VISION FOR THE MINING INDUSTRY
Vision for the Namibian Mining Industry is to be widely respected as a safe, environmentally responsible, globally competitive and meaningful contributor to the long term prosperity of Namibia.

VISION FOR THE CHAMBER
To be acknowledged as the champion of the exploration and mining industry in Namibia.

MISSION
To effectively promote, encourage, protect, foster and contribute to the growth of responsible exploration and mining in Namibia to the benefit of the country and all stakeholders.

CORE VALUES
• Integrity
• Transparency
• Accountability
• Compliance
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MINES IN NAMIBIA

1. Tschudi
2. Ohorongo
3. Otjikoto
4. Otjozondjupa
5. Navachab
6. The Salt Company
7. Rössing
8. Husab
9. Salt & Chemicals
10. Langer Heinrich
11. Matchless
12. Otjihase
13. Swartmoder
14. Namdeb Northern Coastal Mines
15. Debo Marine Namibia
16. Skorpion Zinc
17. Rosh Pinah Zinc Corporation
18. Namdeb Southern Coastal Mines
19. Namdeb Orange River Mines
20. Dordabis Iron mine
21. R.E.D Granit Nambia
22. Namagra Quarry
1. Mining Sector made a direct contribution of 11.1% to GDP in 2016, but contracted by 6% in terms of real value added (NSA Preliminary statistics).

2. Tschudi copper mine, trebled Namibia’s refined copper cathode production.


4. Through a Joint Venture partnership, Imerys Graphite and Gecko Namibia continued the development of the Okandjande graphite mine which is scheduled for production in April 2017.

5. Salt & Chemicals inaugurated their salt expansion project, which would boost salt production from 700,000 tonnes to 1,000,000 tonnes by 2018.

6. Tests work conducted in six phases on Bannerman’s Heap Leach Demonstration Plant yielded results far exceeding benchmarks in the optimisation study.

• Turnover > N$28.85 billion (N$25.28 billion in 2015)
• Wages and salaries > N$4.15 billion (Excluding Swakop Uranium)
• Exploration spending by operating and exploration companies > N$510.92 million
• Corporate tax paid > N$1.75 billion (N$2.35 billion in 2015)
• Royalties paid > N$1.45 billion (N$1.41 billion in 2015)
• Total taxes paid > N$3.21 billion (N$3.76 billion in 2015)
• Chamber members directly employed 9,574 permanent individuals, 669 temporary employees, and 5,400 contractors (2015: 8,853 permanent employees, 716 temporary employees, and contractors 9,423).
In the last seven years, the Chamber in partnership with the Government has worked relentlessly to ensure that Namibia remains an attractive destination for investment in mining and to ensure that this sector, one which underpins economic growth in Namibia, continues to divulge maximum economic benefit for the country. A raft of policy proposals in 2011, which if implemented, would have been severely detrimental for the mining sector, resulted in major uncertainty and angst among existing operations, exploration companies and potential investors. Thankfully, the Government retracted the worst of these proposals and in productive cooperation with industry worked towards establishing a conducive regulatory framework, which drew over N$40 billion in investment to the sector. This ultimately led to the development of three new mines. In 2014, the Fraser Institute Survey of Mining Companies ranked Namibia as the most attractive destination for investment in mining and exploration on the African continent.

Sadly, however, the tides have reversed and we find ourselves in a similar situation as in 2011. In the 2015 Fraser report, Namibia dropped three places ranking as the fourth most attractive destination for mining in Africa. In the most recent 2016 survey, Namibia’s ranking has fallen a further five places to ninth position. The proposed empowerment policy and legislation, the New Equitable Economic Empowerment Bill (NEEEB) and Additional Conditions to licences were cited as the main drivers for the ranking degradation.

“In the most recent 2016 survey, Namibia’s ranking has fallen a further five places to ninth position.”

Through the formulation of NDP5, the Chamber identified significant opportunity for investment in the manufacturing of inputs into the mining sector, such as components for processing plants. The mining sector spent 41% of its revenue on locally procured goods and services in 2016, which presents itself as an appealing business case to manufacture some of these inputs. This is one of the many examples in which the mining sector provides critical mass for the advancement of other industries. For such investments to occur, however, a favourable and conducive regulatory environment is of utmost importance.

