solve key challenges
- Establish working protocols with industry stakeholders and communities
- Monitor and agree on adjustments to industry models for specific needs

In 2017, the CEO Zero Harm Forum focused on high-impact strategic areas aimed at:

- Sharing lessons learned from successes and incidents
- Promoting engineering controls to eliminate risks
- Changing behaviour through culture transformation

The members of the CEO Zero Harm Forum thus realised, with grave concern, that falls of ground and transport accidents have not reduced significantly over the past five years despite considerable efforts in this regard. It was observed that the quality of the process for developing critical controls was a crucial part of an occupational health and safety risk management strategy. To this end, the CEOs approved the establishment of two working groups to:

- Develop the Critical Control Management Journey Model
- Facilitate the sharing of lessons by learning from incidents

The outcomes of these initiatives included:

- A 'South Africanised' Critical Control Management Journey Model to assess individual company maturity levels in terms of critical control management implementation, focusing on falls of ground and transport (trackless and rail-bound) incidents
- Bilateral meetings between the Chamber and occupational health and safety executives to:
 - Popularise the Critical Control Management Journey Model for use in individual companies
 - Based on the identified maturity level within each company, prepare a list of critical controls for the identified agencies

such as falls of ground and transport (trackless and rail-bound) incidents

- Investigate successes and high potential incidents as part of learning from incidents

Following a spate of seismicity-related accidents, the CEOs noted, with concern, the recent increase in rock bursts while rock falls were decreasing. To this end, the CEOs established a task team to develop a summary of rock-burst leading practices and propose the best way to share these with all companies involved in deep-level mining.

To address transportation-related accidents, the CEO Zero Harm Forum took a global leadership stance on the adoption of people-centric collision management systems by initiating a project, costing more than R8 million, to accelerate a risk-based approach through collaboration among mining companies, suppliers and the MHSC.

The objective of the project is to co-ordinate the industry, and to provide the necessary guidance and support to effectively address the regulatory requirements in order to:

- Facilitate adoption of collision management systems by the set dates with minimal disruption to production
- Develop and incorporate change management tools (behaviour change principles) for inclusion in the outcome documents of the collision management systems sub-committee
- Disseminate the outcome documents through facilitated regional workshops targeted at opencast, surface and underground operations
- Develop and pilot user-friendly behaviour measurement tools to measure the change in employee and leader behaviour at operational level
- Discover a South African people-centric collision management system solution with global application, although manufactured locally in the interests of job creation

All stakeholders need to appreciate the importance of:

- Urgently establishing a proximity detection systems testing facility (funded by the MHSC) to facilitate opportunities for new suppliers and thus local job creation, and lower costs of ownership, while sustaining the same safety standards
- Effective people-centric change management, like the MOSH adoption process, to enhance safety while reducing the impact on production, jobs and government revenue

APPROPRIATE APPLICATION OF SECTION 54S

The Chamber has always supported appropriate Section 54 instructions, which empower inspectors to close parts of, or entire mines for health and safety reasons. However, the Chamber remains concerned about inappropriate Section 54 instructions issued since 2007, affecting the viability of many mines and their ability to

SAFETY continued

sustain jobs. A recent Labour Court judgement against DMR officials states that a Section 54 instruction must be proportional to the harm or potential harm that it intends to prevent, quoting a legal authority: “one ought not to use a sledgehammer to crack a nut”. The inspector concerned inspected a small portion of the mine and instructed the entire mine to be closed.

The Chamber is particularly concerned about the North West Province where inappropriate Section 54s are challenging the operation of a significant number of loss-making platinum producing shafts in the Rustenburg area. The primary drivers are direct production days lost due to Section 54 stoppages and indirect losses from the slow upliftment process and subsequent start-ups.

The Chamber has participated constructively in many initiatives to find a solution but the DMR continues undeterred. While a number of companies have resorted to costly court action, the Chamber's Platinum (PLF), consisting of CEOs of platinum mining companies, has developed a practical protocol to guide the appropriate application of Section 54 instructions. The protocol contains proposals to deal with challenges that make Section 54 application ineffective in enhancing health and safety, and value destructive:

- Reducing the duration of Section 54 stoppages
- Assessing the applicability of Section 55s (an instruction that avoids stoppages) versus Section 54 and/or other instruments
- Reducing the extent of Section 54 stoppages
- Co-operating appropriately with organised labour
- Assessing applicability of training as remedial action
- Limiting the impact of small defects and administrative issues

The practical protocol has been shared and discussed with the Acting Chief Inspector of Mines since September 2016 with regular follow-ups. No response has been received yet. It has also been tabled at the MHSC for approval by the tripartite stakeholders.

During November 2016, this ‘disproportionality’ was challenged in the Labour Court by AngloGold Ashanti after its entire Mponeng mine was closed by an inspector who had found a few relatively minor localised infractions, which did not pose serious threats to the safety of employees of the mine. In favour of the company, the Court found that the inspector's closure order, as well as the penalty imposed, were disproportionate, and established important legal principles. The Court ruled that an inspector may only close an entire mine if there is objective reason to believe that identified occurrences and conditions endangered, or may endanger, the health and safety of any person on the entire mine, and not only a portion of the mine.

It is hoped that this case will lead to greater clarity between mines, the DMR and its inspectorate.

A further legal challenge by another Chamber member, Sibanye-Stillwater, in the first month of 2017 was over the unwarranted closure of its Kroondal platinum mine in August 2016. The company has lodged a claim against the Mineral Resources Minister and certain DMR inspectors in their personal capacities for an estimated production loss of R26 million.

In March 2017, the Chamber hosted a workshop aimed at training occupational health and safety managers in the interpretation of Sections 54 and 55 of the Mine Health and Safety Act. The Chamber has since tabled a workshop recommendation to the MHSC that this training should be extended to other occupational health and safety managers, inspectors and organised labour's shop stewards. It is envisaged that Section 54 and 55 training will empower tripartite stakeholders to reach a common understanding of the interpretation and implementation of Section 54s and 55s, thus building much-needed trust in this area of mine health and safety.

MINE HEALTH AND SAFETY COUNCIL

The year 2017 marked the 20th anniversary of the MHSC, which was set up in 1996 to direct safety in the mining industry, and to respond to industry safety and health challenges. The council was built on the achievements of decades of fundamental research and is funded by the mining industry. The MHSC comprises a tripartite board represented by the state, employers and organised labour, under the chairmanship of the Chief Inspector of Mines.

The MHSC is accountable to Parliament and its primary tasks include advising the Minister of Mineral Resources on occupational health and safety legislation and research with outcomes focused on improving and promoting occupational health and safety in South African mines.

The MHSC is a valuable platform for tripartite collaboration in accelerating the improvement of the industry's occupational health and safety performance through shared vision and aspirational 10-year milestones. The council has been working on the implementation plan for the 2014 MHSC Summit milestones on mine health and safety, and plans to effectively implement structures accordingly. Through the MHSC, more than R250 million has been spent on research into seismicity associated with deep-level mines. In addition, R40 million has been spent on fundamental and applied research and technology transfer. The research outcomes have led to new mine designs and methods culminating in the reduction of fatalities associated with seismicity from 48 in 2003 to 14 in 2017.

SAFETY continued

In response to the increasing number of seismicity related accidents in 2017, the MHSC will accelerate research and development into rock-related accidents to address knowledge gaps in pre-conditioning pillar designs. Stakeholders have agreed that the MHSC needs to host a workshop on rock fall and rock-burst incidents in January 2018, including rock engineers and seismologists, to provide expert input, advice and recommendations for implementation by the industry.

MINING QUALIFICATIONS AUTHORITY

The MHSC works closely with the Mining Qualifications Authority (MQA), which plays a critical role in addressing skills shortages in the mining industry through capacity development and process improvement. The MQA is mandated to ensure that the sector has competent people who have been trained to improve health and safety standards, and processes.

MHSC CENTRE OF EXCELLENCE

In November 2014, the MHSC principal tripartite stakeholders launched a Centre of Excellence (CoE) to conduct world-class research, to build research capacity and to facilitate the implementation of research outcomes to accelerate the industry's journey to zero harm.

In 2017, the Chamber actively continued to maintain oversight of business plan implementation for the centre, which began operating on 1 April 2017, and on the execution of the following MHSC CoE quick-win research projects:

- Understanding the impact of technology on people in the South African mining sector
- Assessment of statutory equipment compliance for South African mines based on a centralised database
- Assessment of the feasibility of developing a communication system for underground and surface mining operations
- Development of testing specifications for netting and the dynamic testing of tendons, and assessment of the feasibility of establishing an independent accredited support testing facility
- Development of rock-mass condition assessment tools
- Assessment of the feasibility of developing collision management systems for South African mines
- Missing person locator system
- Assessment of the feasibility of reducing diesel particulate matter (DPM) exposure through replacement and/or conversion of all tier 2 or 3 engines to be able to use low sulphur diesel fuel and the effective maintenance of diesel machines

Through relevant structures, the Chamber will conduct an in-depth review of the findings and recommendations of the final reports of

these MHSC CoE quick-win research projects. It will:

- Ascertain the extent to which the research addressed the terms of reference as outlined in the scope of the research projects
- Assess the socio-economic impact of the recommended systems in terms of commercial viability, cost-effectiveness, human factors and regulatory factors pertaining to the implementation of the research recommendations on South African mines

BUILDING A CULTURE OF SAFETY

The Culture Transformation Framework (CTF), developed by the MHSC and approved at the 2011 Health and Safety Summit, is an initiative that seeks to control risks by transforming the culture of health and safety in the workplace. Research shows that an organisation's culture has an impact on safety. In 2011, the MHSC launched a campaign entitled "changing minds, changing mines" with the aim of developing a framework that would guide the South African mining sector towards making the necessary changes to achieve zero harm.

The Chamber is committed to the effective implementation of the 11 pillars of the CTF, planning to achieve the following by 2020:

1. Bonuses and performance incentives to prioritise safety ahead of production
2. Risk management aimed at reducing risk at source and investigating root causes of incidents
3. Encouraging leaders to lead by example and walk the talk of zero harm
4. Leading practice as a unified approach to identifying and facilitating the adoption of effective occupational health and safety practices and research
5. Diversity management aimed at eliminating racism, gender bias and any other forms of discrimination
6. Data management to monitor and evaluate progress of CTF implementation and mine health and safety performance

After December 2020, the Chamber will implement the remaining pillars concerned with:

7. Integrated mining activities
8. Technology
9. Inspectorate
10. Tripartism
11. Regulatory framework

SAFETY continued

The MHSC and its tripartite stakeholders held the biennial Mine Health and Safety Summit in November 2016 to review progress in the implementation of occupational health and safety milestones, targets and actions agreed upon by tripartite stakeholders at the 2014 Mine Health and Safety Summit. A declaration of actions (the pledge) was signed at the summit by the tripartite stakeholders.

This declaration of actions, with a view to improving the industry's occupational health and safety performance, emanated from the outcomes of the MHSC Tripartite Leadership Workshop in October 2016. Understanding the importance of changing behaviour and improving the organisational culture of safety in mining operations through transformation, the Chamber Council approved the declaration of actions prior to signing the pledge at the 2016 Mine Health and Safety Summit.

The main aspects of the declaration of actions are:

- **Tripartite visible-felt leadership and relationship building**
Action: Principals and leaders of all stakeholder groups commit to meeting at two facilitated sessions on health and safety per annum. The representation would comprise union presidents and general secretaries, the DMR (Minister, Deputy Minister and Director General), Chief Inspector of Mines, principal inspectors and mining CEOs.
- **Trust deficit**
Action: All stakeholders will address the issue of trust deficit among stakeholders, moving from a transactional to a transformative approach.

CAPTION

Petra Diamonds – Finch

- **Communication**

Action: All stakeholder organisations – the MHSC, organised labour, government and employers – will commit to improving communication across all levels to ensure that the message of zero harm reaches all mine employees and contractors. In so doing, actions intended to improve occupational health and safety will be supported and permeate the industry.

- **Empowerment of supervisors and employees**

Action: Stakeholders will collectively and collaboratively empower supervisors, health and safety representatives and employees through extended visible-felt leadership and empowering conversations. This will not only be implemented by employers but also by other stakeholders from organised labour, government and the MHSC. Tripartite stakeholders will also strive to empower women in mining with regard to safety and security challenges, personal protective equipment and hygiene.

- **Annual company health and safety days**

Action: Each mining company will commit to hosting an annual health and safety day, tailored to respective needs as part of their health and safety campaigns.

The objective is to reinforce tripartism, raise the bar on tripartite visible-felt leadership in line with the CTF to achieve the 2024 milestones and accelerate achievement of zero harm.



SAFETY continued

Mining fatalities per commodity

Commodity	2016	2017**	% Change
Gold	30	39	30
Coal	4	10	160
Platinum	27	26	4
Other*	12	13	8
Total	73	88	17

Causes of fatalities

Cause	2016	2017	% change
Falls of ground	24	32	36
Transport and mining	23	23	26
Machinery	4	5	5
General	22	26	30
Other*	–	2	2
Total	73	88	17

Injuries in 2017

Cause	2016	2017**	% change
Gold	1,167	995	(9)
Coal	184	193	5
Platinum	1,120	1,104	(1)
Other*	314	282	(10)
Total	2,785	2,534	(9)

* Other includes diamonds, chrome, copper, iron ore and all others not specified

** 2017 figures are provisional until confirmed by the Minister of Mineral Resources

Source: Department of Mineral Resources



AngloGold Ashanti – Mponeng

CULTURE TRANSFORMATION BY MHSC AND CHAMBER

In 2017, various structures of the Chamber were involved in the implementation of CTF initiatives.

Changing behaviour through the CTF


CTF pillar	2016 Summit pledge/actions	MHSC R&D and other
Leadership	<ul style="list-style-type: none"> • Tripartite visible-felt leadership and relationship building • Address stakeholder trust deficit • Improved communication to all employees and contractors • Empowerment of supervisors and employee empowerment • Annual health and safety days as part of overall health and safety campaigns 	<ul style="list-style-type: none"> • Research project aimed at the development of OHS leadership assessment tool (360) • MHSC tripartite stakeholder principals facilitated session on industry occupational health and safety
Risk management – accident investigations		<ul style="list-style-type: none"> • MHSC tripartite training on Section 54s/55s and consideration of Section 54 protocol • MHSC report on accident investigation • MHSC study on assessment of occupational health and safety risk management systems in South Africa mining industry
Bonus and performance incentive systems		<ul style="list-style-type: none"> • Research project aimed at the development of guidance on zero harm operations bonus system
Leading practices		<ul style="list-style-type: none"> • MHSC common approach to identification of leading practices and research outcomes
Diversity management		<ul style="list-style-type: none"> • Research project aimed at the development of diversity assessment tool in line with pillar minimum standards
Data management		<ul style="list-style-type: none"> • MHSC milestone reporting system launched at 2016 Summit and being piloted • MHSC to draft lost time injury (LTI) reporting form through MRAC

SAFETY continued

Chamber	Guidelines	Chamber structure
<ul style="list-style-type: none"> • Leadership Vision 2030 with AMMSA and universities • Facilitate two sessions of stakeholder principals and leaders per annum as outlined in 2016 Summit Pledge • Review MHSC OHS leadership assessment tool (360) 	<ul style="list-style-type: none"> • Right to refuse dangerous work • MHSC OHS leadership assessment tool (360) 	<ul style="list-style-type: none"> • Occupational Health and Safety Policy Committee • MOSH Learning Hub • OHS leadership and diversity management working group • CEO Zero Harm Forum
<ul style="list-style-type: none"> • Analysis of high-potential incidents/high-potential hazards(quality of accident investigations methods) • Critical control management of OHS risks • Training of managers on section 54s and 55s • Collision management systems and TMM regulations 	<ul style="list-style-type: none"> • Influence drafting and adoption of section 54s/55s protocol during proposed training of OHS managers, inspectors and organised labour shop stewards • Chamber’s draft “South Africanised” critical control management (CCM) journey model • TMM risk guideline • Industry user requirements protocol 	<ul style="list-style-type: none"> • Occupational Health and Safety Policy Committee • Legal department • MOSH Learning Hub • Learning from Incidents (LFI) working group • CCM working group • Consulting mechanical and electrical engineers
<ul style="list-style-type: none"> • Review of MHSC OHS incentive scheme guide 	<ul style="list-style-type: none"> • MHSC OHS incentive scheme toolkit 	<ul style="list-style-type: none"> • Occupational Health and Safety Policy Committee • Working group on review of MHSC OHS incentive scheme
<ul style="list-style-type: none"> • MOSH adoption as a global leading change management practice 	<ul style="list-style-type: none"> • Common approach to identification of leading practices and research outcomes (MHSC & MOSH) 	<ul style="list-style-type: none"> • Occupational Health and Safety Policy Committee • MOSH Learning Hub
<ul style="list-style-type: none"> • Review MHSC diversity management assessment tool 	<ul style="list-style-type: none"> • MHSC diversity management assessment tool 	<ul style="list-style-type: none"> • Occupational Health and Safety Policy Committee • OHS leadership and diversity management working group • MOSH Learning Hub
<ul style="list-style-type: none"> • Healthsource for health data included in MHSC pilot of milestone reporting system • Collation of LTI data from CEO Zero Harm Forum 	<ul style="list-style-type: none"> • MHSC revised SAMRASS 	<ul style="list-style-type: none"> • Occupational Health and Safety Policy Committee • Health Policy Committee • Group environmental engineers • MOSH Learning Hub • CEO Zero Harm Forum

SAFETY continued



 **CAPTION**
Kumba Iron Ore – Sishen



CASE STUDY

CEOs HASTEN ZERO HARM JOURNEY

The Chamber of Mines, and its members, are deeply disappointed and regretful that 2017 was marred by the first regression in fatalities in the past decade.

“This has strengthened the resolve of the CEOs to work together with our tripartite stakeholders in government and organised labour to embolden and accelerate initiatives that could improve this unacceptable performance,” Chris Griffith, Chairperson of the CEO Zero Harm Forum told the Chief Inspector of Mines in a statement on 3 November 2017. “This year’s safety performance is particularly lamentable given that 2017 is the year in which all tripartite stakeholders acknowledge the incredible improvements in health and safety achieved collaboratively since the enactment of the Mine Health and Safety Act 20 years ago.”

On behalf of all the CEOs, Griffith assured the Chief Inspector of Mines that, even though progress had been made, much remained to be done, bearing in mind that **“every fatality is one too many”**.

In partnership with government and labour, the forum has taken the following steps to hasten the journey to zero harm:

- **Learning from incidents:** Sibanye-Stillwater, Harmony, Impala, AngloGold Ashanti and Anglo American Platinum have shared lessons from recent incidents.
- **Falls of ground (FOG):** The MOSH Learning Hub has provided feedback from the Day of Learning on Seismicity in September, indicating that rockbursts have increased recently while rockfalls are reducing. Falls of ground remain the greatest contributor to fatalities in mining. It has been resolved that Chris Sheppard, sponsor of the MOSH FOG team, will lead a task team in developing a summary of rockburst leading practices and propose the best ways to share information with all involved in deep-level mining. In addition, the Mine Health and Safety Council (MHSC) has been urged to accelerate research and development related to pre-conditioning and pillar designs in platinum, among others, where there are knowledge gaps.
- **Transport:** Earlier this year, the CEO Zero Harm Forum adopted a global leadership approach to the adoption of collision management systems by initiating a project, at a cost of more than R8 million, to accelerate a risk-

based approach through collaboration among mining companies, suppliers and the MHSC. It is imperative that all stakeholders appreciate the importance of:

- Urgently establishing a pedestrian detection system (PDS) testing facility funded by the MHSC to attract new suppliers, create local jobs and lower costs of ownership while upholding safety standards
- People-centric change management like the MOSH adoption process to enhance safety while reducing the impact on production, jobs and government revenue
- **Missing person locator systems:** The CEOs have been informed about the MHSC’s research, which will be reviewed by company experts who will present advice on the way forward.
- **Dust and noise**
Anglo American has shared valuable experiences on exposure reduction in surface operations:
 - Noise: An assessment has been conducted among companies to determine their readiness to achieve the new noise milestone. The majority of companies are almost or entirely ready.
 - Dust: Anglo American Coal has shared leading practice on real-time dust monitoring and control. Some gold companies have agreed to trials of controls linked to real-time dust monitoring.
- **MHSC information management system on health and culture transformation:** Progress has been made in piloting this system and members have agreed to support this initiative. With regard to the Culture Transformation Framework, members have committed to report on progress. In parallel, principles and leading practice guidelines on each of the pillars will be shared during 2018.