Furthermore, the mining sector, through its comprehensive Corporate Social Responsibility programmes has already made significant contributions to the achievement of a number of goals and targets in the Harambee Prosperity Plan and National Development Plans. This comes at a time when Government is strapped to achieve these targets alone, and the need for strong collaboration between the private and public sector is more prominent than ever.

Effective partnerships are not the only pillars of saving grace in the years to come. What is required is an environment in which privately owned businesses, and thereby mining companies, can flourish without having to comply with restrictive regulatory requirements. The attractiveness of the Namibian mining sector, along with others will continue to be eroded should uncertainty around the proposed pieces of legislation and policies continue, especially during a time where the Namibian economy cannot afford to forego new investments and business opportunities.
Safety

Painstakingly, the mining industry suffered another two fatalities in 2016. Martin Shilompoka, a machine operator at B2Gold’s Otjikoto gold mine, sadly passed away on 22 January 2016 after being trapped between a dozer and diesel truck during a refuelling operation on 28 December 2015. Just when we thought the year was almost over, a second fatality occurred at Namdeb’s Southern Coastal mine on 12 December, 2016 when a sea wall on which Likius Shetunyenga, a multi-skilled dozer operator was working, collapsed and caused the dozer and operator to submerge below water.

We express our heartfelt condolences to the families and friends of the deceased employees. The Chamber continues to learn from these experiences to ensure that similar accidents will be avoided in the future.

Despite these tragic events, the mining industry continues to strive towards its objective of “zero harm” through a self-governing system which is pioneered through Safety Peer Review missions by the Chamber Safety Committee.

We are grateful to the full support we receive from the Chief Inspector of Mines and his team. We remain optimistic that this cooperation will continue to bear fruit as has happened in previous years when the industry has attained zero fatalities and lower safety statistics.

World Economy

The United States of America (USA) and Europe recorded sluggish recovery and growth in the first six months of 2016, and geopolitical developments underpinned global uncertainty throughout the year. Most certainly, Britain’s exit from the European Union and the election of Donald Trump as the new president of the USA created a stir in an otherwise more optimistic and stable global environment.

It was thus a surprise to see even modest improvement in economic growth in the USA, Eurozone and UK in the second half of 2016 following these events. The Fed raised interest rates for the second time since 2006 in December 2016 as the US economy returned to almost full employment levels, increases in earnings per employee and an uptick in core inflation signalled growth in the local economy. Global recovery, however, is now threatened by protectionist and inward looking policies as a very likely outcome of these two hallmark events.

2016 was a volatile yet successful year for the gold price, which recorded an increase of 28.8% between January and July 2016 as the safe haven asset was well sought after in an unpredictable global climate. Following the Brexit vote and Trump’s victory, the gold price posted sharp declines, returning to US$1,145/kg at the end of 2016 when the Fed signalled towards a rate hike and the Trump administration adopted a pro-growth policy focusing on infrastructure and stimulating the US economy. Furthermore, the demand for gold saw a decline from two of its biggest consumers, India and China.

Turning further east, risks of slowdown in China were diminished as government stimulus supported growth in 2016 and was the primary driver in the recovery of commodity prices. China’s structural adjustment, however, should not be forgotten as the economy moves from import led consumption to consumer led growth. Emerging market economies, Russia and Brazil, appear to be on the path to recovery while India posted robust growth in 2016 supported by effective policy decisions and strong external buffers.

The uranium price posted its worst performance in 12 years, dropping to an unsustainable low of US$18.75/lb early in November 2016 amidst expectations of a steady recovery. The sharp decline was a result of surpluses from large stockpiles at utilities including enough inventory.
held by Japan’s operational reactors to power them for the next six years. Many mines worldwide have suspended operations due to persistently low prices since the Fukushima incident and record low prices continue to threaten the sustainability of mines in operation. Namibia’s uranium sector was not left unscathed as will be outlined in a later section of this speech.

“The uranium price posted its worst performance in 12 years, dropping to an unsustainable low of US$17.50/lb early in November 2016 amidst expectations of a steady recovery.”

Closer to home, South Africa teetered on the brink of recession in 2016 brought about heightened political uncertainty, increasing social unrest and rising unemployment. Depressed oil prices also stifled the Angolan economy, feeding through to Namibia’s retail sector, a large proportion of which was driven by the Angolan market.

Notwithstanding a two-year long drought, Namibia’s fast growing economy halted very suddenly with two consecutive contractions recorded in the second and third quarters of 2016, at 1.2% and 1% respectively, brought about by reduced growth in the construction and mining sectors. Furthermore, the ballooning budget deficit has been cited as one of the main reasons for a downgrade from positive to negative in the outlook of Namibia’s investment rating by international ratings agencies; Fitch and Moody’s. Fiscal consolidation measures announced by the Government in October 2016 and in the recently tabled Budget will see further contractions in the Namibian economy, particularly in the construction sector.

Not without its own challenges, the mining sector is fortunately not directly impacted by the gloomy developments in the local economy. The outlook for the mining sector is substantially more optimistic on the back of a new mega mine which entered production at the end of 2016 and other developments highlighted below.

**Highlights of Mining in Namibia**

In response to the persistent depressed uranium price, Langer Heinrich announced that it would be reducing production by 20% for the following two years. As part of their restructuring and cost reduction strategy, mining operations were suspended and low grade ore which has been stock piled will now feed the plant. The company also retracted the 20% sale of the mine’s shareholding following the restructuring of bonds, which has allowed the company to meet its debt obligations.

A two-month long strike involving a wage dispute spanning from the end of February to mid-April at the Rosh Pinah zinc mine severely curtailed production of zinc and lead concentrate.

Swakop Uranium’s Husab mine produced its first barrel of uranium on the 30th of December 2016, marking a monumental event on Namibia’s mining timeline, as the world’s second largest uranium mine came into production. The mine is expected to reach nameplate capacity in 2019.

Despite some challenges at the Tschudi copper mine, the mine’s contribution trebled Namibia’s refined copper production of copper cathode. Furthermore, B2Gold’s Otjikoto gold mine posted record production through the expansion of mining operations into the wofshag zone. In combination with an attractive average gold price and significantly low operating costs, Otjikoto gold accounted for 10% of mining revenue and contributed to Namibia’s trebled gold production in two consecutive years.

The Mv SS Nujoma completed sea trials and was successfully delivered to Cape Town on 22 August 2016 where it was equipped for operation. The vessel is currently in Namibian waters with final commissioning of all systems at an advanced stage. The vessel is expected to enter into full operation during the second quarter of 2017. This development will boost future diamond production through specialised exploration and by an additional vessel added to the mining fleet which was previously used for exploration.

The Okandjande graphite mine near Otjiwarongo which is under development through a joint venture partnership between Imerys Graphite and Gecko Namibia is scheduled for first production in April 2017. The graphite ore will be processed at the nearby Okorusu refurbished plant, bringing back to life a mining site which closed doors in 2014 due to the depletion of high grade fluor spar deposit.

“Swakop Uranium’s Husab mine produced its first barrel of uranium on the 30th of December 2016...”
Salt & Chemicals officially inaugurated the expansion of its salt production operations in July 2016, which will boost their annual output from 700,000 tonnes to 1,000,000 tonnes of salt per annum.

As for projects close to development, once North River Resources has received its mining licence, the closed lead and zinc mine in the Erongo region will once again come into production with new investments. Further results from Bannerman’s Heap Leach Demonstration plant outperformed targets in the optimisation study cementing their position and preparedness for mine development to commence once uranium prices recover.