“I can assure you that the CEOs are doing all in their power to make mining safer and to work with other stakeholders in the industry to ensure that mineworkers return home from work unharmed every day,” Griffith emphasised.



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1. **Nikisi Lesufi**

2. **Shirley Verster**

3. **Dr Thuthula Balfour**

4. **Dr Khanyile Baloyi**

5. **Brian Mongoma (not in picture)**

The Chamber's Health department continued its efforts to improve the health of employees in the industry, and to lobby and advocate on behalf of the industry in this regard.

Key focus areas in the past year included participating in forums for policy and legislative reform, monitoring the health performance of the sector, supporting the implementation of the Masoyise iTB project and improving access to compensation for occupational lung diseases.

POLICY AND LEGISLATIVE REVIEW

Key legislation under review was the Compensation for Occupational Injuries and Diseases Act No 130 of 1993 (COIDA), which was being amended, and the White Paper on National Health Insurance (NHI).

The amendments to COIDA are currently being reviewed by the National Economic Development and Labour Council (Nedlac). Following a decision by Nedlac, the amendments will be released for public comment. Among the most significant proposals are:

- Inclusion of domestic workers under the category of employees for purposes of benefits in terms of the Act

- A framework for rehabilitation and reintegration of injured and diseased employees into the workplace
- Administrative amendments
- Improvement of some benefits

It is envisaged that Nedlac will conclude discussions by June 2018.

Following earlier drafts in 2015 and 2016, the Department of Health published the White Paper on the NHI in June 2017. We submitted comments on the White Paper, as part of the Business Unity South Africa (BUSA) Task Team on the NHI. We also commissioned a study on the impact of the NHI on the mining industry. The results of the study will be considered in 2018.

Amendments to the Mine Health and Safety Act No 29 of 1996 (MHSA) were discussed and finalised in 2016 but have not yet been submitted to Cabinet and Parliament. Clarity on the future of this important piece of legislation is expected in 2018.

HEALTH TARGETS AND PERFORMANCE

Targets

The mining industry adopted the 2014 Occupational Health and Safety Summit Milestones in November 2014. To review progress in achieving these targets, the next biennial summit of the Mine Health and Safety Council (MHSC) has been scheduled for November 2018.

Performance

The DMR publishes an annual report on occupational health statistics, including HIV/Aids, in October. The report includes data submitted to the DMR every year. Data from the Chamber and the DMR is used in reporting on the health performance of the mining sector.

Occupational hygiene

Occupational hygiene measurements and milestones are ideal in assessing performance as they are early indicators. According to the 2016 report submitted to the DMR, there was an overall reduction in over-exposure to occupational hygiene stressors.

The DMR does not report specifically on silica and coal dust exposure but the total airborne pollutants in a classification band (\geq occupational exposure limit). It decreased from 4.73% in 2015 to 3.66% in 2016. This is in line with trends shown over the past decade as illustrated on page 49.

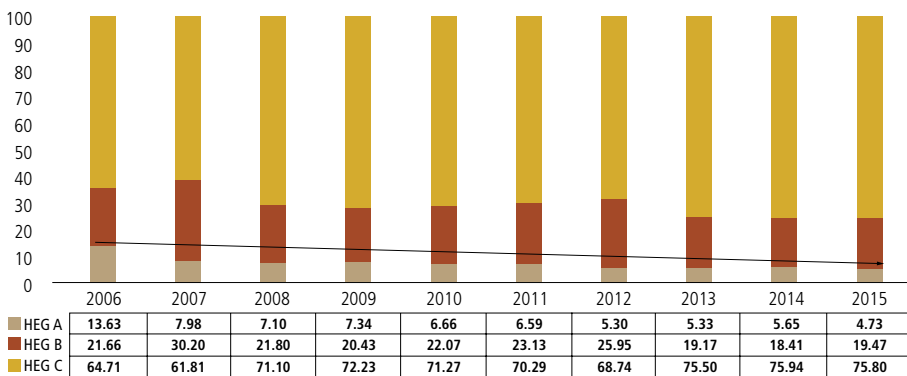
HEALTH continued

The targets to be achieved, mostly by 2024, in the control of dust, noise, tuberculosis (TB) and HIV/Aids, are listed below.

2014 MHSC milestones

Category	Milestone		
Elimination of lung diseases	Eliminate silicosis	By December 2024, 95% of all exposure measurement results will be below the milestone level of 0.05%mg/m ³ respirable crystalline silica	Using current diagnostic techniques, no new cases of silicosis will present among previously unexposed individuals (new people entering the mining industry in 2009)
	Eliminate coal workers' pneumoconiosis	By December 2024, 95% of all exposure measurement results will be below the milestone level of 1.5mg/m ³ (<5% crystalline silica) coal dust respirable particulate	
	Eliminate pneumoconiosis	By December 2024, 95% of all exposure measurement results will be below the milestone level of 1.5mg/m ³ (<5% crystalline silica) platinum dust respirable particulate	
Elimination of noise-induced hearing loss (NIHL)	Quieting of equipment	By December 2024, the total operational or process noise emitted by any equipment must not exceed a milestone sound pressure level of 107dB(A)	By December 2016, no employee's standard threshold shift (STS) will exceed 25dB from the baseline when averaged at 2,000Hz, 3,000Hz and 4,000Hz in one or both ears
Prevention of TB and HIV/Aids	Reduction and prevention of TB and HIV/Aids infection	By December 2024, the TB incidence rate should be at or below the national level	100% of employees should be offered HIV counselling and testing annually with all eligible employees linked to an antiretroviral (ART) programme as per the National Strategic Plan

Airborne pollutants: 2006-2015*



Exposure classification bands
 A = Exposures ≥ the OEL or mixture of exposures ≥ 1
 B = 50% of the OEL ≤ exposures < OEL or 0.5 ≤ mixtures of exposures < 1
 C = 10% of the OEL ≤ exposures < 50% of the OEL or 0.1 ≤ mixtures of exposures < 0.5

Source: Department of Mineral Resources

* Updated figures are yet to be released

HEALTH continued

Regarding exposure to silica, coal and platinum dust, we have set aspirational targets to ensure that members reach the milestones set for 2024. Data from our occupational health reporting system show that members are reaching the silica target but not the target for coal dust.

With regard to noise, any employees working in noise classification bands A and B are over-exposed. According to the DMR, both bands showed reductions in over-exposure in 2016. In the A classification band, there was a decrease from 0.96% to 0.89%. A decrease was also noted in B classification band from 72.15% in 2015 to 67.49% in 2016, although significant numbers of employees remain exposed to noise.

The percentage of employees exposed to excessive noise has reduced from 90.6% in 2006 to 68.4% in 2016. Further reductions are required to prevent NIHL.

The DMR does not collect data on the noise milestone. We collect this information and have found that, among member companies reporting in 2016, there was a 5.5% reduction in the number of pieces of machinery emitting ≥ 07 dB (A) – from 3,085 in 2015 to 2,915 in 2016.

Occupational medicine

The DMR report showed significant reductions in all occupational diseases, except coal workers' pneumoconiosis. The reduction in

the total number of occupational diseases in 2016, compared to 2015, was 29%.

From 2006 to 2016 (illustrated below), the industry reported half the number of silicosis and NIHL cases while reported cases of coal workers' pneumoconiosis doubled.

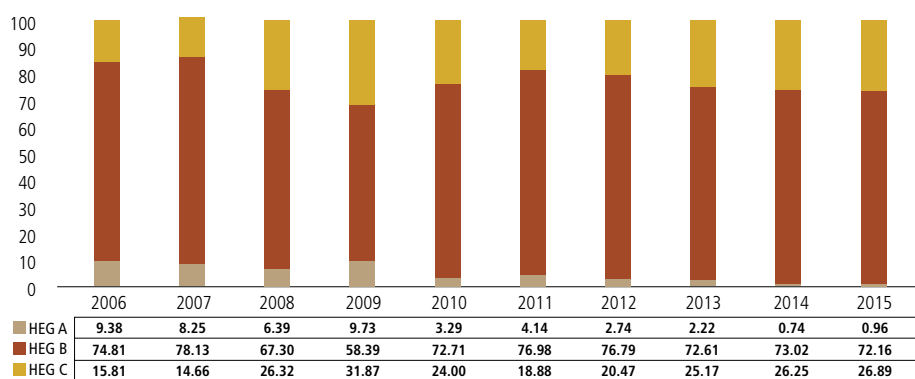
Incidence of occupational diseases: 2006-2016

Disease	Incidence in 2006	Incidence in 2016	% Increase/ (decrease)
Silicosis	1,537	635	58.7
Pulmonary tuberculosis	3,648	2,580	29.3
Noise-induced hearing loss	1,875	966	48.5
Coal workers' pneumoconiosis	29	58	(50)
Total	7,750	4,632	40

In 2014, no new cases of any pneumoconiosis were reported in individuals who had joined the industry as novices in 2009. The noise milestone measuring the standard threshold shift will be reported from January 2018.

Reporting to the DMR on TB and HIV/Aids has improved – 663 mines reported in 2016 compared to 600 in 2015. The number of employees represented was lower at 455,681 in 2016 compared to 476,625 in 2015.

Noise exposure: 2006-2015*



Exposure classification bands
 A = Exposures \geq the OEL or mixture of exposures ≥ 1
 B = 50% of the OEL \leq exposures $<$ OEL or 0.5 \leq mixtures of exposures < 1
 C = 10% of the OEL \leq exposures $<$ 50% of the OEL or 0.1 \leq mixtures of exposures $<$ 0.5

Source: Department of Mineral Resources

* Updated figures are yet to be released

HEALTH continued

The total number of occupational and non-occupational TB cases recorded by the DMR was 3,799, which is down from 4,211 in 2015. Cases of TB declined by 9.8% from 2015 to 2016.

DMR data shows that HIV counselling in the industry improved from 62.9% in 2015 to 65.7% in 2016 while screening for TB also increased from 88.7% in 2015 to 96% in 2016. Our data show HIV counselling rates of 78% and 87% screening for TB. The industry milestone of counselling 100% of employees has still not been met.

Using the DMR data, the crude TB incidence is 900/1,000,000 while our data shows a crude incidence rate of 740 (862)/100,000.

Although the statistics recorded by the DMR and the Chamber show improvements in exposures and the number of diseases reported, some (noise, coal dust, coal workers' pneumoconiosis and counselling for HIV/Aids) require additional effort to control and achieve milestones.

The availability of credible statistics in the sector has improved over time with reliable reports produced by the DMR and the Chamber. An area needing improvement is real-time submission and reporting of data.

COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES

Compensation for injuries and diseases in the mining sector falls under two pieces of legislation. Compensation for injuries is administered by the Department of Labour, through the Act (COIDA). For most mining companies, Rand Mutual Assurance administers this legislation under licence from the Department of Labour.

The second piece of legislation, the Occupational Diseases in Mines and Works Act No 78 of 1973 (ODMWA) covers occupational lung disease in mineworkers and is administered by the Department of Health.

In 2016, we reported on efforts to integrate compensation legislation, led by the Deputy Minister of Mineral Resources, Godfrey Oliphant. More work on the integration, and a final report that would lead to legislative changes, were expected in 2017 but there was very little movement in this direction. Developments

have been seen in the administration of the Compensation Commission for Occupational Diseases (CCOD). Parliament's Portfolio Committee on Mineral Resources has called on the DMR to report on the progress of integration in March 2018.

The 2016 valuation of the CCOD Fund has been approved, which is particularly significant as this is the first successful valuation since 2003. The extent of surplus/deficit in the fund will be known as soon as it is presented to Parliament in 2018. Flowing from the valuation, the ODMWA Advisory Committee has approved changes to levies paid by mines and works, and this will be gazetted with effect from April 2018.

The support provided by the Ex-mineworkers Project and other stakeholders to the CCOD and Medical Bureau for Occupational Diseases (MBOD) is bearing fruit as there have been marked improvements at these institutions. The CCOD is clearing the backlog in audited financial statements submitted to Parliament since 2011/2012. Payments by the CCOD have doubled when compared with similar periods in 2016.

We have implemented our decision to pay for former mineworkers' TEBA records of service so that access to unpaid compensation benefits could be approved. The presence of the Pensions Officer has also assisted mineworkers.

MINE HEALTH AND SAFETY COUNCIL ACTIVITIES

The MHSC has been established in terms of the MHSA in order to advise the Minister of Mineral Resources on matters of health and safety in the mining industry. The Chamber and other industry officials serve on various committees, including:

- MOHAC
- Mining Industry HIV/Aids and TB Advisory Committee (MITHAC)
- Safety in Mines Research Advisory Committee (SIMRAC)
- Culture Transformation Advisory Committee (CTAC)

Several guidelines have been created and adopted by the MHSC. We collaborated with the MHSC in piloting the MHSC Milestone Electronic Reporting System. The system will enable electronic data collection from mining companies and reporting at the scheduled summit in November 2018. Based on progress made to date, roll-out of the system is scheduled for April 2018. It will complement and ultimately replace the Chamber's milestone reporting system.



CASE STUDY

MASOYISE iTB PROJECT

Masoyise iTB, the three-year multi-stakeholder project initiated in 2015, will run until 2018. The year 2017 showed growth and achievement. The purpose of Masoyise iTB is to make a meaningful impact on TB and HIV/Aids in the industry by screening all employees (permanent and contractors) for TB and HIV/Aids.

Progress has been made using the Chamber's Electronic Occupational Health Reporting System. Reports on the numbers of workers screened have been presented to the principals of all stakeholders. The pilot on contact tracing in the Merafong district of the North West Province was launched while reporting on contact tracing in the West Rand continued. The National Institute for Occupational Health (NIOH) produced reports on TB outcomes following analysis of data by the Gauteng and Limpopo branches of the Department of Health. The South African Business Coalition on Health and Aids (SABCOHA), part of Masoyise iTB, led the support provided to small mines.

The year ended on a high note with the Masoyise iTB Steering Committee chairperson, Andile Sangqu, participating in the national World Aids Day celebration, hosted by Cyril Ramaphosa in Mthatha on 1 December 2017. The Masoyise iTB Steering Committee pledged R1.8 million for health screening, while we committed R500,000 for the tracking and tracing of former mineworkers with unclaimed benefits in the OR Tambo and other districts of the Eastern Cape. The health screening initiative will be implemented in 2018 as a partnership between the Chamber and EOH, Africa's largest technology service provider, together with the SABCOHA.

There was positive coverage of the speech and of the commitment made by Mr Sangqu that the Chamber would contribute funding for HIV/TB testing and recruit a dedicated pensions officer to deal with health and pension claims by former mineworkers.

Communications in 2017

2017 has been a productive year for the Masoyise iTB project, with a communications initiative which, after much debate and discussion, opted to focus on educating member employees about TB and about their rights in the workplace.

On the theme of 'Know your rights and responsibilities', the communications initiative produced posters and leaflets for on-mine distribution and use by health and HR teams. It also produced content to be used by members in HR and health newsletters.

The material was put to exceptionally good use by Masoyise iTB members – six companies and one union have utilised the material in various ways – from 15,000 fact sheets printed and distributed by Harmony, to NUM publishing the content in their national newsletter, and 5,000 leaflets printed and distributed by AngloGold Ashanti. There has also been valuable feedback from employees and health/HR staff on the ground as to how the campaign could be developed and refined further.

Posters



CASE STUDY

Leaflets



KNOW YOUR RIGHTS AND RESPONSIBILITIES

TS IN BONGA

KNOW YOUR RIGHTS, AND RESPONSIBILITIES

- You are not a victim of TB. You are a person who has TB and you can be cured.
- You are not a victim of TB. You are a person who has TB and you can be cured.
- You are not a victim of TB. You are a person who has TB and you can be cured.



TSEBA DITOKELO

LE MANKABELO A RAO

TSEBA DITOKELO LE MANKABELO A RAO

- You are not a victim of TB. You are a person who has TB and you can be cured.
- You are not a victim of TB. You are a person who has TB and you can be cured.
- You are not a victim of TB. You are a person who has TB and you can be cured.



YAZI AMALUNGelo AKHO

KANYE NISEBO HO ZAKHO

YAZI AMALUNGelo AKHO

- You are not a victim of TB. You are a person who has TB and you can be cured.
- You are not a victim of TB. You are a person who has TB and you can be cured.
- You are not a victim of TB. You are a person who has TB and you can be cured.

Media coverage



Mines bolster fight to stop Aids

Dedicated fund to support research on HIV and TB testing

MINING COMPANIES are bolstering their fight to stop Aids and TB testing. A dedicated fund to support research on HIV and TB testing has been set up by the industry.



Health screening initiative for miners

Screening to be targeted at high-risk areas

HALTH SCREENING initiatives for miners are being rolled out in high-risk areas. The initiative is being targeted at high-risk areas.



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|---------------------------|---------------------------|---------------------------|--------------------------|----------------------|
| 1. Mpumi Mthethwa | 3. Tabby Resane | 5. Sibusiso Talane | 7. Tshidi Moabelo | 9. Mpho Mudau |
| 2. Kagisho Motseme | 4. Ntsiky Phokwana | 6. Kobus Blomerus | 8. Shane Durapraj | |

The Mining Industry Occupational Safety and Health (MOSH) Learning Hub continued to collaborate in people-centric industry initiatives, including but not limited to leading practice adoption, modernisation, leadership’s Vision 2030, health and safety training, adoption progress reporting, sharing lessons learned and successes, and monitoring and evaluation.

LEADING PRACTICE ADOPTION

The MOSH Learning Hub facilitated investigation, adoption and promotion of leading practices in health and safety in pursuit of zero harm, focusing specifically on noise, dust, falls of ground, transport and machinery.

NOISE

The MOSH Noise Team continued to facilitate the Industry-wide Buy and Maintain Quiet Initiative (IBMQI) under the auspices of the IBMQI Steering Committee. This noise source elimination initiative encourages management of the noise hazard at equipment design stage. It uses the industry’s collective demand to motivate original equipment manufacturers (OEMs) and suppliers to focus on noise reduction in product development. The initiative acknowledges that individual mining companies have established Buy Quiet

policies albeit with limited success. Some of the key achievements of the IBMQI in 2017 include:

- Development, evaluation and popularisation of the Critical Noise Equipment Screening Tool under the guidance of the IBMQI Procurement Working Group
- Development and publication of the Equipment Noise Reporting Guidance Note under the leadership of the Measurement and Standards Sub-Working Group – aimed at facilitating alignment of the equipment population and reporting process within the South African mining industry
- Engagements with OEMs on the introduction of IBMQI processes
- Critical noise equipment screening
- Equipment noise reporting guidance note
- Engagements with OEMs
- Identification of new leading practices
- Noise research

Critical noise equipment screening

Following the development of the Critical Noise Equipment Screening Tool, the Noise team initiated an industry evaluation and popularisation programme for the screening tool through regional tripartite forums and other platforms.

MOSH LEARNING HUB continued



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10. Katlego Letsoalo**12. Christopher Legodi****14. Phelisa Yoyo****16. Dr Vukosi Banyini****18. Sietse Van Der Woude****11. Stanford Malatji****13. Israel Sibisi****15. Willie Deysel****17. Leigh McMaster**

The main objective of the screening tool is to assist mining operations in prioritising management of noisy equipment, using a risk-based approach with a risk ranking output rather than a blanket-type approach.