The year in perspective

New Equitable Economic Empowerment Framework (NEEEF)
The Chamber was actively involved in the private sector consultations with government on the proposed empowerment legislation, the New Equitable Economic Empowerment Bill (NEEEB). The Chamber formally made submissions to the Law Reform and Development Commission and to the Office of the Prime Minister in August 2016. The outcome of NEEEF is still uncertain, though we have it in good faith that Government is cognisant of the sector’s concerns with the current version of the Bill. The Chamber is concerned that the continued uncertainties around NEEEF will further worsen Namibia’s rankings in the Fraser Institute reports as detailed in a following section. We therefore wish to appeal to government to expedite this matter to ensure an amicable outcome as soon as possible. The Chamber hopes that government will adopt the constructive alternative proposals in NEEEF which accommodate market fundamentals of the private sector and growth thereof, while implementing effective and pro-growth empowerment mechanisms.

Namibia Investment Promotion Act, 2016
The Chamber is equally concerned with the Namibia Investment Promotion Act of 2016 and is part of Business Namibia that has proposed changes to the Act before it comes into effect. As with NEEEF, the Chamber appeals to government to quickly amend this Act in consultations with the private sector under the umbrella of Business Namibia to bring an end to uncertainties and further downward sliding of Namibia’s competitive rankings on global rating agencies.

“The Chamber is concerned that the continued uncertainties around NEEEF will further worsen Namibia’s rankings in the Fraser Institute reports …”

Export Levy
Following the gazetting of the Export Levy Act on 24 June 2016, the Chamber engaged extensively with the Ministry of Finance on particulars of the legislation which present challenges to the effective implementation and administration by mining companies, specifically the definition of export levy amount and the frequency of payments. The Chamber has presented alternatives which have largely been accepted by the Ministry of Finance and proposed changes should be in the form of Regulations or amendments to the Act.

NDP5
The Chamber played a prominent role and contributed significantly to the formulation of the fifth National Development plan which was scheduled to be launched in March 2017, and in which the mining sector has been recognised and prioritised to move the Nation towards the goals and objectives outlined in Vision 2030.

Harambee Prosperity Plan
The Chamber welcomed the Harambee Prosperity Plan as unveiled by His Excellency, President Hage Geingob on 5 April, 2016. The Chamber is encouraged that Harambee is in sync with the Mining Charter that the Chamber submitted to government in November 2010 and adopted in September 2014. Chamber members were assigned two activities under the Social Progression and Economic Transformation pillars to “Introduce a housing scheme for mine workers” and “Chamber of Mines members to adjust procurement policies to favour local SMEs and local entrepreneurs” respectively.

The Chamber is proud to announce that the mining industry has delivered on the two activities and continues to do so going forward. The industry spent over N$ 11 billion on local procurement of goods and services during 2016, which was 64% of total procurement spend. Furthermore, this constitutes approximately 41% of the total industry revenue. These figures speak volumes and demonstrate that the procurement policies in the mining sector are already aligned to support local SMEs and local contractors. Going forward, government should concentrate on attracting investments in manufacturing plants for high value inputs into mining processes. Similarly, the industry provides housing schemes in various forms to ensure workers return home to a decent dwelling. Workers are at liberty to elect for homeownership...
through mortgages with financial institutions. In some cases, mines are disinvesting in housing property and selling to miners. One new mine has taken the approach to purchase land from local municipalities, service such land and transfer title deeds directly to mine workers for home construction through normal bank mortgages. In an unprecedented move to support Harambee, one mine has donated land worth N$ 31 million to Tsumeb municipality to enable construction of low cost housing to local communities. The Chamber has since been submitting quarterly reports to the Presidential Advisors and the Minister of Mines and Energy.

Security of Water

Despite the recent good rains, water security remains a threat to mines, especially in the central part of Namibia. Should these areas encounter continued water shortages, Navachab could be negatively impacted through reduced gold production, undermining the profitability of the mine and consequently the socio-economic contribution to the national economy.

“Despite the recent good rains, water security remains a threat to mines, especially in the central part of Namibia.”

Rossing was granted an Environmental Clearance Certificate to construct its own desalination plant which would alleviate pressure on the national utility, NamWater. This milestone enables all other permits to follow. Other mines in the vicinity have expressed interest to participate in this project. The Bankable Feasibility Study (BFS) is being updated to advance the project forward.

Moratorium on Marine Phosphate Mining

The Chamber welcomed the granting of an Environmental Clearance Certificate to Namibia Marine Phosphates by way of a letter issued by the Environmental Commissioner dated 9 September 2016. However, a public outcry on the procedures followed for its issuance resulted in a decision to retract the Clearance Certificate. The Chamber remains grossly concerned that an agreement and way forward on marine phosphate mining has not yet been concluded, but remains supportive of an environment conducive for all sectors of the economy to co-exist.

Trans Namib & Rail Working Group

The Chamber welcomed the announcement by Government in 2016 to purchase six General Electric (GE) locomotives and 90 sulphuric acid tanker wagons to transport sulphuric acid to mines. The Chamber was pleased to witness the official launch of the rolling stock and handling equipment on 1 March, 2017 at the Windhoek Railway station. The Chamber commends government on this direct support to the mining industry and notes that this will also help other mines to move some of their cargo off the highly congested national roads and thereby contribute to better safety on the roads. The Chamber continues to engage TransNamib on further proposals to enhance rail transport, including proposals for public-private partnerships.

Joint Value Addition Committee (VAC)

The Chamber has actively participated in Joint Value Addition Committee. Unfortunately, due to government financial constraints, the planned field missions to
galvanising and copper wire and tube manufacturing plants in South Africa and Zambia respectively could not be undertaken. The Chamber had made all logistical plans until the last moment when the trips had to be cancelled. We hope this matter will be executed this year to ensure the successful conclusion of a Minerals Beneficiation Strategy.

**Mining Expo and Mining Conference**
The fifth Mining Expo and Conference in 2016 was a great success, with the change of venue to the Windhoek Show Grounds. There was a slight reduction in the number of exhibitors, a reflection of current economic headwinds. The venue change significantly raised the calibre of the event offering more space and facilities for all participants.

This annual event is now firmly entrenched in the Windhoek calendar of events during the last week of April.

**Ministry of Mines and Energy (MME)**
The Chamber continues to enjoy a cordial and constructive relationship with our line Ministry under the leadership of Hon Obeth Kandjoze as the Minister of Mines and Energy and his Deputy, Hon. Kornelia Shilungu. The Chamber appreciates the support received from MME, particularly when some of our members are still sailing through tough economic times, particularly the uranium mines.

The Chamber of Mines was delighted at the news that the Minister of Mines has lifted and terminated the moratorium on new applications for EPLs in respect of nuclear fuel minerals. The ten years’ moratorium was terminated effective from 15 December, 2016. We wish to commend the Honourable Minister on this bold decision and welcome development which places Namibia at a competitive advantage when uranium markets recover and investors scramble for EPLs again as we saw in 2007 at the height of the so-called “uranium rush”.

The Chamber welcomed the Minister’s assurance that there will be no backlog of licence applications during 2016. However, the Chamber was very disappointed to note that the backlog actually developed due to unintended consequences in the implementation of Additional Conditions to licences. The Chamber wishes to commend the Minister and his team for the successful outcomes during the watershed special Council meeting with the Minister on 16 November, 2016, at which most stumbling blocks were addressed. The Chamber has accordingly finalised amendments to the Additional Conditions as requested by the Hon. Minister. We are pleased to note that members have since been receiving physical licences to enable new investments into exploration and mine development to flow into Namibia.

The Chamber is deeply concerned to note that sadly, Namibia dropped from first position in 2014 as the most attractive destination for mining and exploration in Africa, to ninth position in 2016 in the recently released Fraser report.

“The Chamber wishes to commend the Minister and his team for the successful outcomes during the watershed special Council meeting with the Minister on 16 November, 2016, at which most stumbling blocks were addressed.”

The report named NEEEF and the new Additional Conditions to licences as the main reasons for Namibia’s tumbling. We therefore
appeal to government to expedite an amicable conclusion on NEEEF and thereby remove the damaging investor sentiments so that Namibia can regain its previous ranking and benefit from Foreign Direct Investments (FDIs).

Highlights from operations

Diamonds

There was a significant reduction of 11% in the output of diamonds from 1.76 million carats in 2015 to 1.57 million carats in 2016. Namdebland operations contributed 403,000 carats to this total, also posting a drop in output due to operational challenges which involved declining resources, cementation of ore, water management challenges and reduced throughput owing to clayish material.