The screening tool also complements the existing noise repositories of mines, assisting in choosing appropriate equipment. In ranking risk, the screening tool considers the number of people exposed, number of machines, duration of exposure, confined space, machine vibration, wear parameters, improvement ideas, effective hearing protection and frequency of noise.

The top 10 critical factors identified for each commodity inform engagement with OEMs, and ultimately the design and manufacture of quiet mining equipment.

Equipment Noise Reporting Guidance Note

Following the development of the Guidance Note for Noise Measurement of Equipment, to ensure compliance with Mine Health and Safety Council (MHSC) milestones, the IBMQI Committee identified variances in methodologies applied by various mining operations when reporting equipment noise. This highlighted the need for equipment noise reporting guidelines, which would facilitate a uniform approach for the South African mining industry so that results could be compared among mining operations.

The Measurement and Standards Sub-Working Group subsequently published the Equipment Noise Reporting Guide to assist mining companies in grouping equipment populations for noise measurement, and for recording and reporting the noise levels of individual pieces of equipment. It is envisaged that this step-by-step equipment noise reporting guide will be used by mining operations as an appropriate equipment noise reporting methodology:

1. Group equipment, according to type/model into populations, based on the South African Mines Occupational Hygiene Programme (SAMOHP) activity area.
2. Measure noise in equipment populations (minimum of five samples or 5% of equipment) per activity area.
3. Calculate the logarithmic average noise level for the equipment population, using the noise measurement results obtained in Step 2.
4. Report the logarithmic average noise result from Step 3 for the equipment population in order to track noise milestones and not in terms of individual measurement results.
5. Investigate any individual noise measurement, which was equal to or above the milestone sound pressure limit of 107dB(A), recorded for the sampled equipment population.

MOSH LEARNING HUB continued

DUST

Continuous real-time monitoring

The community of practice for adoption (COPA) for continuous real-time monitoring (CRTM) continued to dedicate its programme to sharing the understanding and challenges of the adoption process and the on-mine pilot of the instruments prior to rolling out. At the end of the reporting period, there were 55 mines adopting the practice. An opencast coal mine, as well as a manganese mine, a gold surface plant and a gold operation were added. Of these mines, 20 are collieries, 31 gold mines while the rest are manganese, iron ore and a platinum converting plant. The overall adoption progress, based on the MOSH process, was 68.5% with 498 units scheduled to be rolled out in 2018.

CAPTION

Anglo American Coal – New Vaal*



* New Vaal has since been acquired by Seriti



CASE STUDY

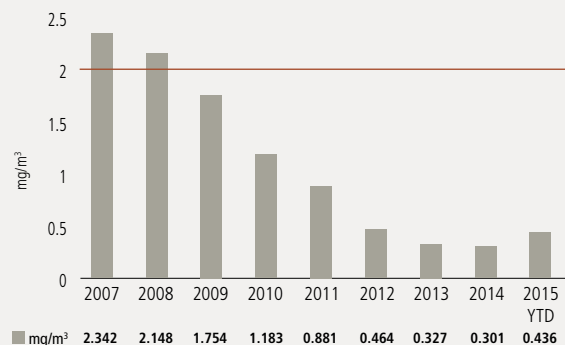
DUST MEASUREMENT AT ANGLO AMERICAN COAL'S NEW VAAL COLLIERY

The CRTM leading practice continued to show the sustainability of engineering control efficiencies through continuous real-time feedback and intervention, as illustrated by New Vaal Colliery. Since 2011, primary tip dust measurements have been below the milestone $1.5\text{mg}/\text{m}^3$.

When dust challenges were identified at New Vaal's primary tip, the DMR focused continuously on this operation. Anglo American's zero tolerance approach required proactive monitoring of key dust controls. This led to continuous real-time monitoring of engineering controls, production stopped and engineering control failures were repaired. The outcomes included:

- Improvements in health (lower dust exposure)
- Safety (improved visibility)
- Production (better coal rock tipped)
- Community relations reduced environmental nuisance dust

Primary tip dust measurements



Source: Department of Mineral Resources

MOSH LEARNING HUB continued**Underground Colliery Working Group**

The Colliery Working group was formed on 30 March 2016 for airborne dust monitoring with a real-time dust (CRTM) monitor on-board a continuous miner (CM) to prevent explosions. The forum concurred that this initiative has unforeseen occupational health benefits in that it reduces dust exposure for same-zone workers. The MOSH Dust Team is therefore fully supportive of this coal sector initiative.

When mining groups (Sasol, Exxaro, Anglo Thermal Coal and South 32) were invited to a site meeting with all OEMs, the forum acknowledged the need for continuous real-time monitoring of airborne engineering controls with explosion proof certification (EXia). At the initial meeting, five OEMs were invited but three accepted and attended this first session. OEMs pointed out that the process of seeking EXia certification had begun. At the time, it was observed that the CRTM can theoretically work on explosion-proof continuous miners. The forum requested collaboration among OEMs as one supplier had experience with real-time dust monitors in a non-explosive environment and others with on-board continuous miner methane monitoring. It was concluded that the CRTM retrofits would be piloted simultaneously with improved real-time methane detection tests, and the additional continuous miner scrubber heads and additional nozzle sprays with engineering controls.

Despite the setbacks, there has been progress:

- EXia approved a CRTM continuous miner retrofit. The mining houses and OEMs developed a protocol submitted to EXia for

approval, which proved that the CRTM was safe for use in a continuous miner.

- OEMs collaborated towards the success of continuous miner CRTM retrofit success. The briefing and terms of reference set by the MOSH Dust Team on 30 March 2016 ensured sincere collaboration between methane and dust CRTM. This has ensured that continuous miner OEMs include software communication.

TRANSPORT AND MACHINERY

The adoption team continued to focus on supporting the industry in improving transport and machinery safety performance.

Proximity detection system leading practice

It must be noted that the MOSH proximity detection system (PDS) leading practice for underground diesel trackless mobile machinery only required a warning functionality and the initiative should not be confused with Chapter 8 of the Mine Health Safety Act pertaining to trackless mobile machinery.

For electric machines used in underground coal mining, the Chapter 8 requirements are the same as those of leading practice. However, for diesel trackless mobile machinery, the Chapter 8 requirements are much more advanced. In 2017, there was movement from the underground gold sector to rail-bound beacon technology. The team believes this will make a further significant contribution towards trammig safety.

Adoption tracker for transport and machinery leading practices

Leading practices	Participating mines	Installations	Installation of proximity detection system
Electrical machines in coal mining	13 operations (4 mining houses)	113 sections	100% (2016: 89%)
Hard rock track-bound equipment	79 operations (8 mining houses)	582 levels 2 992 locomotives	54.5% (2016: 51.1%)
Hard rock trackless mobile machinery	35 operations (9 mining houses)	4 146 machines	94.4% (2016: 92.8%)

MOSH LEARNING HUB continued

Traffic management leading practice

The applicability of opencast/pit traffic management leading practice stretches across the entire country with approximately 1,700 potential adopter mines, ranging from sand works to large-scale mines. Roll out of the practice will be lengthy, given the size of the team (three people).

The practice was successfully launched in the Northern Cape in May 2017 and in Mpumalanga in August 2017. The practice, over and above the 17 technical elements it comprises, also includes analysis of traffic flow and risk, which directly addresses the concerns expressed by the MHSC with regard to the quality of risk assessment in industry. This element could significantly improve the effectiveness of safety risk management in opencast/pit operations. Although it is early in the application stage of this practice, industry feedback is positive. The team believes that the approach could be developed as an example of 'Local solutions for international challenges' and demonstrates the team's solutions to industry challenges outside the narrow definition of leading practice rollout. The 17 technical elements will be confirmed in 2018 as the single most comprehensive collation of leading practices regarding safe movement of vehicles and pedestrians in opencast/pit mines around the world. The body of work has been acknowledged by an international organisation, Earth Moving Equipment Safety Round Table (EMESRT), which has decided to realign its strategic priorities for opencast/pit operations from level 8 and 9 (advanced technology) controls to level 1 to 6 controls due to the effectiveness of controls (leading practice elements) at these levels in comparison with reliance on last-second technology intervention to prevent collisions.

Other transport and machinery (T&M) initiatives

The year 2017 marked major contributions by the T&M team with a number of initiatives:

- **Behavioural communication**

The team initiated the development of a behavioural communication mode as a play, which addresses some fundamental beliefs, at managerial level in the industry, hampering progress towards zero harm. The play was performed at the Northern Cape Zero Harm Conference in February 2018. It addresses generic and specific challenges, and not only issues related to transport and machinery.

- **Milestone management**

While the team proactively began to challenge industry with the concept of milestone management (T&M only) as early as 2014, it made a breakthrough in 2017 when it was presented to the CEOs of local Anglo American companies, and received their support. The team started to show mines the value to be derived from the initiative over and above reporting of progress for industry at large. The team successfully proposed to the Chamber that an electronic system should be developed to facilitate effective milestone management and this has been incorporated into the Chamber's information management initiative.

- **Leveraging technology for behavioural change and behaviour management**

The team presented a challenge to industry and PDS suppliers at an all technical PDS symposium early in 2017: to spend focus effort and cost on the development of technology functionality and reporting to facilitate behaviour change and management among operators. The presentation highlighted the importance of machine operators adhering to operational rules and the fact that automatic slow down and stopping of vehicles implies non-conformance to operating rules and thus poor operational management. Some suppliers have made progress in this regard. The concept of 'technology for people-centred behaviour support' could advance beyond equipment operators.

- **Stakeholder interaction**

Encouraged by the head of the Learning Hub, the team interacted with machinery inspectors in Mpumalanga and the Northern Cape. The engagements concluded that some work was needed to build trust between the parties. The fact that the team took initiative did pay off in the sense that we were able to secure follow up sessions with the Inspectorate.

- **Modernisation for mining and job creation**

The team participated in a hackathon in 2017 and also supported the Chamber at the International Council on Mining and Metals innovation summit (focusing on PDS) in presenting 'local solutions for international challenges'. Technology for machine operator behaviour has been highlighted as a differentiator by existing international providers and could be a quick win opportunity.

- **Support for Chapter 8 collision management system rollout**

The team offered to develop a rollout guide for the collision management systems required to comply with Chapter 8 regulations. The MOSH Traffic Management Leading Practice has a direct bearing on the need for technology to avoid collisions in that it offers mines a number of superior controls.

- **Knowledge and skills sharing**

In 2017, the team revived the development of a programme to share knowledge and build competence in addressing the challenges faced by industry in introducing new ways to work, particularly using technology. The programme has been accepted from industry attendants. The team has also developed training interventions for traffic flow and risk analysis.

- **Sponsor support**

The team's sponsor, Themba Mkhwanazi, continued to provide exceptional leadership, direction and support to the team. In particular, his dedication to personally emphasizing the importance of beacon technology in rail-bound equipment has led to renewed focus on this subject by the industry.

FALLS OF GROUND

Through the community of practice for adoption (COPA), the falls of ground team continued to monitor the adoption rate of the existing leading practices, namely: Entry examination and

MOSH LEARNING HUB continued

making safe (100%), nets with bolts (100%), and trigger action response plan (85%). In addition, the leading planning leading practice was launched in June 2017 during a workshop attended by approximately 160 industry representatives (organised labour, senior mine/general managers, rock engineering professionals, etc.). In parallel, a process to make further enhancements to the drilling and blasting leading practice was started. Collaboration with the MHSC saw the barring-down best practice research outcomes being launched in March 2017, and a process is underway to develop dissemination booklets and related materials. In response to the spate of seismic events that led to a number of fatalities, a Day of Learning workshop was convened in September 2017 attended by approximately 50 rock engineers, safety executives and mine/general managers which facilitated the unpacking of the underlying causes of rock burst accidents and incidents. This workshop resolved that research related to preconditioning and platinum pillar design needed to be reviewed. In addition, the work of the CEO Zero Harm Forum as well as the industry's falls of ground management systems also need to be reviewed.

MOSH Learning Hub secretariat

The Learning Hub secretariat continued to play a strategic facilitator role in leading the change to zero harm, including the provision of operational support to the adoption teams through monitoring and evaluation of behaviour change processes.

Monitoring and evaluation

Monitoring and evaluation interventions included the adoption rate of leading practices, identifying and sharing lessons learned and successes. A post-adoption assessment mechanism was also used to guide adoption so that mines could self-evaluate and thus assess the quality of adoption.

The tool aims to track and determine a balance between the adoption process (behaviour aspects) and technical aspects of the leading practice. A survey was conducted to gauge general perceptions of health and safety, including the MOSH initiative. MOSH website visitor measurement analytics show an average of 659 visitors per month locally and internationally. The Learning Hub continued to be actively involved in the broader information management initiative with a view to boosting data collection and reporting needs.

Behavioural change

The Chamber completed exploratory work in 2017 to assess areas in which additional development was required by the industry. Two of these areas include skills development in health and safety at graduate level and development of leadership capacity across the industry.

Chamber working groups, led by the MOSH Learning Hub, developed conceptual models for both of these areas, and significant progress was achieved in this regard towards the end of 2017. The Chamber, in collaboration with other stakeholders, has begun assessing modalities for the development of a Diploma in Occupational Health and Safety. A budget and programme has also been allocated for the development of a leadership

assessment and development tool incorporating the latest methodologies and technology available in the market.

Behavioural interest group

The Human Factors Framework (HFF), developed in the second quarter of 2017, has been accepted as a guide by the Behavioural Interest Group (BIG) team, which believes that this tool would be useful for companies assessing human factor and behavioural interventions.

An industry organisational human factor comparative analysis was completed in the third quarter, providing a thematic overview of the behavioural and human factor programmes implemented in the mining industry. Further development is required in line with recommendations to extend the analysis and to continue updating the document so that more companies can be included.

The BIG team decided to focus on the following areas in 2018:

- Visible-felt leadership (specifically unlocking mechanisms for quality conversations in the mining industry)
- Systemic inclusion of the assessment and management action related to risk propensity
- Change management

ONGOING ASSESSMENT OF PREVAILING PERCEPTIONS IN THE MINING INDUSTRY

A comprehensive survey was conducted in the last quarter of 2017 to assess the industry's perception of safety, behaviour and the MOSH adoption system.

A total of 72 responses were received from three major stakeholder groupings namely: organised labour, employers, MHSC and government (including the DMR). Results show that more than 90% of respondents believe that compliance with rules and an unresponsive industry culture are the main reasons for poor safety performance. This is supported by the view that the 'main' root cause of incidents is people's behaviour and lack of discipline. Very few respondents recognised the deep systemic issues influencing behavioural aspects highlighted in leading literature and models. Significant work is needed to change perceptions and paradigms regarding risk.

GOVERNANCE STRUCTURES

Engagements with adoption team sponsors continued to provide strategic guidance. Reporting to the CEO Zero Harm Forum also continued to elevate leading practice adoption issues related to health and safety. Two interactive sessions were facilitated for the MOSH Task Force and chief operating officers (COOs), culminating in an annual action plan and the need for new leading practices to be vetted by the COOs before they are widely promoted.

RESOURCING AND CAPACITY

With staffing levels at 81%, a process to fill three vacant positions began in the second half of the year. In addition, collaboration with the Mining Qualifications Authority led to the recruitment of graduates for a 24-month internship programme, which started in February 2018.

TRANSFORMATION



Public
Affairs and
Transformation



1

2

1. **Tebello Chabana**

2. **Jenny Mohamed**

We believe that transformation is an enabler that underpins growth, innovation and competitiveness.

Our members support the national transformation agenda beyond mere compliance with the Mining Charter. Through their Social and Labour Plans (SLPs), which are the industry's social licences to operate, our members continue to fulfil their commitments towards addressing socio-economic challenges faced by employees, communities and the citizens of South Africa.

Our Council, senior executive team and the public affairs and transformation team acknowledge that socio-economic transformation is a journey. There is still a lot of ground to cover but the industry's commitment to transformation is evidenced in the table below which illustrates progress made during 2016 by our members against the 2014 Mining Charter targets.

Overall performance by Chamber members against the 2014 Mining Charter targets

Charter element	Description	Measure	Compliance target 2014	Chamber assessment
Ownership	Minimum target for effective historically disadvantaged South African (HDSA) ownership	HDSA ownership %	26%	39%
		Percentage of companies achieving 26%	100%	96%
Housing and living conditions	Conversion and upgrading of hostels to attain occupancy rate of one person per room	Percentage reduction of occupancy rate towards 2014 targets	100%	95%
	Conversion and upgrading of hostels into family units	Percentage conversion of hostels into family units	100%	94%
Procurement and enterprise development	Procurement spend from BEE entities	Capital goods	40%	69%
		Services	70%	75%
		Consumable goods	50%	68%
Employment equity	Diversification of the workplace to reflect the country's demographics to attain competitiveness	Top management	40%	49%
		Senior management	40%	48%
		Middle management	40%	50%
		Junior management	40%	58%
		Core skills	40%	84%
Human resource development (HRD)	Development of requisite skills, including support for South African resource development	HRD expenditure as percentage of total annual payroll	5%	5.5%

TRANSFORMATION continued

The mining industry believes that investing in all the elements of the Mining Charter will help transform the industry in a more sustainable manner. It has gone beyond compliance on certain elements and will continue to advocate for sustainable growth, innovation and transformation in the sector.

OWNERSHIP

The Chamber carried out a survey of mining industry transformation and community development performance among its members. Of the surveyed companies, which accounted for 70% of the industry by production in 2016, historically disadvantaged South Africans (HDSA) owned 39% (weighted average) of the equity, significantly above the 26% equity ownership 2014 target. This assessment is based on the principle of recognition of continued consequences of historical empowerment transactions.

DECLARATORY ORDER

One of the major departure points between the industry and the DMR is the interpretation and recognition of historical empowerment transactions under the ownership element. This led to both parties agreeing after years of trying to reach consensus that the issue needs to be decided upon in court. An application for a declaratory order by the High Court was initiated and the hearing was held on 09 to 10 November 2017. Judgement on the matter will help clarify this issue once and for all. The industry has invested billions of rands on empowerment transactions that have resulted in tangible empowerment and this has had a positive spill-over into other sectors of the economy.

HOUSING AND LIVING CONDITIONS

The majority of our members have finalised their hostel conversion and upgrade programmes for employees. There are a handful of programmes in their last phases of implementation and we will continue to monitor this progress. The unintended consequences of providing housing allowances, where employees have opted to use the money for other financial concerns, is being researched in collaboration with government through the Department of Planning Monitoring and Evaluation (DPME) and the Department of Human Settlements (DHS).

PROCUREMENT AND ENTERPRISE DEVELOPMENT

Our members have done relatively well under the procurement 2014 targets, exceeding them especially for capital and consumable goods. Our members support the next wave of transformation in this element, where localisation and local content become key drivers. Our members also support a balanced and well researched target that will stretch the industry and foster growth of local manufacturing capabilities.

EMPLOYMENT EQUITY

Mining companies continue to focus on workplace transformation with improvements being achieved in three categories. The 2010 Charter specified a target of 40% HDSAs in all reporting categories by 2014. In 2016, HDSAs constituted:

- 49.3% of top management (50.4% in 2014)
- 48.3% of senior management (41.9% in 2014)
- 49.8% of middle management (50.9% in 2014)
- 58% of junior management (54% in 2014)
- 84.4% of core and critical skills positions (75.5% in 2014)

WOMEN IN MINING

Since the promulgation of the MPRDA in 2002 and the Mining Charter in 2004, the number of women in the industry has significantly increased. Most mines meet or exceed the 10% women in mining target and numerous industry initiatives are underway to make a career in mining more welcoming to female employees and job seekers. Representation of women in mining increased from around 11,400 women in 2002 to around 53,000 women in 2015, increasing to 53,179 in 2017. Women represent 12% of the mining labour force.

HUMAN RESOURCE DEVELOPMENT

This is a critical element for economic development. The industry invested R7.7 billion on improving the skills of its employees during 2016. This is over and above the R1.5 billion paid as the skills levy. The industry believes that a skilled and educated workforce will survive the tides of mining and build a mining industry of the future.

MINING COMMUNITY DEVELOPMENT

The Mining Charter does not have contribution/rand value targets based on mine operations' net profit after tax (NPAT). Rather contributions and investments made to mining communities are agreed upon between mine operations and the DMR. Both international and national targets for corporate social investments /socio-economic development are based on 1% NPAT.

The combined industry's NPAT for 2016 amounted to R34 billion, making the 1% NPAT equivalent to R340 million. The surveyed members contributed a total of R1.14 billion towards mining community development in 2016, significantly greater than the national/international standard. This included loss-making mines which during 2016 contributed a total of R180 million. This demonstrates our members' commitment to transformation beyond compliance and its continued improvement.



CASE STUDY

REVIEWED MINING CHARTER 2017

The consultation process followed by the DMR during 2016 and 2017, before publishing the Reviewed Mining Charter 2017, was fundamentally different to the tripartite negotiations that produced both Mining Charter 2004 and Revised Mining Charter 2010. Previous negotiations were held under the auspices of the tripartite Mining Industry Growth Development and Employment Task Team (MIGDETT) or similar forum, where we represented the mandated positions of our members. The previous two charters, although not perfect, were substantially agreed upon and defensible by the industry, labour unions and the regulator.

In June 2017, the DMR published the Reviewed Mining Charter 2017 after bilateral consultations were conducted between the Chamber and the DMR, as well as between the DMR and labour unions. This meant that the three parties didn't get the opportunity to discuss and negotiate this charter together. The published document therefore had countless unresolved points and also introduced critical points that the Chamber had not previously been consulted on. After studying the document, the industry decided that this reviewed charter set unachievable targets and would damage the sustainability of the industry. We therefore

applied to interdict the implementation of the Reviewed Mining Charter 2017 and get the charter set aside until it could be reviewed. The matter was initially meant to be heard on 13-14 December 2017, but was then rescheduled due to the increased number of co-applicants on the matter, to 19 to 21 February 2018. On 20 February 2018, after President Ramaphosa's maiden State of the Nation Address where he committed to a new phase of engagement with the industry, the Chamber agreed to postpone the court hearing. We agreed to work together with government and other key stakeholders, in a genuine partnership, underscored by trust and a shared vision to try to resolve the current impasse and agree on a Charter that both accelerates transformation and grows this vital sector of our economy.

Our members have performed relatively well under the Mining Charter 2010, but acknowledge that more can be done. We therefore remain resolute on continued transformation and creating an industry that will proudly reflect a truly non-racial South Africa. Together with our members, we remain committed to a stakeholder engagement process that will result in a reviewed Mining Charter that will be achievable and defensible by all stakeholders.

CAPTION

Sibanye-Stillwater – Kloof



EMERGING MINERS' DESK



Emerging
Miner's Desk



1. **Tebello Chabana** 2. **Jenny Mohamed** 3. **Grant Mitchell**

As part of its transformation agenda, and to diversify its membership, in 2014 the Chamber established an internal specialist group known as the Emerging Miners' Desk (EMD). Since its launch the EMD has made considerable progress in its main purposes:

- Recruiting and assisting new entrants into the mining industry.
- Implementing a programme that will assist emerging miners in understanding their legal obligations, assist them in conducting their mining activities in a socially responsible manner, and in complying with the environmental obligations required from all mining companies.

A key role of the EMD is stakeholder relations with various organisations such as government departments and Mintek. The EMD also conducts research into the sector.

Though there is no hard-and-fast definition of what makes an emerging miner, these are generally firms that operate in the early phases of the mining cycle. This includes prospectors and developers. Those with which the Chamber is currently engaged are primarily registered companies that hold mining or exploration rights. Most are operating in the coal sector where barriers to entry are less onerous than those into deep-level, hard-rock mining.

In addition the EMD also works with two associations, the Clay Brick Association as well as the South African Diamond Producers Organisation (SADPO) which represents the smaller diamond companies. It also counts small contracting companies among its members. The Chamber has sought and actively seeks to extend

and diversify its membership in order to be more representative of the South African mining industry as a whole. Emerging miners pay a subsidised membership fee and have full access to all Chamber resources.

23 companies made up of emerging miners and related advisory services have joined the Chamber membership and fall under the EMD. The two associations account for a further 200 small companies. As stated above, at present most are engaged in coal operations, followed by diamonds, manganese, iron ore, platinum, industrial minerals and chrome. Most are black-owned, empowered firms, particularly those in the coal sector.

Since its inception the EMD has run a number of public workshops covering diverse areas such as the Mining Charter, finance, water management and environmental compliance. These workshops are free of charge and topics are determined by needs expressed by the participants. The EMD also runs closed sessions exclusively for its members. Examples are on the inputs mining companies can make into the development of the third iteration of the Mining Charter and on finance, run in conjunction with the IDC. The EMD has also hosted a confidential workshop helping facilitate the linking of smaller producers with their larger counterparts in order to create operating and commercial synergies.

The outcomes of these sessions are not left in the air. By way of example, the outcomes of one closed seminar aimed at enabling emerging miners to give inputs to the draft Reviewed Mining Charter were submitted to the DMR. These inputs were made during the window period for submissions to the DMR. At another open session on the Charter, concerns emerged over the status of the pending court case, issues around social and labour plans, an accurate definition of emerging mining and the lack of participation of the junior sector in policy in the past.

The EMD also runs a mentorship programme for emerging miners. In this programme, the Chamber matches, on a pro bono basis, retired executives with emerging miners. Emerging miners' continued meaningful participation in this programme will help determine the content of the coaching programme. The Chamber is grateful for the participation of this pool of retired executives who have committed to ploughing back their skills and experience for the benefit of future leaders in the mining industry.

There have been approximately nine requests for mentorship where EMD members have been linked to mentors. In most cases this involves one or two meetings and the mentors then point the companies in the right direction. In some cases mentors have kept longer relationships with the Emerging Mining companies. Requests range from financial advice, business strategy, legal and regulatory issues, advice on the acquisition of mines, and business partnerships as examples.



Ursula Brown

Our Legal Department provides legal advisory services required by the Chamber in support of executing our role in lobbying government and stakeholders for an acceptable and predictable policy and regulatory environment.

These services include but are not limited to drafting and making submissions, both written and oral, on behalf of the Chamber. The Legal Department also provides in-house legal service to the Chamber and where necessary and required, seeks specialist external legal advice from external law firms and/or legal counsel.

ONCE EMPOWERED PRINCIPLE

We sought clarity through our 2015 High Court application for a declaratory order on the 'once empowered always empowered' principle, applicable to the assessment of the ownership element of the Mining Charter, in respect of the continuing consequences of previous black economic empowerment deals carried out by the industry between 2004 and 2014. The application for a declaratory order was finally heard on 9 and 10 November 2017 before a full bench of the High Court. Judgement was granted on 4 April 2018 in favour of the Chamber endorsing the principle of once empowered, always empowered, which technically

means that mining companies would not be compelled to permanently 'top up' the black shareholding of mines if existing black shareholders for any reason exit or sell out. The Department of Mineral Resources has however submitted an application for leave to appeal the 4 April 2018 judgement. The matter is ongoing.

MPRDA AMENDMENT BILL

The National Assembly passed the MPRDA Amendment Bill in May 2014 and submitted it to the President for assenting. In January 2015, the President referred the Bill back to Parliament for reconsideration, citing the Bill would not pass constitutional muster in that, amongst others, it elevated the Mining Charter to the status of legislation, by-passing Parliament as the legislature in the process. Section 26 of the Bill was probably also unconstitutional in that it was inconsistent with South Africa's obligations under the General Agreement on Tariffs and Trade (GATT) and the Trade, Development and Cooperation Agreement (TDCA). The section constituted a quantitative restriction on exports and this rendered the state vulnerable to challenges in international fora.

The State Law Advisors and the Parliamentary Legal Advisors have consistently disagreed with the President's Legal Advisors and maintained that the substantive issues were constitutional. The Chamber has always held the view that the two substantive issues were unconstitutional.

The Provincial Legislatures held public hearings on the Bill between December 2016 and March 2017. Parliament's National Council of Provinces' (NCOP's) Select Committee on Land and Mineral Resources also conducted its own public hearing in June 2017 and the Chamber made written submissions and representations before some of the Legislatures and the Select Committee. Numerous additional amendments were introduced by the DMR following the public participation processes. The Chamber is of the view that the introduction of these additional amendments exposes the Bill to further legal challenges as it is understood that the National Assembly in reconsidering the Bill should, in terms of the Joint Rules of Parliament, only confine itself to the reservations raised by the President and has no authority to introduce new amendments.

The NCOP is currently deliberating on the negotiating mandates from the Provincial Legislatures. It is anticipated that the NCOP's Select Committee will conclude its processes by the end of May 2018, after they have considered and adopted the final list of amendments on the Bill.

LEGISLATION continued

TAXATION

We made a submission to the Davis Tax Commission (DTC) on the First Interim Report on the Proposed Carbon Tax for South Africa in January 2016, highlighting our concern about the negative impact of a carbon tax on the mining industry, given the deteriorating economic circumstances in South Africa and the fact that South Africa is reliant on coal as its primary energy source. The National Treasury published the second draft of the Carbon Tax Bill for public comment on 14 December 2017. We are currently considering the Bill and its implications for the mining industry.

On 13 November 2017 the DTC released a number of final reports, including but not limited to the following, to the National Treasury:

- **Report on Base Erosion and Profit Sharing (BEPS):** The DTC provided recommendations on how South Africa could incorporate the fifteen OECD's BEPS minimum standards and best practice into its international tax framework. In summary, the DTC recommended South Africa consider a balanced approach in the adoption of the 15 Actions in its international tax policy, citing that South Africa is an emerging economy that attracts large amounts of foreign direct investment (FDI), therefore, it must consider its legislative capacity, socio-geopolitical issues and its trade treaties. The implementation of the guidelines will assist in the best location of economic activities for tax purposes and in addition, enhance transparency and improve information access to tax authorities.
- **Report on Hard-Rock Mining:** The report mainly covers income tax and mineral royalty charges imposed in terms of the Mineral and Petroleum Resources Royalty Act.
- **Report on Tax Administration:** This report deals with specific issues relating to the administration of tax in South Africa and its implications for the structure, operation and practice of the South African Revenue Services (SARS). The report recognised the need to examine all relevant information affecting the running of SARS and recommends that a separate inquiry be considered to examine the relationship between the various legislative tax instruments.
- On 18 March 2018, the DTC published the following four additional final reports in conclusion of its work based on its Terms of Reference: VAT report (replaces the first VAT report), Corporate Income Tax (CIT) report, Public Benefit Organisations (PBOs) report and the Wealth Tax report.

There is likely to be legislative reforms to comply with the various recommendations of the DTC to the National Treasury.

SOCIAL SECURITY

The Taxation Laws Amendment Act, which was scheduled to become effective on 1 March 2016 has been delayed until 1 March 2018 due to the labour unions' rebuttal of the proposed amendment relating to provident fund annuitisation. The implementation of annuitisation of retirement benefits in provident funds is the subject of ongoing discussions.

The DTC requested our comments on the proposed funding models for the National Health Insurance (NHI) contained in the White Paper issued on 11 December 2015. We submitted detailed comments and recommended that a comprehensive discussion on all social security reforms needs to take place before legislation in respect of such matters is finalised. The ad hoc proposals to increase taxes or levies in a low growth scenario and where the mining industry is in dire economic straits is, in our view, inappropriate. The recent DTC Report on NHI also observed that there is currently substantial uncertainty about both the costs and funding shortfall of the NHI given the level of detail on institutional reforms and the lack of specifics on health financing system reforms. Detailed implementation plans and financing plans still need to be developed.

The Comprehensive Social Security Policy Paper was issued for comment in November 2016. We are currently participating in the ongoing NEDLAC meetings on this matter.

TRUSTEES APPOINTED TO INDUSTRY RETIREMENT FUNDS

In terms of the rules of the industry funds dealt with here, provision is made for the appointment of employer trustees, mainly because employers are co-contributors to these funds on behalf of their employees.

Sentinel Retirement Fund (Sentinel): The Sentinel Fund is one of the largest self-administered, defined-contribution, umbrella funds in South Africa, and actively manages assets of approximately R82 billion (as at 30 June 2017). The Fund has 40,640 active and deferred members and monthly pensions are paid to 34,420 former members and beneficiaries. We appoint seven employer representatives to act as trustees of this Fund.

Mineworkers Provident Fund (MPF): The MPF is one of South Africa's largest self-administered provident funds with assets exceeding R28 billion. As at 31 December 2016, the portion of unclaimed benefits stood at 76,512. The MPF has also established an office in Maputo to assist potential claimants with their claims. The MPF has amended its rules which are currently awaiting approval by the Financial Services Board. The number of employer trustees will be reduced from nine to five, taking into account the number of members employed by each employer. The MPF was the recipient of a number of Best Practice Awards in 2017.



CASE STUDY

THE REVIEWED MINING CHARTER 2017

A prominent feature of the Legal Department's work during the year under review related to the submission of its application for the judicial review and setting aside of the Reviewed Broad Based Black Economic Empowerment Charter for the South African Mining and Minerals Industry, 2017 (Reviewed Mining Charter), published by the Minister of Mineral Resources on 15 June 2017. We are fully supportive of and committed to meaningful transformation in the mining industry and this is not the basis on which the Review Application is premised. The Chamber believes that, as the primary instrument for driving transformation in the mining sector, the Reviewed Mining Charter should be designed and agreed upon by all affected stakeholders with an outcome that all stakeholders support and which they can defend. The DMR failed in this regard. It has not shown a commitment to engage genuinely. In its current form, the Reviewed Mining Charter will jeopardise the viability of the industry that is already under significant economic pressure. The key features of our Review Application focus on the review of the substantive issues of the Reviewed Mining Charter which include, but are not limited to the issue of regulatory overreach.

We also submitted an urgent interdict application to prevent the implementation of the Reviewed Mining Charter, pending the outcome of a decision on the judicial Review Application. The urgent interdict application was never adjudicated as the Chamber reached an agreement with the Minister in terms of which the Minister undertook in writing not to implement the Reviewed Mining Charter until judgment had been handed down in respect of the Chamber's judicial Review Application. This undertaking, which we accepted, rendered the granting of an interdict by the court unnecessary at that stage.

The parties initially agreed that the application for the judicial review of the Reviewed Mining Charter be heard on 13 and 14 December 2017 before a full bench of High Court Judges and that was the position until 24 November 2017.

On 14 November 2017, the Centre for Applied Legal Studies (CALs) and Lawyers for Human Rights (LHR) on behalf of three mining community organisations – Mining Affected Communities United in Action, Women Affected by Mining United in Action, and the Mining and Environmental Justice Network of SA – successfully instituted an urgent application seeking leave to intervene as co-applicants in our application for a review of the Reviewed Mining Charter. Our decision to oppose the intervention applications was premised on the fact that the co-applicants' grounds for review were materially different from those of the Chamber, and that the allotted two days which were initially set aside for the hearing would be inadequate to complete the arguments on a wide range of highly complex issues. The Court granted judgement in favour of the co-applicants. In addition to the admission of NUM and Solidarity as friends of the Court, there were then nine parties whose arguments would be heard before the court.

On 24 November 2017, the hearing of the Chamber's application for the review of the Reviewed Mining Charter was consequently postponed to 19 to 21 February 2018 as the judges were not comfortable that the initial two days which were set down for the hearing would be adequate to accommodate the arguments of all 11 parties involved in the matter.

Following the State of the Nation Address on 16 February, and subsequent engagement with the Presidency, the Chamber, on behalf of our members, agreed, jointly with the DMR to postpone our court application in respect of the Reviewed Mining Charter, that was due to be heard in the High Court on 19 to 21 February.

The order was handed down by presiding judges on 19 February in the High Court regarding the postponement of the application for the review of the Minister's Reviewed Mining Charter 2017. In terms of the order, the application has been postponed sine die. In addition, the court recorded that applicants two to eight as recognised by the Minister of Mineral Resources are interested and relevant stakeholders.

SKILLS DEVELOPMENT



Skills
development



1 2 3 4 5 6

1. **Collin Anderson**
2. **Jenny Mohamed**
3. **Mustak Ally**
4. **Theo Mehona**
5. **Duncan Julyan**
6. **Mbali Mathenjwa**

In recognition of the critical role the mining sector has to play in skills development in South Africa, the Skills Development Unit of the Chamber of Mines continues to solicit and consolidate stakeholder views as well as lobby, advocate and influence these views to develop a skills development solution that is in the interests of all stakeholders.

The Chamber is involved in all levels of skills development – from adult education and training to skills training for operators, miners, artisans, technicians, professionals and managers. This involvement includes input into theoretical, practical and workplace-based training and development programmes conducted by Technical and Vocational Education and Training (TVET) colleges, universities, universities of technology and accredited training providers.

CONTEXT

The National Development Plan Vision 2030 subscribes to the objectives of eradicating poverty, removing inequality and reducing unemployment. It is well known that, without sufficient focus and

continued investment in skills development, these objectives may not be realised to any meaningful extent.

Within the mining sector there are many challenges associated with the development of relevant skills. Among others, a legacy of poor educational opportunities, a complex tertiary education and training landscape, and a poor basic education system have resulted in many employees with few or low skills. The national shortage of skills in all economic sectors exacerbates the challenges associated with the retention of staff, and increases demands for training and development in the mining sector. The skills-development environment is also complex with many policy, regulatory and legislative requirements. Navigating these requirements and challenges can be resource-intensive and onerous for individual organisations.

To counter skills shortages, South African mining companies invest in employee training and development in many forms, including learnerships, bursaries, apprenticeships, internships, and adult education and training. The industry also supports training and skills development in the communities where operations are located, helping to make socio-economic growth possible beyond the life of mines.

ADVOCACY AND LOBBYING

The Chamber's Skills Development Unit represents the interests of the mining industry in matters affecting education and skills development nationally. The Chamber is represented on statutory bodies such as the Mining Qualifications Authority (MQA), Human Resource Development Council of South Africa (HRDC), National Skills Authority (NSA), and the Quality Council for Trades and Occupations (QCTO).

Chamber officials are also active members and participants in several national, sectoral and ministerial task teams and committees. Among others, these include the National Artisan Development Advisory Body (NADAB), the task team for advancing TVET education and training, the National Economic Development and Labour Council (Nedlac) task teams on free higher education and the National Skills Development Plan (NSDP), and the International Labour Organisation (ILO) teams on the future of work and recognition of prior learning. Involvement in these platforms ranges from foundational learning, further education and training (FET) colleges, and their course offerings, to artisan training and reviews of skills systems. Chamber officials are also active members of Business Unity South Africa (BUSA) in areas affecting skills development. Participation in these structures and platforms affords the Chamber an opportunity to play a leading role in crafting business mandates on skills development, including the mining sector positions on skills development.

SKILLS DEVELOPMENT continued

MINING QUALIFICATIONS AUTHORITY

The Chamber plays an important role in the tripartite MQA, together with organised labour and government. The MQA is the sector education and training authority (SETA) for the mining industry, supporting skills development in the sector and responsible for ascertaining skills demand as well as disbursing the skills development levy.

In the 2016/2017 financial year, the MQA ensured that it did not receive a second qualified audit opinion. During the first quarter of the calendar year, the MQA focused largely on ensuring that the financial year 2016/2017 was closed off without any major issues. Although the MQA received an unqualified audit opinion, the following were still areas that needed improvement:

- Bursary management at the MQA (issuing and administration)
- Data integrity and management (a challenge in need of major systems changes)
- Policy shortcomings and policy adherence (one of the key areas resulting in weak governance).