Debmarine production fell marginally from 1.2 million carats in 2015 to 1.17 million carats in 2016. The decline in output was due to scheduled vessel servicing which took place throughout the course of the year.

Sluggish global demand for diamonds continued during 2016 which drove declining diamond sales and prices.

Uranium

Rössing uranium produced 1,850 tonnes of uranium in 2016, a significant increase of 48.6% from 1,245 tonnes of uranium oxide production in 2015. Despite depressed market conditions, a number of improvements in mining activities increased mill throughput and consequently, production. The company also declared a profit in 2016 as a result of enhancing mining efficiency and eliminating bottlenecks.

Production from the Langer Heinrich mine was sustained during 2016 posting a marginal increase from 2,228 in 2015 to 2,236 in 2016 due to ongoing efforts to achieve operational efficiency while trying to curb the costs of production.

Swakop Uranium commenced production on 30 December 2016.

Zinc

Refinery production increased from 82,029 tonnes in 2015 to 85,427 tonnes in 2016 despite a number of operational challenges faced by the mine. In order to maximise output and refinery processes, Skorpion zinc imported ore from Turkey and Morocco which contributed to the rise in refined zinc production.

A two-month long strike at the Rosh Pinah Zinc mine was the primary cause for a severe drop in the output of zinc concentrate which fell from 99,665 tonnes in 2015 to 80,560 tonnes in 2016.

Lead

Similarly, the decline in lead concentrate production from 18,521 tonnes in 2015 to 14,862 tonnes in 2016 was also as a result of the industrial action at Rosh Pinah mine.

Gold

B2Gold produced 4,714 kg in 2016, 12.3% up from production in 2015, resulting from increased throughput owing to the completion of the mill expansion project which was successfully completed in September 2015. Mining operations were extended to the Wolfshag zone which also contributed to record production.

Production from Navachab remained stable in 2016, amounting to 1,878 kg of gold bullion.

Cement

Ohorongo Cement produced 777,571 tonnes of cement in 2016, a reduction from 796,055 tonnes in 2015.
Copper

Tschudi copper mine reached nameplate production in March 2016 after which mining operations intersected water in the open pit and resulted in higher than anticipated dewatering quantities. Production was negatively impacted by the unforeseen challenges. However, enhanced infrastructure was installed to better manage the higher water quantities and the mine produced 16,391 tonnes of copper cathode in 2016, trebling refined copper production in Namibia.

Salt

Salt & Chemicals produced 698,590 metric tonnes of salt in 2016, an increase of 13.5% from the 614,980 produced in 2015.

The Salt Company produced 136,949 tonnes of salt in 2016 in line with set targets.

Economic Contribution

Preliminary statistics produced by the National Statistics Agency for 2016 show that the sector made a direct contribution of 11.1% to Namibia’s GDP, but contracted by 6% in real terms. This contraction was primarily a result of the decline in diamond output and base metal production, more specifically for zinc and lead, which are allocated significant weightings in the National Accounts.

The Chamber of Mines, however, is in disagreement with the reported preliminary overall contraction of mining by 6% and disputes the overall GDP contribution of 11.1%. While the contraction for diamonds of 9.6% may have been accounted for correctly, the Chamber negates the contraction of 1.2% posted by metal ores as this also includes production of copper and gold along-side zinc and lead. As reported in the “Highlights from Operations” section, production of pure copper was trebled and total gold production increased by 10% from 2015. Gold bullion and copper cathode are high value minerals and the Chamber is thus of the firm view that their combined contribution would have off-set the contraction in zinc and lead, yielding positive growth for this sub-category in the National Accounts.

Fixed investment by the sector saw a further reduction from N$5.46 billion in 2015 to N$3.49 billion in 2016. It is of no surprise that these numbers may appear insignificant in comparison to the exceptionally high fixed investment of approximately N$17 billion recorded in 2014, as the development of the three new mines and the sulphuric acid plant are now complete.

Exploration remained stable in 2016, posting a slight increase from N$490 million in 2015 to N$510 million, as prices for base metals and gold started to improve. However, the flat spend very likely reflects the challenges in the implementation of Additional Conditions to licences which delayed the issuance of exploration licences to Chamber members for the most part of 2016 as detailed above, and thus investments into exploration.