Some of the key financial figures in the 2016/2017 financial year were as follows:

- Total revenue (levies, investment income and grants from the National Skills Fund) was at R1.1 billion
- Total expenditure for the year was at R1.2 billion
- The MQA had a deficit of R141 million for the year but positive net asset value of R3.3 million

Some of the MQA's performance achievements during 2017 were as follows:

- At least 72% or 34 of the 47 targets set were achieved in the period under review
- 10 research projects in the sector were conducted against a target of nine
- The MQA collaborated with mining and minerals sector stakeholders to provide workplace training for mining graduates to qualify in their fields (a total of 637 undergraduate learners against the set target of 500)
- The MQA exceeded its target for training representatives in the occupational health and safety skills programme (a total of 6,125 employees completed the training programme against the set target of 6,000)
- A total of 2,115 learners were registered in various artisan programmes against the set target of 2,600

NATIONAL BODY REPRESENTATION

The Chamber continues to be an active voice on national human resource development platforms either through formal nomination as a business representative through BUSA or by ensuring that it participates in the substructures of these bodies.

Among others, these bodies include the Quality Council for Trades and Occupations (QCTO), the National Skills Authority (NSA), and the Human Resource Development Council of South Africa (HRDC).

The QCTO is responsible for quality assurance of trades and occupations in the post-school education and training system. Some of the key areas of focus in 2017 were:

- Moving quality assurance accountabilities, responsibilities and outputs from the SETAs to the QCTO (only workplace quality assurance would remain with the SETAs)
- Ensuring that the registration of trades and occupations is a priority (a challenge for the QCTO due to limited resources)
- Developing the business case for increasing funding of the QCTO (limited finances has been a major stumbling block in achieving objectives)

The NSA advises the Minister of Higher Education and Training on policy issues relating to skills development. The NSA's focus during 2017 was largely on:

- Conducting provincial consultation workshops on the NSDP and providing the Minister of Higher Education with recommendations
- An analysis and evaluation of the National Skills Development Strategy III due to be concluded in 2018
- Developing a model to conduct more comprehensive monitoring and evaluation in the entire skills system
- Consulting stakeholders and conducting research into the overall improvement of the skills development system

The HRDC is a national, multi-tiered and multi-stakeholder advisory body, established in March 2010 under the leadership and stewardship of the Deputy President and managed by the Department of Higher Education and Training. Membership is based on a five-year tenure and representatives include government ministers, senior business leaders, organised labour, academia and civil society. Focus was on the following in 2017:

- Identifying skills blockages and recommending appropriate solutions as well as identifying the primary institutional structures and leaders to implement possible solutions in partnership
- Commissioning research in human resource development
- Encouraging organised business, civil society, government and organised labour to invest in education and training, and to take full responsibility for human resource development within their areas of competency

SETA GRANT REGULATIONS

When the skills levy and SETAs were initially established, the grant regulations were:

- A mandatory grant of 50%
- The National Skills Fund (NSF) received 20% of the levy

SKILLS DEVELOPMENT continued

- A discretionary grant of 20%
- An administration cost for SETAs of 10%
- Levies not used in a year could be saved as surplus and used in future by the SETA

The Minister of Higher Education changed the original SETA grant regulations as follows:

- The mandatory grant was reduced from 50% to 20%
- The NSF received 20% of the levy
- The discretionary grant was increased from 20% to 49.5%
- The administration cost was increased to 10.5%
- Surpluses in excess of 5% were to be 'swept' into the account of the NSF

BUSA challenged the Minister of Higher Education and Training's decision to change the SETA grant regulations through the Labour Court in 2013.

Since 2013, the matter has been in court and has been heard a few times. Each time, the ruling was in favour of business and the grant regulations of 2012 were set aside. However, the Minister of Higher Education and Training appealed these decisions on various grounds hence the matter is still with the Labour Court. The last ruling, made in October 2017, set aside the 'sweeping' of surplus funds. The matter on the changing of the mandatory grant from 20% to 50% will be heard in the first quarter of the 2018 calendar year.

PROPOSED SETA LANDSCAPE AND NATIONAL SKILLS DEVELOPMENT PLAN

Following the publication of the Government Gazette on the SETA landscape proposal and the extension of National Skills Strategy IV, social partners engaged with Nedlac throughout 2017, as well as other platforms on the proposed changes. The revised NSDP was gazetted in December 2017 for further public comment. The Chamber has solicited input from various members and has made a submission to BUSA, which in turn will be including consolidated business input on the proposals.

CHAMBER OF MINES CERTIFICATES

The Chamber of Mines Examination Department arranges and administers all examinations written in the survey, sampling, ventilation and rock mechanics disciplines, and also issues certificates for the:

- Advanced Sampling qualification enabling candidates to work with confidence and the knowledge needed to advance to a senior position
- Advanced Survey qualification as a pre-requisite to write the Government Certificate of Competency
- Mine Environmental Control qualification required by the Mine Health and Safety Act No 29 of 1996
- Rock Mechanics qualification required by the Mine Health and Safety Act

CAPTION

DRDGOLD – EBDA (Ergo Business Development Academy)




SKILLS DEVELOPMENT continued

CERTIFICATES ISSUED BY CHAMBER OF MINES IN 2017

The table below indicates the number of Chamber certificates issued over the past four years. Fluctuations in the number of candidates who have sat the examinations over the four-year period were driven by demand from various mining companies. This is indicative of the economic fluctuations experienced by the sector. The number of Chamber examinations are expected to decrease substantially once these qualifications have been formally registered with the QCTO.

Certificate	2017	2016	2015	2014
Certificate in Advanced Mine Surveying	36	73	63	91
Certificate in Advanced Mine Valuation	37	48	54	75
Certificate in Advanced Rock Engineering	3	6	7	4
Certificate in Basic Mine Sampling	78	99	123	164
Certificate in Basic Mine Surveying	61	134	143	156
Certificate in Elementary Mine Sampling	116	57	87	64
Certificate in Elementary Mine Surveying	33	92	120	141
Certificate in Mine Environmental Control	19	21	12	29
Certificate in Radiation Protection Monitoring Screening	95	145	102	181
Certificate in Rock Mechanics	17	26	18	25
Certificate in Strata Control	96	99	71	96
Intermediate Certificate in Mine Environmental Control	112	60	64	51
Certificate in Mine Survey Draughting	15	13	26	30
Total	718	812	890	1,107



 CAPTION
Ivanplats – Mokopane

MODERNISATION:

TAKING THE MINING CLUSTER INTO THE FUTURE



Modernisation



1. **Shanaaz Waja** 2. **Sietse Van Der Woude** 3. **Lerato Tsele**

The Chamber and its partners made significant progress towards modernisation in 2017. From the Mining Phakisa of 2015 (a year of advocacy) to formulation in 2016 when needs were identified and structures, relationships and programmes were established, action was taken in the past year to pave the way for delivery in 2018.



Northam – Booysendal

MODERNISATION continued**2030 MINING INNOVATION ROADMAP**

- **Completed research into key technical innovation and change-related trends**

Research into 36 major technological, social and human trends was completed, identifying 'flags' to be noted by the mining cluster for operations and host communities.

- **Developed long-term innovation roadmaps describing potential future states**

Six broad thematic areas will be affected by the overarching mining modernisation process:

1. Skills development for future employment
2. Rural and mining community development
3. Local procurement
4. Health and safety
5. The environment
6. People-centred technology

Each of these areas will be affected differently by various long-term trends, commodities and geographies, for example, Emalahleni and Rustenburg face different futures. Trends have therefore been applied to each thematic area to understand risks and to present specific interventions (including 2018 modernisation pilot projects) to mitigate the risks.

**MINING INNOVATION ECOSYSTEM**

- **Research into leading global practices for collaboration in innovation at cluster level**

While every innovation ecosystem around the world is unique, common factors, which generally underpin success, have been identified. Extensive research and engagement with organisations within and outside South Africa were conducted to this end.

The research has produced a series of recommended characteristics for the development of a South African mining innovation ecosystem. The factors are being incorporated into the Mining Precinct @ Carlow Road.

- **Evaluated capabilities of the South African research environment**

The capabilities of all universities, research councils and commissions, specialised research organisations and any other relevant publicly funded agencies were mapped across South Africa so that these institutions can collaborate effectively with the mining cluster.

The study produced a matrix, which describes the research activities, competency and performance of all these institutions.

- **Hosted participatory dialogues between members of the mining cluster to promote collaboration and build relationships across sectors**

- **Six major events were organised for various sectors of the mining cluster to develop specific content for use in various projects and to build cross-cluster relationships. The events included:**

- Trends and the future state of mining
- The future mine in practice
- Mining Equipment Manufacturers of South Africa (MEMSA) technology ideation workshop
- Mine.D Zero Harm Hackathon
- The future of mining through the employee's eyes
- Platinum industry technology ideation workshop

Participants included executives, managers and operational staff in industry, government departments and agencies, original equipment manufacturers (OEMs), suppliers, unions, communities and academia.

MODERNISATION continued

MINING PRECINCT @ CARLOW ROAD

Among the major achievements in 2017, the first year phase, was the establishment of the Mining Precinct @ Carlow Road. The premises, provided by the Department of Science and Technology in 2016, is ideally located for innovative research and development (R&D). Some 60 occupants, ranging from interns to programme managers and directors, now work in this Mining Precinct – and more are expected in the coming year.

The Mining Precinct operates in terms of a hub-and-spoke model:

- At the 'hub' is a co-ordinating centre, which manages the facility and co-ordinates the flow of R&D activity between the precinct, participating universities, the Council for Scientific and Industrial Research (CSIR), MEMSA and other stakeholders, including the Department of Science and Technology, the Department of Trade and Industry and the Office of the Phakisa Secretariat. Associated with MEMSA, the South African Capital Equipment Export Council is also in the hub, together with various other professional societies such as the Mine Ventilation Society of South Africa and the Geological Society of South Africa.
- Mining companies and their operations as well as research institutions are the 'spokes'. Some researchers reside within the Mining Precinct.

The variety of organisations operating within the hub illustrates its collaborative nature, which is in line with the agreed public-private partnership (PPP) approach. The CSIR is the 'incubator' in this PPP, which performed successfully throughout 2017.

In 2016, National Treasury allocated R150 million for the hub to conduct mining R&D over a period of three years: R27 million for 2017/8, R63 million for 2018/19 and R60 million for 2019/20. National Treasury has pledged another R63 million for 2020/21 and possibly more when project delivery is evident.

The Chamber Council co-invested R1 for every R2 from government, in addition to each company's investment, in 2017.

Delays in the transfer of government funds delayed some programmes in 2017 but this challenge had been resolved by year end. Significant collaborative, ground-breaking agreements were established with the CSIR, the University of the Witwatersrand, the University of Pretoria and the University of Johannesburg. Memoranda of understanding (MoUs) are being

formulated to include the Mine Health and Safety Council, the Mining Qualifications Authority (MQA), the Tshimologong Digital Innovation Precinct and various commercial partnerships.

The Chamber and its members participate actively in the Mining Precinct, managing the programmes through established steering committees and the innovation team, which includes senior technical executives who guide and advise participants.

Achievements in 2017 included enabling researchers and interns to monitor and analyse the performance of new mining equipment on testing sites. The information thus gathered was disseminated and communicated to all participating members. The collective R&D strengths of the researchers, industry and MEMSA could then be leveraged for the benefit of all.

At the end of 2017, an additional development was the agreement with a team of eminent industry executives and researchers to form a mentorship and advisory group that would nurture researchers and advise on research programme delivery.

Six programmes were set in motion in 2017:

- Advanced orebody knowledge
- Longevity of current mines
- Mechanisation of gold and platinum group metal (PGM) mines
- Non-explosive rock breaking
- Real time information management systems
- Successful application of technology map

The programmes have been designed to fast track baselines and identify areas in need of research, assisted by mining companies prepared to share experiences and sites to avoid the duplication of efforts in realising short-, medium- and long-term deliverables.

Short-term deliverables aim to deliver 'quick wins' with the longevity of current mines in mind: 34 emerging technologies are being evaluated – 10 focusing on new stope drilling equipment, five on ore reserve development, eight on stope cleaning, four on support systems, three on blasting and four on transport.

More fundamental programmes, such as the non-explosive rock-breaking programme, may require immediate fundamental research and longer-term development, based on their levels of technological readiness.

MODERNISATION continued

A particularly important programme is SATMAP, which deals with 'people issues'. As stakeholder involvement is particularly important in this programme, in 2017 a number of bilateral discussions were held with organised labour, including Solidarity, UASA, NUM and AMCU. In all cases, engagements were positive and it was unanimously agreed that modernisation is inevitable however with the caution: 'do nothing about us without us'. A strong platform for progression towards real stakeholder engagement has thus been established for the benefit of all.

Clearly, the primary focus of the Mining Precinct and hub is on R&D delivery for the modernisation of the mining industry. However, the occupants have identified a need to increase the scope of activities to include other areas essential for modernisation, including community development, local industrialisation, development of agri-business on mine properties, water and energy use, skills development and value chain optimisation.

Ideation sessions

To facilitate further collaboration and to stimulate ideas, new innovative processes have been introduced in the Mining Precinct, including a series of cascaded 'ideation' sessions.

Critical questions are presented in these sessions to stimulate discussions about innovative solutions. Discussions have included the integration of people, processes and technologies to create an order of magnitude improvement in productivity for the PGM sector. Sessions begin with high-level strategically-focused workshops followed by a series of sessions including management and OEMs.

📷 CAPTION

AngloGold Ashanti – Mponeng

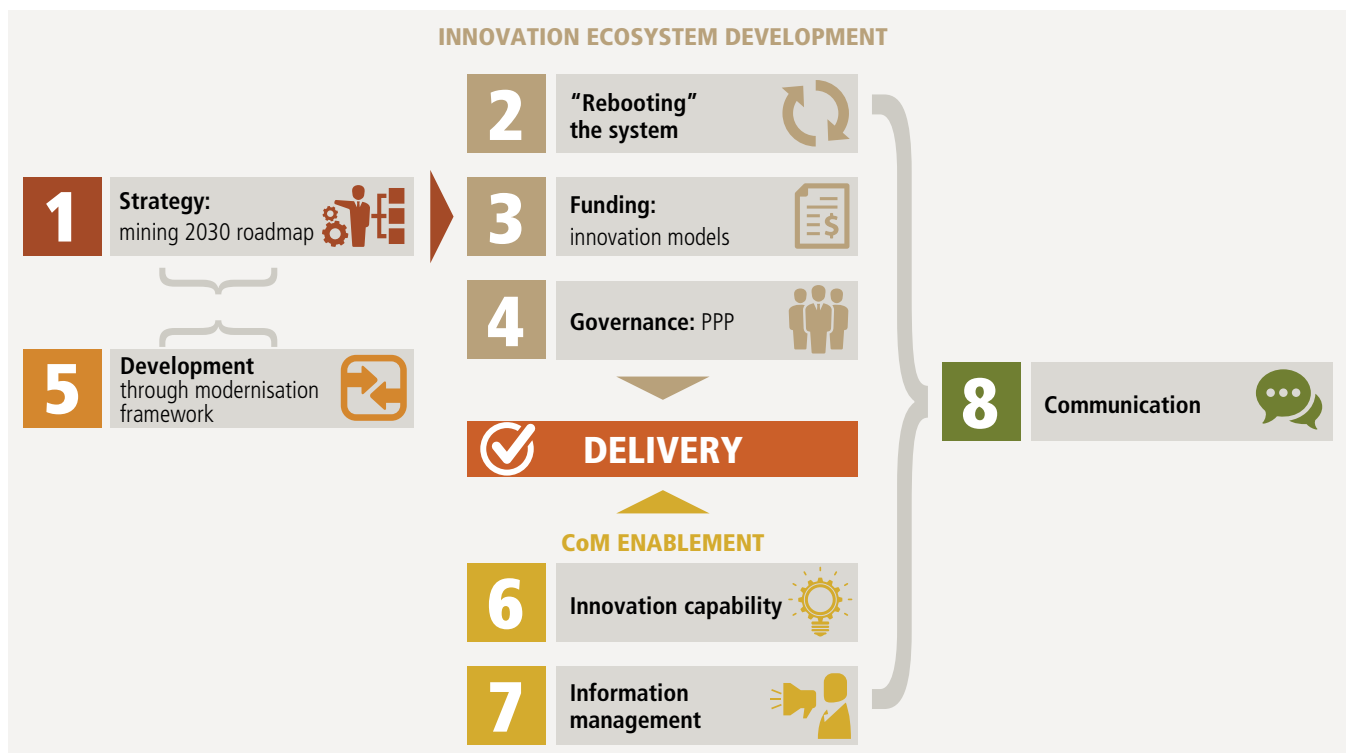


MODERNISATION continued

MINING 2030

Chamber Vice-President, Neal Froneman, in a presentation at the Mining Indaba in February 2017, said: “To be successful, introducing technology will need to be addressed in a holistic manner, adopting a systems and people-centric approach”.

To give effect to a holistic approach to innovation the Chamber decided, as part of its annual strategic review, to develop an ‘innovation-focused’ strategy. The framework for this strategy is in the diagram below.



INNOVATION ECOSYSTEM DEVELOPMENT

The priorities for 2018 include:

- Mining Modernisation Framework:** A framework is needed to inform mines and host communities about the complexities and risks associated with modernisation efforts required for mining to remain a sustainable economic activity into the future. Trends identified and scenario development completed in 2017 will be used in developing this framework, which will help each operation establish a long-term roadmap and plan of action. It will be applied initially in the Mpumalanga coal region.
- Support for social and technology-based entrepreneurs:** A mechanism that will enable establishment and growth of businesses in the mining cluster is needed. The financial and human resources of national and industry stakeholders will have to be leveraged, and mining-specific innovation incubation and acceleration guidelines will have to be developed.
- Modernisation of MOSH Learning Hub:** To enable the hub to share innovative leading practices, and in support of its change management role, capabilities must be modernised. New technologies, which prevent vehicle-related incidents and fatalities (advanced proximity detection systems, among others) can lead to step changes in the health and safety performance of mining operations.
- One conformant blast per day:** To support this achievement, innovation, such as new drilling technologies, and human resource development are necessary. Electrohydraulic drills, improved drill positioning technologies, incorporation of composite materials into drills to reduce carry weight and integration of internet of things (‘smart’ technology) applications into the drilling cycle are among the innovative solutions.

STAKEHOLDER RELATIONS AND COMMUNICATION



Stakeholder relations and communication



1

2

3

1. **Jenny Mohamed**

2. **Zakithi Zama**

3. **Tebello Chabana**

Mining has been the backbone of the South African economy for more than 100 years, and it will continue to be a catalyst for economic and social development if the environment is conducive to investment and there is community acceptance of our operations.