Chamber statistics show that members paid out N$3.2 billion in corporate taxes and royalties in 2016. These figures exclude PAYE paid through wages and salaries by the sector.

Training and Employment

The mining industry spent some N$82.8 million on training and skills development in 2016 and awarded 33 new bursaries. In addition to in-house training programmes and support provided for tertiary education, the mining sector continued to support and develop local skills capacity with job attachments and internships provided to NIMT students.
Proud to have you here... Dundee staff pose for a picture with the new acid tankers specifically designed for the transportation of Sulphuric acid shortly after the tankers had arrived.
In 2016, mining and exploration companies collectively employed 9,574 people in permanent positions. Total employment by the sector, which includes permanent, temporary positions and contractors, decreased from 19,000 in 2015 to some 16,000 jobs in 2016 as construction of the new Husab mine came to an end.

Conclusions

In conclusion, the mining industry remains the backbone of the Namibian economy and opens new opportunities to the wider economy as the country is now reaping the benefits of new investments and re-investments with three new mines in production. Namibia has trebled gold and copper production in 2016 and with the recovery of most commodity prices, the mining industry is geared to support and underpin the NDP5 goals. The focus is shifting to upstream manufacturing industries to produce high value mining inputs and thereby realise the multiplier effect in the economy and import substitution. The new sulphuric acid plant at the Tsumeb smelter is a starting point for such upstream industries. The mining industry remains committed to supporting local suppliers of goods and services as illustrated by the ever-increasing lucrative Namibian spend in the last three years.

However, the sustainability and continued success of the mining industry will depend on the competitiveness of Namibia as an attractive investment destination for exploration and mining. The further slide of Namibia’s ranking in the 2016 Fraser Institute report is a wakeup call for government to bring to an end investor anxiety and uncertainty on NEEEF policy as well as the Namibia Investment Promotion Act of 2016. The private sector has shown commitment by working closely with government to ensure that Namibia retains its previous status as the most attractive investment destination in Africa for exploration and mining.

My tenure as President of the Chamber of Mines comes to an end and I will be passing on the baton to my successor Mr. Johan Coetzee. I wish to take this opportunity to thank all Chamber members, the EXCO team, my colleagues at the Council and the CEO and his team for their continued support during the last two years under my leadership. It is my sincere hope that the Chamber shall continue to grow from strength to strength and steer the industry to greater heights for the socio-economic development of Namibia as a whole.

Kombadayetu Kapwanga
Chamber President
25 April 2017
Notwithstanding continued efforts to achieve the goal of Zero Harm by the mining sector, two fatalities regrettably occurred in 2016. Both fatalities involved heavy mobile equipment at B2Gold’s Otjikoto mine and Namdeb’s Southern Coastal Mines respectively. The industry also recorded a marginal worsening of the Lost Day Injury Frequency Rate (LDIFR) for 2016 compared to 2015, which rose from 2.37 to 2.39. The number of lost day injuries for the period increased from 80 in 2015 to 86 in 2016. Overall, hand/finger/foot injuries were the most common injuries reported among operations. All mines have focused programmes in place to address these and a downward trend in injuries was evident towards the latter part of the year.

The industry continues its relentless focus on the prevention of fatalities with the various Health and Safety improvement programmes aimed at further understanding and managing fatality risks as well as health-related impacts.

The Chamber of Mines Safety Committee conducted Peer Review meetings and consultations at the following member sites during the course of the year; Namdeb, Tschudi copper mine, B2Gold’s Otjikoto mine and the Walvis Bay Salt operation. Key learnings from these visits included, among others, fall prevention and protection practices, fatigue management and the use of technology-driven solutions to manage safety risks. These peer review sessions are also attended by the Office of the Chief Inspector of Mines, the Ministry of Labour as well as the Mine Workers Union of Namibia (MUN), demonstrating a collaborative effort to improve health and safety in the industry, and involves the sharing and learning of best practices.