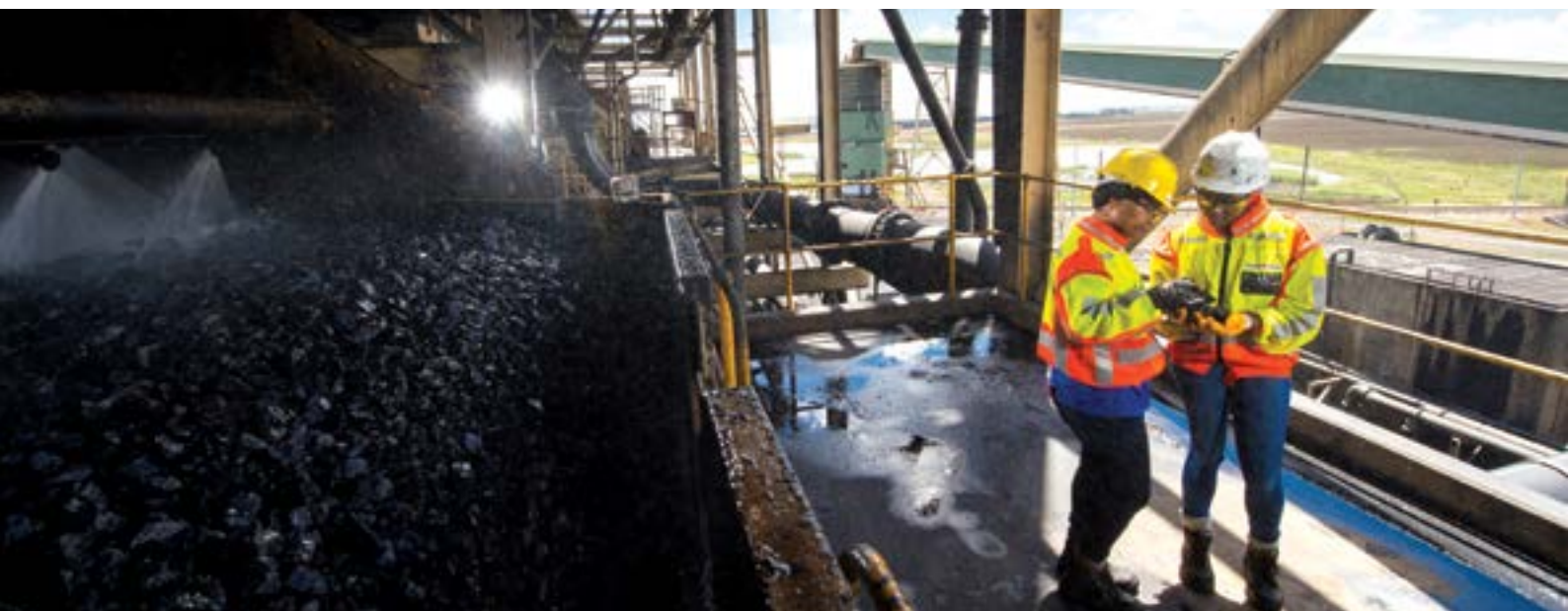
We continue to build relationships with all our key stakeholders and periodically review our engagement strategies to ensure we respond to stakeholder expectations. This includes engaging stakeholders on difficult issues which may include legacy issues and our current and future contributions to the country's economic growth.

We define stakeholders as those individuals, groups and entities directly and indirectly affected by our activities, and aim to develop and enhance relationships with these key stakeholders in order to create and sustain an enabling environment in which to do business.

In 2017, the Chamber Public Affairs and Transformation team continued the extensive exercise of identifying and mapping our stakeholders, in order to identify and prioritise material issues of mutual concern to the industry and stakeholders. This process is important in order to create an enabling, business-friendly policy, legislative and operating environment for a sustainable and successful mining industry.



Glencore - Goedgevonden



STAKEHOLDER RELATIONS AND COMMUNICATION continued



GOVERNMENT



The Chamber and our members are committed to contributing positively to the growth and development of the South African economy. Importantly, we continue to engage and raise concerns with government on ethical leadership and governance, given that a well-governed country is critical for economic development and growth.

In the year under review, lapses in governance within government were key risks in the mining industry. These included state capture allegations implicating senior government officials and, in some instances, the over-regulation of the industry.

We realise the importance of the relationship between the industry and the regulator for the creation of a sustainable mining environment. The relationship between the Minister of Mineral Resources and the industry deteriorated and put a strain on the working relationship with a Ministry that is supposed to regulate the industry. A case in point, was the gazetting of the Reviewed Mining Charter in June 2017, without any meaningful engagement with the industry.

We appreciated the referral of the MPRDA Amendment Bill back to Parliament in January 2015 by the President; however, we have been extremely concerned by the delayed finalisation of the Bill. The Chamber is in support of the President's substantive concerns that the Bill would not pass the Constitutional muster.

The substantive issues are, the Codes, Standards and Charter in the definition of 'this Act' and giving the power to the DMR Minister to amend the Codes, Standards and Charter will bypass the constitutionally required legislative procedures for the amendment of legislation. Furthermore, that sections 26(2B) and 26(3) may be inconsistent with South Africa's obligations under the General Agreement on Trade and Tariffs (GATT) and the Trade, Development and Cooperation Agreement (TDCA) and could render the state vulnerable to challenges in international fora.

 2017 PRIORITIES	 PERFORMANCE
<ul style="list-style-type: none"> • Governance issues in government negatively impacted the growth and stability of the mining industry 	<p>We believe our engagements with the government in addressing governance concerns were not appropriately addressed, however, at the time of this report, there were signals that the government was heeding our call to address the challenges affecting the regulatory environment.</p>
<ul style="list-style-type: none"> • Continued contribution to transformation and to the growth of the economy of South Africa 	<p>Our contribution to the economy included: 464,667 employees, R312 billion to GDP, R16 billion in taxes and R5.8 billion in royalties.</p>
<ul style="list-style-type: none"> • The Reviewed Mining Charter 	<p>Whilst the engagements with the government on the Mining Charter did not produce desired outcomes during the year under review, we are proud of the broader consultations we undertook with the wider range of stakeholders on what the Mining Charter should look like. We believe a consultative and inclusive approach will derive a win-win result that can be welcomed by all stakeholders.</p>

The Chamber will continue to be the voice of the mining industry in government as we look forward to the finalisation of the MPRDA Amendment Bill in 2018. The delay in the assenting of the Bill has contributed to heightened regulatory uncertainty in the mining industry.

STAKEHOLDER RELATIONS AND COMMUNICATION continued



POLITICAL PARTIES REPRESENTED IN PARLIAMENT

Constructive engagement with Parliament continues to be a key deliverable for the Chamber. We engaged the priority Portfolio Committees on critical legislative issues affecting the mining industry.

Additionally, the alleged involvement of the mining industry on base erosion and profit shifting (BEPS) was one of the key areas of engagement with Parliament in the past year. Whilst evidence points to minimal misapplication of BEPS, we have committed to continuous engagement with Parliament in the coming year to address possible shortfalls in data collection and reporting.

The publishing and the effectiveness of Social and Labour Plan (SLP) implementation were concerns raised by political parties. As part of our commitment to transformation and to contribute to the positive social performance of the industry where it operates, we are supportive of the proposals to publish our members' SLPs. One of the areas where we are responding positively to stakeholder expectations is in the establishment of the regional office in Nkangala, Mpumalanga to ensure and enhance the acceptance of mining operations. The office will be instrumental in the coordination of development programmes and ensure full participation of the local municipality in ensuring the sustainability of SLP projects.



Environmental management, health legacy issues and safety continued to dominate in engagements with parliament, however, whilst there is concern with the pace of the tracing, tracking and compensation of ex-mineworkers, there is acknowledgement of the improvement in the identification and compensation of beneficiaries.

 2017 PRIORITIES	 PERFORMANCE
<ul style="list-style-type: none"> • Continuous engagement with the respective Parliamentary Portfolio Committees • Demonstrate progress on transformation, safety, health and environmental management 	<p>A series of engagements were held with the following Portfolio Committees: Mineral Resources, Water and Sanitation, Trade and Industry, Environment, Health, Labour and the Select Committee on Land and Mineral Resources.</p> <p>The engagements centred on the economic performance of the mining industry, the transformation Charter, the MPRDA Amendment Bill, workforce skills development, and health and safety.</p>
<p>The Chamber welcomed the views of the Parliamentarians as the elected representatives of society, which are subject to ongoing engagements. We will continue with our engagements with political parties to ensure there is improvement in understanding of the mining industry; an enabling legislative, regulatory and operating environment for business; and furthermore, sharing of success stories on how mining companies are transforming society.</p>	



BUSINESS AND INVESTORS

We remain committed to our key role in business structures which assist in ensuring that the business environment is conducive and contribution to the country's economic growth is maximised. The Chamber is an active member of both Business Leadership South Africa and Business Unity South Africa (BUSA), where we represent the interests of the mining industry in the economy.

 2017 PRIORITIES	 PERFORMANCE
<ul style="list-style-type: none"> • Enhance our role in business structures for an enabling environment, inclusive growth and employment 	<p>The Chamber has been instrumental in lobbying for the strengthened role of BUSA as a collective business representative.</p>
<p>Going forward, the Chamber will lobby for inclusive and transformed policies that ensure that the political and policy environment is conducive for the economy to thrive which includes available and cost-effective infrastructure.</p>	



STAKEHOLDER RELATIONS AND COMMUNICATION continued



NON-GOVERNMENTAL ORGANISATIONS AND OPINION MAKERS

We acknowledge the importance of continued engagement with NGOs on environmental, social and economic issues. Furthermore, the engagements are a platform to share best practice and showcase industry successes and challenges, as well as to understand the NGOs' concerns about the industry to promote co-existence of activities and sustainable development.

A series of engagements were held with the NGO community working towards finding solutions on community engagements and importantly, the formulation and implementation of the Transformation Charter (see Transformation section for detailed issues).



 2017 PRIORITIES	 PERFORMANCE
<ul style="list-style-type: none"> Reviewed Mining Charter Continued engagement with NGOs on the environmental, social and economic issues 	<p>In the absence of a third version of the Mining Charter, companies continued to observe the previous Mining Charter's targets.</p> <p>The assessment of 2016 performance, revealed that of the 28 companies surveyed, 25 spent more than 1% of net profit after tax (NPAT). Their total spending in 2016 amounted to R1.14 billion. The entire industry's NPAT for the period amounted to R34 billion, of which 1% is R339 million. Therefore, just the 28 companies spent triple the total 1% of NPAT standard. Importantly, 16 of the 66 operations managed by the 28 companies reported financial losses in 2016, yet they collectively contributed more than R180 million to mining community development.</p>
<p>Our engagements with the NGOs are a journey to finding solutions that will promote co-existence of activities and we commit to work with them towards our common goal of socio-economic development in a sustainable manner in host communities.</p>	



COMMUNITIES

Challenges facing communities continued to take a prominent space in the mining industry. Whilst the Chamber agrees with the notion that globally there is acknowledgement that business has to contribute to society beyond its core business, historically, our members have always regarded social investments as a key business imperative.


However, the growing tensions around host mining communities fuelled by limited economic opportunities and diminished service delivery posed serious instability. The Chamber, as part of our mandate to serve our members and promote their interests by providing strategic support and advisory input, organised a session with the Emerging Miners' Desk for a dialogue on understanding the community dynamics and to discuss and share ideas on the delivery of the Social and Labour Plans (SLPs).

 2017 PRIORITIES	 PERFORMANCE
<ul style="list-style-type: none"> Two-pronged approach to counter the negative image the industry has Establishment of a regional presence to foster collaboration beyond Gauteng and into other regions with the Steelpoort, Carletonville, and Emalahleni areas as pilots 	<p>The Curriculum Assessment Policy Statements (CAPS) aligned education materials to support the national curriculum were successfully developed and a Mining for Schools website portal is now active.</p> <p>The Chamber office in Nkangala, Mpumalanga was successfully launched and is functioning well.</p>
<p>With community expectations of the mining industry increasing, the Chamber has identified an increased need to engage with broader society on the benefits of mining in order to create shared value in a manner that will ensure the retention of our members' social licence to operate. This action will include establishing Chamber presence in other regions, after the successful launch of the Nkangala site.</p>	

STAKEHOLDER RELATIONS AND COMMUNICATION continued



MEMBERS

 2017 PRIORITIES	 PERFORMANCE
<ul style="list-style-type: none"> • Creating a platform which allows members to raise concerns • Ensuring that the Chamber is fully aligned with its members 	<p>The Chamber hosts and meets with the communications executives of its member companies on a quarterly basis. These meetings facilitate open discussions on industry issues.</p> <p>The Chamber also reports on its activities on an annual basis in its integrated annual report and publishes a quarterly newsletter which is distributed to its members to keep all abreast of the latest developments.</p>



As an advocacy organisation, the Chamber recognises that successful advocacy depends on finding a delicate balance that puts South Africa first, and creates an environment in which the mining sector can function optimally. Presenting its members' interests continues to be the Chamber's main priority.

Our main priority remains representing our members' interests. We are also looking at innovative ways of improving the mining industry's profile through a number of globally-accepted transparency instruments. We will report on the progress of this initiative in due course.



MEDIA AND ANALYSTS

The Chamber remains committed to promoting the mining industry amongst the investment community and to convey the industry's position to the media and public at large.

 2017 PRIORITIES	 PERFORMANCE
<ul style="list-style-type: none"> • Promoting the mining industry amongst the investment community • Communicating the Chamber's position on various aspects including health and safety, environmental issues, transformation and economic performance and stability, amongst others, to the media and the public at large 	<p>The Chamber ensures that accurate and up-to-date information is available and accessible to the investment community, the media and the public at large. The Chamber also addresses investors at many international platforms, for example, at the Mining Indaba.</p> <p>A key component of these efforts is ensuring that the Chamber's website contains information which is useful, relevant, up-to-date and easy to access.</p> <p>The media relations function at the Chamber has been outsourced to an external public relations agency as part of the Chamber's drive to engage proactively with the media. During the year, a proactive media relations programme was implemented to ensure that the industry's position is communicated accurately and timeously.</p>

STAKEHOLDER RELATIONS AND COMMUNICATION continued

THE CHAMBER OF MINES AT WORK

The Chamber and its members have clear views on:

- The sustainability of mining in a shifting economic and legislative environment
- Modernisation based on changing technologies and mechanisation on which the industry's future will increasingly depend
- Job security and skills development in an environment characterised by declining labour-intensiveness and moves towards productivity enhancements
- The financial ability of mines to provide fair wages and benefits
- The industry's provision of acceptable living conditions to employees
- The industry's health and safety initiatives, particularly progress towards the goal of zero harm
- Community wellbeing, including facilitating the transition of communities to sustainable post-mining futures

The Chamber and its members are in accord over the centrality of the mining industry in creating a socio-economic environment that contributes to government's economic growth, transformation and social development goals. The central message is that all of the industry's stakeholders should be treated equitably if these aims are to be achieved and if new investment is to be attracted to help create and sustain a vibrant mining sector.

THE MINING INDUSTRY ASSOCIATION OF SOUTH AFRICA

As part of our contribution to a wider, regional appreciation of mining's developmental role, the Chamber is a member of the Mining Industry Association of Southern Africa (MIASA) which brings together the chambers of mines of nine southern African countries – Botswana, the Democratic Republic of Congo, Madagascar, Malawi, Namibia, South Africa, Tanzania, Zambia and Zimbabwe. The Chamber of Mines of South Africa acts as the MIASA secretariat and is the primary MIASA contact. Amongst MIASA's aims is building a regional consensus on what constitutes 'shared value' particularly in relation to African Mining Vision, which covers the aspirations of the African continent's governments and societies.



 **CAPTION**

Impala Platinum – Rustenburg

STAKEHOLDER RELATIONS AND COMMUNICATION continued**CASE STUDY****CHAMBER PRESENCE IN COMMUNITIES**

We view community as an important stakeholder group for the industry and have noted with concern the increase in social protests against mining operations. The acceptability of mining operations by host communities guarantees continuous operations and positive socio-economic spin-offs for local stakeholders. However, the violent social unrests that are becoming common have affected mining industry operations. The protests have resulted in loss of production time and at times damage to property. As a result, the Coal Leadership Forum mandated the Chamber to assist the coal mining operations to identify and explore collaborating on some of the SLPs, especially those that can result in greater and more positive regional impact. In addition to this, the Chamber also established an office in Emalahleni (Witbank), Mpumalanga Province, as part of providing support to its members and the collaboration initiative.

In the short- to medium-term, the objective is to work with mining companies, government (provincial, district and local) and community-based organisations in building meaningful and sustainable relationships which will help the participating mines to obtain public acceptance and retention of the mining social licence to operate. This in turn helps in the efforts for collective collaboration in contributing to the solutions on matters such as mine community development, access to skills development, procurement and employment opportunities. This is our commitment to finding win-win solutions with society to enhance socio-economic growth and successful mining industry operations.

The strategic intent behind Chamber representation on the ground, is to encourage collaboration of the mining companies on community development programmes aimed at developing the community and its region. In addition, this step has been taken to encourage dialogue between the industry and the host communities. The key stakeholders are the municipality, community representatives as well as religious, youth and political groups.

It is anticipated that the growing contingent of emerging miners in the region will also support the initiative as often they do not have the capacity and the expertise to manage complex community issues. Asked about the significance of the initiative, Tebello Chabana, the Chamber's Senior Executive: Public Affairs and Transformation said: "It is important for the industry, as a collective, to understand the issues that affect the community and to have an ongoing dialogue about common issues of interest in a coordinated manner". He further added: "With this initiative, the industry is positive that it will receive support from broader stakeholders and a commitment to resolve issues together".

A similar initiative is being pursued in the Northern Cape (John Taolo Gaetsewe District) with the support of the Manganese Leadership Forum. Again, the objective is to assist mining companies to build meaningful and sustainable relationships with various stakeholders in host communities. It is believed that once the logistical issues have been finalised, the mining companies, working together with the stakeholders, will be able to start making a visible and positive impact to the immediate challenges of high unemployment, literacy levels and youth development.



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| 1. Makome Makwela | 4. Babalwa Matiwane |
| 2. Stephinah Mudau | 5. Reginald Mabalane |
| 3. Nikisi Lesufi | |

The Environmental Department of the Chamber of Mines acts as the primary representative of the mining sector in environmental sustainability policy and regulatory initiatives.

This is achieved through the department's leadership in engagements in the development of position papers for policy formulation and implementation in the fields of mining, general environmental management, water resources management, waste management, air quality and sustainable development. The department reviews policy and legislative frameworks; and provides advisory services and guidance and strategic leadership in areas such as mine rehabilitation and closures, environmental management policy issues, and sustainable development.

In the period under review, the department participated in various initiatives dealing with environmental and sustainability issues of concern to the mining industry, including chemicals, biodiversity, climate change, air quality, water resources and waste management. It also provided expert and specialist input to many legislative and policy initiatives. The main vehicle for such interaction is the Chamber of Mines Environmental Policy Committee, comprised of the most senior environmental management grouping in the South African mining industry.

KEY DEVELOPMENTS IN 2017

National Environmental Management Act: Financial Provision Regulations

We continued to pursue engagements on policy initiatives pertaining to creating favourable policy and regulatory investment in the mining industry. Of critical significance was the number of engagements on National Environmental Management Act Financial Provision (NEMA FP) regulations with the Department of Environmental Affairs (DEA), initially including National Treasury, and the departments of Water and Sanitation and Mineral Resources. These engagements aimed to find common solutions to mining industry concerns about the regulations published in 2015.

Throughout the engagements, the Chamber sought intervention from the DEA on provisions of the regulations, which present dire negative implications for the mining industry. These key issues included *inter alia* the following:

- The proposed methodology suggesting unjustifiable escalation of FP with CP1+2%
- Lack of a mechanism for withdrawal of FP funds
- Financial provision for latent impact
- Restrictions on the use of trust fund regulation presenting misalignment with Section 37(A) of the Income Tax Act No 58 of 1962

Subsequent to the numerous engagements, including workshops with government on the draft regulations earlier in the year, the DEA published the draft revised regulations pertaining to the Financial Provision for Prospecting, Exploration, Mining or Production Operations on 10 November 2017. The published revised draft regulations are considered by the Chamber of Mines to improve on the 2015 version in addressing some of the mining industry's challenges. Some of the positive changes include deletion of regulations relating to latent impact and inclusion of a definition of residual environmental impact, deletion of the Minister's powers to retain financial provision upon issuance of a closure certificate and to cede financial provision for closure, deletion of care and maintenance and restriction of the use of a trust fund as a vehicle for financial provision.

Notwithstanding these positive changes, there are still some critical concerns on the revised NEMA FP regulations which were highlighted in our submission in December 2017 requesting the DEA to urgently address prior to the finalisation of the revised regulations. Some of these issues include the proposed methodology for calculating financial provision in regulations 7(2) and appendix 2, restriction of the use of guarantee, and deferring excess financial provision against subsequent assessment. To date we await the publication of the revised regulations which will hopefully address these mining industry challenges.

ENVIRONMENT continued**Classification of mine residue deposits and stockpile as hazardous waste**

Over the past two years, we have engaged intensively with the DEA, highlighting the negative technical, legal and financial impacts of the classification of mine residue deposits and stockpile in terms of the National Environmental Management: Waste Act 59 of 2008.

In 2017, the DEA conceded to the substantive inputs made by the Chamber of Mines regarding the intricacies of mine residue deposits by proposing an amendment to the Waste Act through the National Environmental Management Laws Amendment Bill, 2015 (NEMLA 4) process as a long-term solution. The DEA has also published the regulations with a list of waste management activities for exclusion from the definition of waste. In order to achieve complete temporal relief, the promulgation of regulations is necessary to completely exclude all mine residue deposits from the Waste Act. Subsequently, the proposed regulations for management and planning of mine residue deposits were amended by the DEA to exclude norms and standards for hazardous waste and also to focus on a risk-based approach. Reference to mine residue deposits in the definition of waste has not yet been removed from the Waste Act.

In this regard, Parliament has to approve the proposed amendments, which include inter alia the amendment of the Waste Act through NEMLA 4, as a lasting solution for the mining industry.

The UNFCCC 23rd Conference of Parties – COP 23

We actively participated in stakeholder engagement prior to the 23rd Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP 23), arranged by government and aimed at providing a platform for discussion of South Africa's position and, most importantly, giving direction to negotiators in terms of the expected outcomes.

The Chamber of Mines participated in COP 23, which took place in Bonn, Germany, in November 2017, as part of a business delegation from South Africa. South African business together with the government also collaborated in hosting a side event throughout COP 23 to showcase some of the initiatives that they are undertaking in addressing climate change - a number of mining houses were also part of this.

Pertinently, COP 23 took place at the same time as some of the worst storms in years were experienced in parts of South Africa, causing enormous infrastructure destruction. And of course in Cape Town, there has been persistent drought throughout 2017 thereby adversely affecting business and industry operations in the area due to stringent water use restrictions.

Some of the developing countries within the UNFCCC had insisted that adaptation to climate change and the mechanisms to help developing countries to deal with natural disasters caused by global warming should be one of the focus areas for discussion at COP 23. The adaptation fund has now reached a total equivalent of US\$93.3 million dollars exceeding the 2017 target.

Another key development out of COP 23 was the launch of various initiatives discouraging investment in coal mining. Bloomberg committed US\$50 million to expand the shift away from coal. Another event was the launch of the Powering Past Coal Alliance, encouraging 27 countries and regions to accelerate clean growth and climate protection through the rapid phase-out of coal power. Significance progress was also made towards negotiations in developing the rule book for the Paris agreement.

Chemicals and Waste Economy Phakisa

The Chamber of Mines participated in the Chemicals and Waste Economy Phakisa convened by the DEA. The inclusion of mine residue deposits by the DEA, as part of the industrial bulk waste work stream, prompted the Chamber to attend the Phakisa. Participation by the Chamber of Mines led to the exclusion of mine residue deposits from the focus areas for waste stream under industry bulk waste as this material is viewed as a resource.

National Climate Change Response Policy

The Chamber continued to engage with the DEA about the range of policy proposals aimed at providing measures to mitigate the impact of climate change. Carbon tax is one of the response policies with an array of allowances, such as trade exposure, carbon budgets and the Z-factor, among others, to cushion the economic impact.

We have embarked on an initiative to determine greenhouse gas (GHG) intensity benchmarks to enable the gold and platinum sectors to develop subsector Z-factors for consideration by National Treasury. The Z-factors will be used by subsectors to claim discount allowances in various efforts to reduce respective GHG emissions.

The Chamber of Mines, through Business Unity South Africa (BUSA), is engaging with the DEA to finalise the technical guidelines for reporting GHG emissions through the South African National Atmospheric Emissions Inventory System. The DEA has also embarked on a project to determine GHG emissions projections for South Africa up to 2050 in terms of the following scenarios:

- Without measures (WOM) – no climate change mitigation actions for that period
- With existing mitigation measures (WEM) including policies
- With additional measures (WAM)

ENVIRONMENT continued

The DEA has also published the final regulations pertaining to pollution prevention plans and a notice declaring GHGs as priority air pollutants. The Chamber of Mines has been providing inputs on behalf of members. The GHG reporting regulations have not yet been finalised.

National water resource strategy 2

The Department of Water and Sanitation (DWS) consulted with business and the Chamber of Mines through BUSA to inform stakeholders of its initiative to review the strategy. A business and mining industry implementation plan status report of the National Water Resource Strategy 2 (NWRS2) was presented by government and discussed at the engagement with a view to obtaining inputs from business at large. The discussions were aimed at assisting in the development of the NWRS3 so that previous issues of concern presented by government and the Chamber of Mines could be captured appropriately during the review.

The department will inform stakeholders of further engagements in the review of the NWRS2.

POLICY AND LEGISLATIVE DEVELOPMENT

The Chamber, on behalf of the mining industry, continued to provide specialist input on environmental policy and legislative development through participation in a range of activities in which all stakeholders are engaged. Some of these activities are discussed here.

Climate Change Legal Framework

The DEA has embarked on a process to develop climate change-specific legislation. The Act aims to:

- Provide for a co-ordinated and integrated response to climate change by all spheres of government in accordance with the principles of co-operative governance
- Provide for effective management of inevitable climate change impacts by enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change with a view to building social, economic and environmental resilience and an adequate national adaptation response in the context of the global climate change response
- Make a fair contribution to the global effort to stabilise GHG concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a time frame that enables economic, social and environmental development to proceed in a sustainable manner

The mining industry has welcomed the development of this legislation because it clarifies the roles and responsibilities of municipalities in terms of the National Environmental Management: Air Quality Act No 39 of 2004, and the concurrent mandate of the provinces and the national department in terms of climate change. Most importantly, this legislation will provide the necessary and dedicated framework to manage all aspects of a climate change response, including measures contained in the National Climate Change Response White Paper, which requires legislation for implementation.



Sibanye-Stillwater – Driefontein



ENVIRONMENT continued**Chemicals Management Policy**

During the year under review, the DEA gave in to pressure from stakeholders for the development of legislation on chemicals management arguing that there are inadequate legislative measures in place to manage chemicals. The DEA contends that chemicals management is a cross-sectoral issue, administered by various government departments and institutions, thus there is no formalised overarching framework for chemicals management. The DEA has identified a need to develop a national policy aimed at reducing and eliminating chemical threats to the environment and human health. During the engagements, the DEA indicated that a major challenge in achieving a comprehensive approach to managing the impacts of chemicals lies in ensuring that there is co-ordination and harmony in activities and legislation. In responding to these challenges, a national Chemicals Management Policy is needed. To this end, the Chamber contributed to engagements by the DEA to discuss the policy proposal for chemicals management.

National Environmental Management Laws Amendment Bill (NEMLA 4)

In March 2017, Cabinet approved the publication, for comment, of the National Environmental Management Laws Amendment Bill 2017 (NEMLA Bill 2017), which intends to amend the following pieces of environmental legislation:

- National Environmental Management Act No 107 of 1998
- National Environmental Management: Protected Areas Act No 57 of 2003
- National Environmental Management: Biodiversity Act No 10 of 2004
- National Environmental Management: Air Quality Act No 39 of 2004
- National Environmental Management: Integrated Coastal Management Act No 24 of 2008
- National Environmental Management: Waste Act No 59 of 2008
- National Environmental Management Amendment Act No 62 of 2008

Of strategic importance for the mining industry is the amendment of the Waste Act to exclude mine residue deposits and stockpiles from the definition of waste under the NEM: Waste Act. This provides long-term certainty to the mining industry as these materials are a resource and thus it is inappropriate to regulate them as waste.

To this end, the Chamber of Mines has initiated a process to compile comments for submission when public consultations on the Bill resume.

National Water Act

The DWS has published regulations regarding procedural requirements for water use licence applications and appeals, as contemplated in Section 41 of the National Water Act No 36 of 1998. The Chamber of Mines submitted comments following engagement with the DWS at a meeting prior to the finalisation of the regulations.

Among other National Water Act developments, the Chamber represented the mining industry position in the following initiatives:

- The development of South Africa's National Water and Sanitation Master Plan intended to assist the DWS with investment planning for the development of water resources, and the delivery of water and sanitation services. The plan is intended to provide an integrated response to the United Nations Sustainable Development Goals, National Development Goals, National Water Resource Strategy and Medium Term Expenditure Framework.
- The Mine Water Management Policy Position published by the DWS in terms of Chapter 2 of the National Water Act provides for the development of strategies in order to facilitate proper management of resources. The purpose of the policy document is to present the position of the DWS on mine water management, including acid mine drainage (AMD). In addition, to provide measures on protection of water resources from prospective, operational and historic mine activities with negative quality impacts.
- The DWS's initiative aimed at the development of an Integrated Water Quality Management Plan for the Olifants River system. The plan is a sub-strategy that will fit in the catchment management strategy for the Olifants water management area as a layer of the National Water Quality Policy being developed to focus on water quality.

Draft National Water Pricing Strategy

Chapter 5 of the National Water Act provides for the development of a Raw Water Pricing Strategy for water-use charges. The pricing strategy applies only to the use of raw (untreated) water and to the setting of tariffs by the DWS and water management institutions to be established in terms of the National Water Act. The raw water tariff includes charges for water resource development, water resource management and waste discharge, as well as the water research levy. The water resource management charges are intended to fund water resource management activities, including:

- Monitoring and assessing water resource availability and use
- Water use allocation

ENVIRONMENT continued

- Management of flood, drought and water abstraction
- Management of water quality and water resource protection
- Water conservation and demand management
- Institutional development and public participation
- Planning and implementation of catchment management strategies

We participated in a national consultation workshop for raw water use charges in the financial year 2018/19, hosted by the DWS, and contributed to discussions with written submissions to the relevant section of the DWS.

We discouraged the inclusion of AMD cost in the revised water pricing strategy on the basis of the recommendation of the Inter-Ministerial Committee report for the DWS on the feasibility of an AMD levy. The Chamber of Mines was also involved in the development of the draft Integrated Water Quality Management Policy currently with Parliament.

Draft Preservation and Development of Agricultural Land Framework Bill, 2016

The National Economic Development and Labour Council (Nedlac) deliberations on the draft Bill published by the Department of Agriculture, Forestry and Fisheries (DAFF) continued throughout 2017. The Chamber has been negotiating as part of a business contingent co-ordinated through BUSA with the Agricultural Business Chamber and Agri South Africa.

Nedlac has not made much progress in resolving some of the following mining industry concerns:

- Authorisations to use agricultural land for mining and other activities with relief of the regulatory burden faced by the mining
- Delineation of high-value agricultural land to restrict activities such as mining

Implementation of the National Environmental Management: Air Quality Act

The DEA embarked on the legislative process to review the National Air Quality Framework (NAQF) in compliance with the Act that provides for the review of the NAQF every five years. The draft NAQF was published for comment by stakeholders and provincial consultation workshops were hosted by the DEA. Air quality management is the constitutional mandate of the local authorities. Due to administrative complexities and the various roles and responsibilities of the three spheres of government, it became necessary to also provide for implementation of the Air Quality Act throughout national, province and local authorities where necessary. The NAQF provides an administrative guideline to authorities on the implementation of the Act as well as norms and standards regarding administration fees for the issuance of atmospheric emission licences, ambient air and emission standards

and implementation of the Act, among others. One of the key developments of the NAQF is to elevate mining-related activities, including licensing, to the national department.

Water conservation and water demand management

Water is scarce in South Africa while demand continues to increase in the mining, agricultural, power generation, industrial, commercial and domestic sectors. With limited water resources, water conservation and water demand management (WC/WDM) initiatives and measures are national imperatives.

WC/WDM is fundamental in promoting efficient, effective and sustainable use of water, and is consistent with the National Water Act and the National Water Resources Strategy. We continued to provide both technical and financial support for the achievement of deliverables for the collaborative project with the DWS to develop commodity-based national water use efficiency benchmarks, as well as new reporting protocols to monitor mine performance as it relates to water efficiency. To this end, the Water Use Efficiency Benchmarks Report and Guideline for Implementation of WC/WDM Plans has been published.

Mining and biodiversity

The Chamber continued to provide leadership in the biodiversity sector through collaboration with stakeholders in the development of measures to mainstream biodiversity under the auspices of the South African Mining Biodiversity Forum (SAMBF). Mining companies, government departments, conservation organisations, independent academics, organised labour and financial institutions participate in the forum, which provides an opportunity for cross-sectoral interaction and co-operation to improve biodiversity conservation, management and performance in the South African mining industry.

The Chamber of Mines also engaged with the annual National Biodiversity Planning Forum, hosted under the leadership of the South African National Biodiversity Institute (SANBI), which provides an opportunity for individuals, agencies and departments involved in spatial biodiversity planning to share and synthesize valuable lessons learned across South Africa.

Environment-related taxes and charges

The DEA, National Treasury and the Organisation for Economic Co-operation and Development hosted a workshop on environment-related taxes and other fiscal instruments. The objective of this workshop was to facilitate dialogue about inter alia improving environmental performance while raising revenues. Discussions included the following:

- National Treasury asserted that environmental taxes are extremely important for governments facing challenges, including economic pressures that led to the need for new tax

ENVIRONMENT continued

revenue streams. Although earmarking a particular tax revenue stream is not in line with sound fiscal practices, it is important to recycle revenue efficiently, including mechanisms such as tax shifting and tax incentives, among others.

- The plastic bag levy has led to a noticeable decrease in litter, although not as much as expected. It has also not influenced consumer behaviour significantly, and has not addressed waste reduction.
- Developments in pursuit of carbon tax highlight its objective as part of South Africa's mission to lower GHG emissions and transition to a low carbon economy.

Mine water co-ordination body

The Chamber played a pivotal role in the formation of the Mine Water Co-ordinating Body (MWCB) and, most importantly, in facilitating enrolment and participation by its members. The Chamber also serves as a key member of the MWCB executive committee, representing the interests of its members. The MWCB is a neutral platform for public, private and civil society sectors to identify and implement joint solutions to improve water quality and address mine closure, starting in the Upper Olifants Catchment.

The MWCB will also provide governance and develop project processes, work plans and time frames for the joint projects and initiatives. This will include a structure to govern all stakeholder engagement and the establishment of a small implementing team to ensure that projects are implemented within the required scope, time frames and budget.



CAPTION
Northam – Booyensdal

Water Institute of Southern Africa Mine Water Division

During 2017, the Chamber continued to be a standing member of the executive management committee of the Water Institute of Southern Africa's Mine Water Division. This division provides a multi-disciplinary forum for the advancement of cost-effective and environmentally acceptable water management in the South African mining and metallurgical industry. Through active involvement in this initiative, the Chamber managed to exchange information on proactive mine water management approaches, identifying information, technology, research, development and implementation needs for the benefit of its members.

International Council on Mining and Metals

As a member of the International Council on Mining and Metals (ICMM), the Chamber continued to apply ICMM principles and protocol to strengthen social and environmental performance in the mining industry. The Chamber has been participating in ICMM activities aimed at the implementation of the overarching ICMM strategy for 2016 to 2018, which focuses on collaborative action towards water stewardship.

Bojanala Water Forum

During the year under review, the Chamber was instrumental in the co-ordination of activities and projects related to water and sanitation in response to commitments presented by the Bojanala Water Forum, as mandated by the Portfolio Committee on Water and Sanitation. The forum comprises mining houses, water boards, the South African Local Government Association, the Department of Co-operative Governance and Traditional Affairs and municipal representatives. It has been formed to implement partnerships between mining houses and municipalities on issues related to water and sanitation.





CASE STUDY

DETERMINING PGM AND GOLD MINING GREENHOUSE GAS INTENSITY BENCHMARK

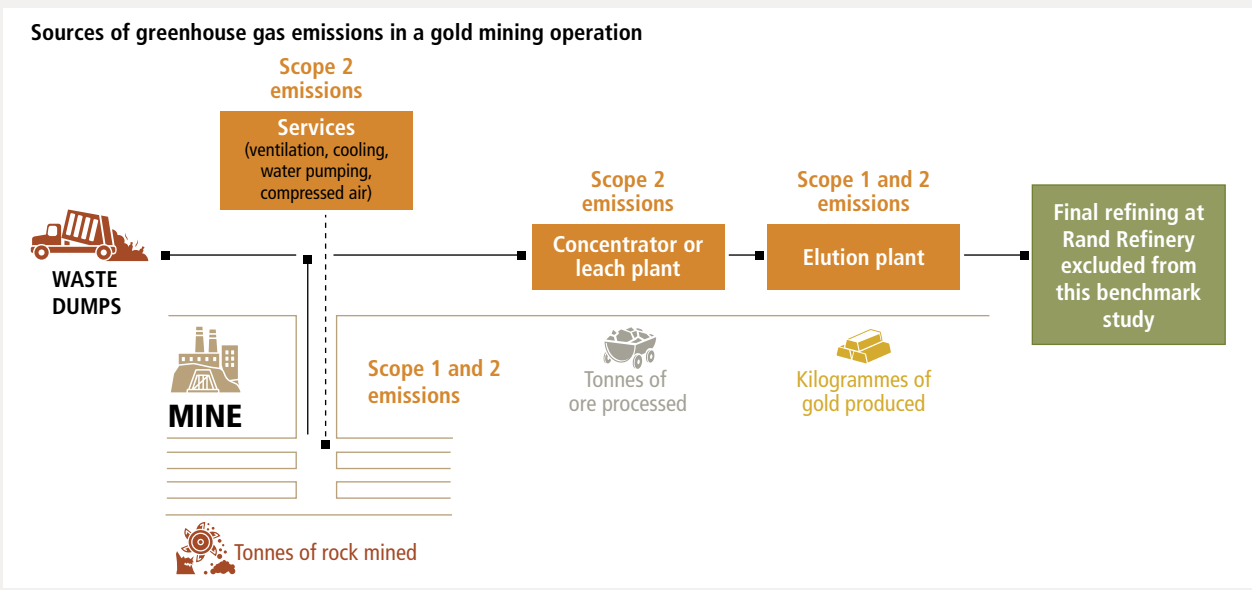
National Treasury is developing carbon tax legislation in an effort to introduce and implement measures that will mitigate the impacts of climate change.

The draft Carbon Tax Bill provides for a range of tax-free allowances in its design and these are subject to review after five years. The tax-free allowances provide tax relief during Phase 1 of the implementation of the Act to ensure a smooth transition to a low carbon economy and to reward companies that have taken voluntary actions to reduce their GHG emissions. The draft Carbon Tax Bill provides for, among other instruments, the Z-factor, which encourages firms to reduce their respective carbon intensities. It will thus provide companies with a tax-free allowance of up to 5% if its emissions intensity is better than the sector or subsector benchmark. This will be accommodated by adjusting the basic tax-free threshold of 60% by a factor (Z), calculated with reference to either the agreed benchmark emissions intensity (including Scope 1 and Scope 2 emissions) for the sector or the emissions intensity (including Scope 1 and Scope 2 emissions) with reference to a specific date. Essentially, firms below the benchmark emissions intensity (including Scope 1 and Scope 2 emissions) will be rewarded through this allowance.

In response to this, the Chamber of Mines, on behalf of the South African mining industry, is undertaking a study to determine the GHG intensity benchmark and, consequently, to develop the Z-factor for mining subsectors. A phased approach was adopted with the first phase focusing on the platinum group metal (PGM) and gold mining subsectors with a view to addressing other commodities when approval is granted by National Treasury.

The Chamber of Mines has engaged with National Treasury about the GHG intensity benchmark. Data from various mines was used to determine a consolidated GHG intensity benchmark, noting various conditions, such as mine depths. The Chamber has since revised the draft proposals, which have been resubmitted to National Treasury. We envisage that National Treasury will commence with the expert review on the draft reports submitted and provide feedback to the relevant subsectors.

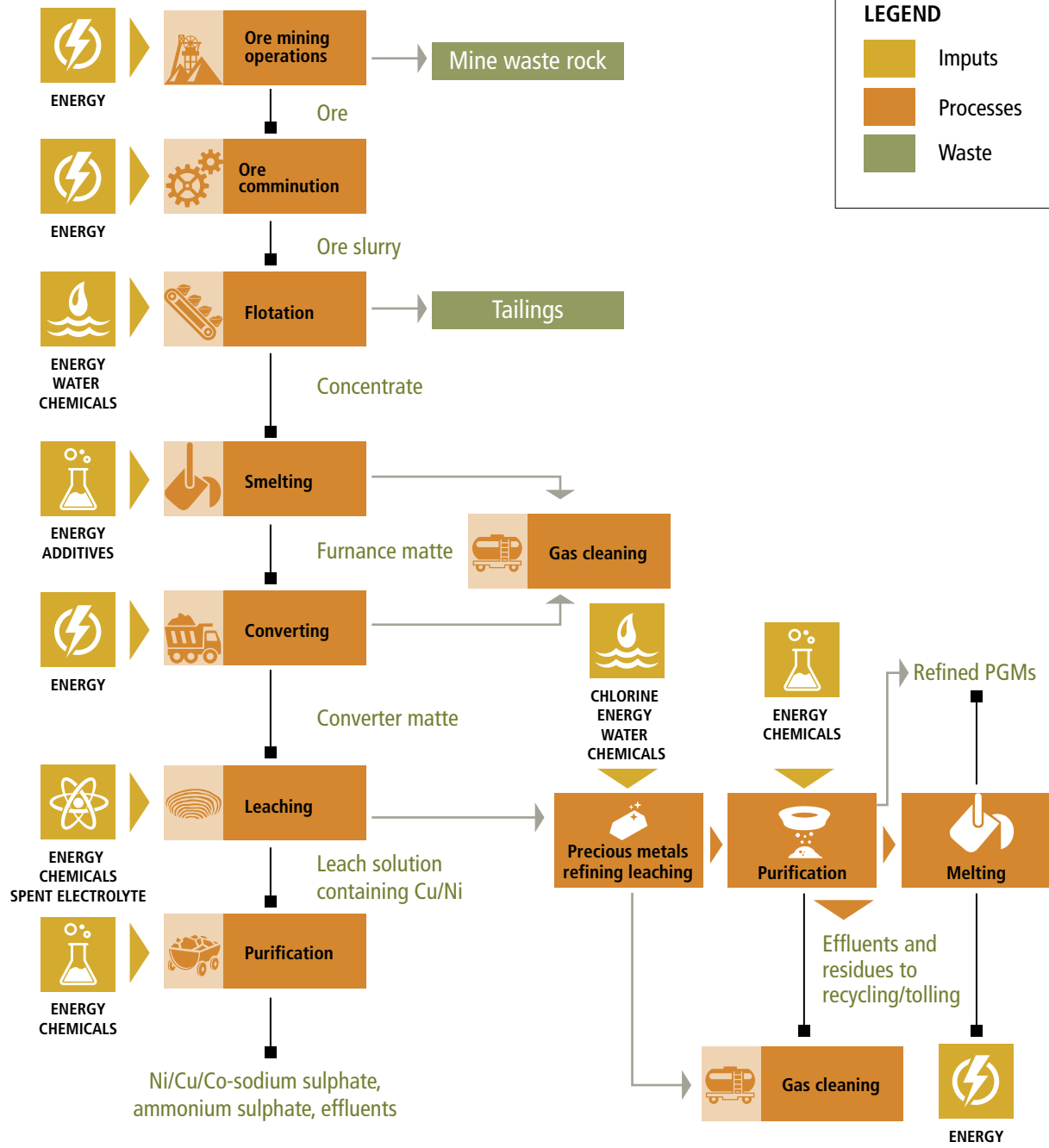
The GHG emission source data in gold mining and a PGM operation collected from mining companies was used to determine the respective draft intensity benchmarks illustrated in the diagrams below.



ENVIRONMENT continued

CASE STUDY

Sources of greenhouse gas emissions in a PGM mining operation





Ursula Brown

We at the Chamber recognise that illegal mining is a critical issue that needs to be addressed, not only for the sake of the industry and the fiscus, but also in the interests of the environment, safety, health, and security of mine employees, communities and in the best interests of illegal miners themselves.

In the medium and long term, rampant illegal mining will undermine the aims of the MPRDA and the Mining Charter and will result in irreparable damage, sterilising of resources and leaving behind a costly and damaging environmental legacy.

Illegal mining has a range of negative economic, social and environmental impacts which include the following:

Economic impacts

- Costs industry and fiscus billions of rands a year in lost sales, taxes and royalties
- Theft of copper, electricity cables, dragline cables, diesel, and materials prejudice the economic viability of companies and pose risks to mine infrastructure
- Significant increase in security costs and costs related to unnecessary stoppages, repairs and maintenance

- Cost to state and mining companies to commission Mines Rescue Services for rescues
- Unquantifiable environmental and social costs

Social impacts

- Influx of undocumented immigrants (90% of arrested illegal miners are undocumented immigrants)
- Significant safety and health risks to illegal miners and miners at legal operations, as well as communities
- Increase in crime and illegal trade - explosives, diesel, copper cables and other equipment from mines
- Destroys the social fabric of mining communities – fear, coercion, human rights abuses, prostitution, and substance abuse
- Number of mining accidents/incidents and near-misses in recent years related to illegal mining
- Risk of interruption of electricity supply (theft of copper cables) to underground workings
- Threats to employees, booby traps, tampering with mine equipment

Environmental impacts

- Sabotaged pipelines contaminate the environment
- Illegal water usage and wastage
- Sinkholes created due to water pipeline 'spiking'
- Underground fires and explosions
- Mercury contamination of environment
- Excavation and reopening of sealed and rehabilitated shafts, with associated hazards

Illegal mining is not only a South African challenge and it is not an issue that has recently come to light. Indeed, references to illegal mining may be found in the archives over the past 100 years. Illegal mining is a complex issue that requires the involvement of many layers of stakeholders – including government, labour unions, the South African Police Service (SAPS) and the industry – and the solution would need to include clear objectives with thorough risk assessments.

We are of the view that until all the underlying factors contributing to crime in South Africa, including illegal mining, are addressed, the parties will be addressing only the symptoms rather than the cause. The entire legal enforcement system needs to be addressed, including policing, prosecution, immigration and border control.

No single stakeholder can address the challenge of crime in South Africa, including illegal mining, on its own – collaboration is key. The industry, individually and through the Chamber, remains committed to working with other stakeholders to address this serious challenge.

ILLEGAL MINING continued**ILLEGAL MINING VS SMALL-SCALE MINING**

There is a difference between illegal and small-scale mining.

Illegal mining is mining which is not regulated. We are of the view that regulated mining is in the interest of everyone, particularly from a health and safety, socio-economic, environmental and human rights perspective.

Small-scale mining is encouraged under the MPRDA, and the Chamber has a special unit dedicated to support small-scale miners.

This sector is regulated – not only to ensure that there is control over the allocation of mineral resources in a way that is beneficial to South Africa and promotes transformation, but also to protect the environment, communities and employees. Indeed, current legislation was put in place exactly for this reason.

ILLEGAL MINING IS ON THE RISE

Illegal mining is on the rise in South Africa and takes place on the surface and underground at closed-off, abandoned and operating mines. Illegal mining is often organised and carried out by crime syndicates. Whilst individual illegal miners may act out of economic desperation, there is no doubt that illegal mining activities are directly linked to the lucrative illicit trade in precious metals and diamonds.

It is estimated that illegal mining activities on operating mines cost the economy billions of rands every year, including through non-payment of taxes and royalties. But this is likely to be an under-estimate as illegitimate activities cannot be accurately quantified.

Illegal miners, also known as zama zamas, risk their lives to open cemented and sealed off shafts with explosives at abandoned mines where they travel up to three kilometres underground to live and work for extended periods without the necessary protective gear and without regard for the impact of their activities on the environment.

Where illegal miners trespass on operating mines to do their work, they cause significant damage and losses which have a negative impact on the viability of these operations. This translates into the loss of revenue, taxes, employment opportunities, capital expenditure, exports, foreign exchange earnings and procurement generated by legal mining. Illegal miners are often heavily armed and set ambushes and booby traps for employees, security and rival groups of illegal miners.

Mining communities suffer as they become riddled with related crime such as bribery, violence against workers and management, and child labour.

Unfortunately, the illegal miners taking these risks are exploited by the organised crime bosses and do not share in the real value of their labour.



CAPTION

Rand Refinery



ILLEGAL MINING continued

SCOPE AND IMPACT OF ILLEGAL MINING



ILLEGAL MINING continued**THE ILLEGAL MINING MARKET SYSTEM**

The illegal mining market is a well-managed five-tier system:

Tier 1: Illegal miners

The underground workers, mostly illegal immigrants, do the physical mining. Many have worked in the mines previously. They use chemical substances to primitively refine the product.

Tier 2: Buyers on surface, around the mine

They often organise Tier 1 illegal miners and support them with food, protection and equipment.

Tier 3: Regional bulk buyers

Often entities with permits issued under the Precious Metals Act.

Tier 4: National and international distributors

Distribution through front companies and legitimate exporters.

Tier 5: Top international receivers

Usually through international refineries and intermediary companies.

Local police and mine security deal with levels one and two of the five-tier syndicate system and the Chamber of Mines, SAPS, National Coordinating Strategic Management Team (NCSMT) and the DMR are working to identify and deal with levels three, four and five of the syndicate system that constitute the buyer market. This work is undertaken hand-in-hand with international agencies such as the United Nations (UN) Interregional Crime and Justice Research Institute, European police, Interpol and international embassies.

Multi-stakeholder efforts, National Precious Metals Forum and Standing Committee on Security

We remain fully committed to working with all other stakeholders to address the serious challenge of illegal mining.

We have a Standing Committee on Security (SCOS) in place which provides a platform for members to deal with all issues relating to security, including theft from mines. The SCOS works with the NPMF which is chaired by the Directorate of Priority Crime Investigation.

Its initiatives include:

- Establishing a precious metals finger-printing database at the SAPS forensic laboratories
- Formal agreements between the Chamber, the mining companies and the SAPS
- Determining where gold and platinum has originated from
- Creating a special investigative task force
- Investigating syndicate activity at national and international level

In addition, provincial multi-agency forums exist in five of the nine provinces in which we participate. The provincial multi-agency forums feed into a multi-disciplinary coordinating body which deals with illegal mining and the smuggling of precious metals and diamonds across the five syndicate levels. The forums implement provincially-based disruptive operations and measures to identify and apprehend illegal miners and provide awareness and training to the SAPS and other authorities in identifying the different forms of precious metals, PGMs in particular.

We have also engaged at regional and international levels to create awareness of the issue globally.

South Africa and the Russian Federation engaged in talks with the UN Interregional Crime and Justice Research Institute (UNICRI) and the United Nations Office on Drugs and Crime (UNODC) with the purpose of developing a global strategy to assist in dealing with the illegal mining phenomenon. In April 2013, South Africa tabled a resolution dealing with combating transnational organised crime and any possible links to the illicit trafficking of precious metals. The resolution was adopted by the Economic and Social Council (ECOSOC) on 25 July 2013. The resolution stressed the need to develop comprehensive, multi-faceted and coherent strategies and measures, including reactive and preventative measures, to counter the illicit trafficking of precious metals.

In its resolution 2013/38, ECOSOC mandated UNICRI to develop an international strategy to combat illicit trafficking of precious metals. Thus far, UNICRI has completed the assessment and has presented the technical report together with an International Strategy and a National Action Plan.

On 20 June 2016, the UNICRI assessment findings were presented to the Chamber of Mines Council. The Council endorsed the assessment and on 4 August 2016, UNICRI met with our CEO to propose a National Precious Metals Action Plan. We supported the proposal in principle.

We have acted as a liaison to arrange a meeting between UNICRI representatives and the Department of Planning, Monitoring and Evaluation to develop a National Action Plan relating to illegal mining to establish, in the first instance, terms of reference for the plan and to agree on an approach to fund the model for the project.

SUPPLEMENTARY INFORMATION


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Abbreviations

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Contact details and administration



 **CAPTION**
Sibanye-Stillwater – Driefontein

ABBREVIATIONS

AET	Adult Education and Training	DOL	Department of Labour
AMV	African Mining Vision	DPCI	Directorate of Priority Crime Investigation
AI	Africa Institute	DPME	Department of Planning, Monitoring and Evaluation
AMCU	Association of Mineworkers and Construction Union	DST	Department of Science and Technology
AMD	Acid Mine Drainage	DTI	Department of Trade and Industry
AMR	Annual Medical Report	DWS	Department of Water and Sanitation
AMMSA	Association of Mine Managers of South Africa	EAO	Emolument Attachment Order
BASA	The Banking Association South Africa	EBIT	Earnings before interest and taxes
B-BBEE	Broad-based black economic empowerment	ECOSOC	Economic and Social Council
BEE	Black economic empowerment	EEMS	Entry Examination and Making Safe
BLSA	Business Leadership South Africa	EMD	Emerging Miners' Desk
BUSA	Business Unity South Africa	EWULAAS	Electronic Water Use Licence Application and Authorisation System
CCOD	Compensation Commissioner for Occupational Diseases	EXIA	Explosion Proof Certificate
CEO	Chief Executive Officer	FOG	Falls of ground
COAS	Carbon Offset Administration System	FP	Financial provision
COE	Centre of Excellence	GA	General Authorisation
COIDA	Compensation for Occupational Injuries and Diseases Act	GATT	General Agreement on Tariffs and Trade
COP	Conference of Parties	GDP	Gross Domestic Product
COPA	Community of Practice for Adoption	GFCF	Gross Fixed Capital Formation
CPI	Consumer price index	HCT	HIV counselling and testing
CRG	Charter Reference Group	HDSA	Historically disadvantaged South Africans
CRTM	Continuous real-time monitoring	HEG	Homogeneous exposure group
CSIR	Council for Scientific and Industrial Research	HRD	Human Resource Development
CTAC	Culture Transformation Advisory Committee	HPD-TAS	Hearing Protection Devices – Training, Awareness and Selection Tool
CTF	Culture Transformation Framework	HRDC	Human Resource Development Council of South Africa
DCOGTA	Department of Cooperative Governance and Traditional Affairs	IBMQI	Industry-Wide Buy and Maintain Quiet Initiative
DEA	Department of Environmental Affairs	ICMM	International Council for Mining and Metals
DHA	Department of Home Affairs	IDC	Industrial Development Corporation
DHET	Department of Higher Education and Training	IWWMP	Integrated Water and Waste Management Plan
DMR	Department of Mineral Resources	JOGMEC	Japan Oil, Gas and Metals National Corporation
DOE	Department of Energy	JSE	Johannesburg Stock Exchange
DOH	Department of Health	LAC	Labour Appeal Court

ABBREVIATIONS continued

LBMA	London Bullion Market Association	NEMA	National Environmental Management Act
LPC	Labour Policy Committee	NEMLA	National Environmental Management Laws Amendments
LRA	Labour Relations Act	NGO	Non-governmental organisation
LTI	Lost time injury	NHI	National Health Insurance
MBOD	Medical Bureau for Occupational Diseases	NIHL	Noise-induced hearing loss
MHSA	Mine Health and Safety Act	NIPF	National Industrial Policy Framework
MHSC	Mine Health and Safety Council	NMW	National minimum wage
MIASA	Mining Industry Association of Southern Africa	NPMF	National Precious Metals Forum
MIGDETT	Mining Industry Growth, Development and Employment Task Team	NSA	National Skills Authority
MIOHAC	Mining Industry Occupational Health Advisory Committee	NSF	National Skills Fund
MITHAC	Mining Industry TB and HIV Advisory Committee	NSP	National Strategic Plan
MOSH	Mining Industry Occupational Safety and Health	NSDP	National Skills Development Plan
MOU	Memorandum of Understanding	NUM	National Union of Mineworkers
MPF	Mineworkers Provident Fund	NWRS2	National Water Resource Strategy 2
MPRDA	Mineral and Petroleum Resources Development Act	ODMWA	Occupational Diseases in Mines and Works Act
MQA	Mining Qualifications Authority	OEL	Occupational exposure limit
MRAS	Model Reference Adaptive System	OEM	Original Equipment Manufacturer
MRDS	Mine Residue Deposits and Stockpile	OHS	Occupational Health and Safety
MTDA	Mining Transformation and Development Agency	OHSMS	Occupational Health and Safety Management System
MWD	Mine Water Division	OH&SPC	Occupational Health and Safety Policy Committee
NAMB	National Artisan Moderating Body	OLD	Occupational Lung Disease
NBI	National Business Initiative	PAYE	Pay As You Earn tax on personal income
NCA	National Credit Act	PDAC	Prospectors & Developers Association of Canada
NCOP	National Council of Provinces	PDS	Proximity detection system
NCR	National Credit Regulator	PGMs	Platinum group metals
NCSMT	National Coordinating Strategic Management Team	PIC	Public Investment Corporation
NDC	Nationally determined contributions	PLF	Platinum Leadership Forum
NDP	National Development Plan	PPC	Parliamentary Portfolio Committee
NEDLAC	National Economic Development and Labour Council	PPI	Producer Price Index
		QCTO	Quality Council for Trades and Occupations
		R&D	Research and development
		RAF	Road Accident Fund

ABBREVIATIONS continued

RBE	Rail-bound equipment
RCS	Respiratory Crystalline Silica
RMA	Rand Mutual Assurance
RQO	Resource quality objectives
SA	South Africa
SACMA	South African Colliery Managers' Association
SADPO	South African Diamond Producers Organisation
SAHRC	South African Human Rights Commission
SALGA	South African Local Government Association
SAMRASS	South African Mines Reportable Accidents Statistical System
SAPS	South African Police Service
SCOS	Standing Committee on Security
SEIFSA	Steel and Engineering Industries Federation of Southern Africa
SENTINEL	Sentinel Retirement Fund
SETA	Sector Education and Training Authority
SIMRAC	Safety in Mines Research Advisory Committee
SLP	Social and Labour Plan
SARB	South African Reserve Bank
Stats SA	Statistics South Africa
STS	Standard Threshold Shift
SWAF	Standardised Water Accounting Framework
TARP	Trigger-action response programme
TB	Tuberculosis
TDCA	Trade, Development and Cooperation Agreement
TVT colleges	Technical and Vocational Training colleges
TMM	Trackless Mobile Machinery
UASA	A labour union active in the mining sector
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICRI	United Nations Interregional Crime and Justice Research Institute
UNODC	United Nations Office on Drugs and Crime

VCT	Voluntary counselling and testing
WC/WDM	Water conservation and water demand management
WISA	Water Institute of South Africa
WQM	Water quality management
WSLG	Water Sector Leadership Group
WUE	Water-use efficiency



 **CAPTION**

Ivanplats – Mokopane

CONTACT DETAILS AND ADMINISTRATION

COUNTRY OF INCORPORATION AND DOMICILE

South Africa

NATURE OF BUSINESS AND PRINCIPAL ACTIVITIES

A voluntary employers' organisation tasked with lobbying and advocacy to achieve a policy, legislative and governance framework, which is widely supported and which will allow the mining industry to convert the country's abundant mineral resources into wealth for the benefit of South Africa.

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REPORTING PERIOD

The Chamber of Mines of South Africa's financial year is from 1 January 2017 to 31 December 2017. This report covers noteworthy events and developments during this period. Separate financial statements have been prepared which combine the Chamber's financials with that of Mining Lekgotla (Pty) Ltd, a 100% subsidiary company. These are available online at:




<http://www.chamberofmines.org.za/industry-news/publications/annual-reports>



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