On the regulatory side, the Committee continues to work with the office of the Chief Inspector of Mines towards the finalization of the draft Mine Health & Safety Regulations.

The year under review was unfortunately not exemplary in safety performance for the sector, especially given the continuous improvement trend that was evident over the past three years. The industry however, is committed to reverse this trend and continues to work towards the goal of Zero Harm. The Chamber’s Safety committee continues to play a key role in ensuring collaboration, learning and self-regulation across member operations to achieve this goal.
Operating Companies

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Chamber of Mines
Annual report 2016
### Output
Output in 2016
Nil

### Employment
Permanent employees at end 2016
35

Temporary employees as end 2016
0

Contractors at end 2016
70

Expatriate employees at end 2016
0

### Financial
**Financial Year**
1 Jan – 31 Dec

- **Turnover in 2016**
  N$243.6 million (from water sales)

- **Wages and salaries in 2016**
  N$27.8 million

- **Fixed investment in 2016**
  Nil

- **Exploration expenditure in 2016**
  Nil

- **Profits & Losses in 2016**
  N$32 million profit (AREVA Resources Namibia)
  N$75.6 million loss (AREVA Processing Namibia)

### Details
- **Shareholders**
  Uramin Inc 100%

- **Related operations in Namibia**
  AREVA Processing Namibia
  Erongo Desalination Company

- **Mines in Namibia**
  Trekkopje uranium mine (ML 151)

- **Date of production start**
  Mine under care and maintenance

- **Latest estimate of life of mine**
  10 years

- **Affirmative action plan**
  Approved

- **Number of bursaries awarded in 2016**
  Nil

- **Managing Director**
  Hilifa Mbako

- **Mine Manager**
  Francois Van Dyk

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The Minister of Mines and Energy paid a visit to the Erongo Desalination Plant.
100% owned by AREVA, constructed the Trekkopje uranium mine. A separate company, AREVA Processing Namibia (APN), will convert the output of the mine into uranium oxide for sale to AREVA clients once operations commence. Water for the Trekkopje operations is provided by the 20 million cubic metre Erongo Desalination Plant, situated at Wlotzkasbaken.

Highlights for 2016
• Completion of the 2016 maintenance programme.
• Desalination plant assisted NamWater to meet water demand of uranium mines, especially when commissioning ramped up at the Husab mine towards the end of 2016.

Production
The mine continued with its care and maintenance programme in 2016 and thus no production was recorded. The test programme explored ways of pre-concentrating the ore by discarding most of the waste rock before the material is leached. Processes such as finer crushing, attrition and flotation were tested and valuable knowledge was gained.

Exploration
No exploration work was undertaken in 2016.

Safety
There were no LTI’s recorded for the year in review. One FA (First Aid Case) was reported.

Labour Relations
No industrial action was reported and sound labour relations were maintained between the company and MUN.

Education and skills
As part of its external skills development programme, AREVA sent five of its employees for technical skills upgrading at the Namibia Institute of Mining and Technology (NIMT), while one employee completed a post-graduate degree in Radiation at the Namibia University of Science and Technology (NUST). Two bursars pursuing degrees in Engineering at the University of Namibia (UNAM) continued to receive financial sponsorship from the company. Internal training totalling 2,072 hours was provided to AREVA employees.

Procurement
AREVA spent N$56.9 million on local goods and services in 2016.

Community Relations
The AREVA Foundation continued to support Corporate Social Responsibility (CSR) projects in the areas of economic development, education, culture and sport in their neighbouring communities.

AREVA contributed to local economic development by co-funding the Erongo Development Foundation (EDF) micro-finance credit scheme for small and medium enterprises and funded training sessions for leather patchwork for community members at the Community Skills Development Foundation (COSDEF) Arts & Crafts Centre in Swakopmund.

In support of sporting events, the company co-hosted and sponsored “the Rock Spitzkoppe Community Run and Mountain Bike Challenge” and an annual soccer event in partnership with Engen.

AREVA contributed to cultural activities and events through sponsorship provided to several festivals of communities and conservancies and fundraising events organised through local authorities among others.

In an effort to curb the number of fatalities among students in vehicle related accidents, the company provided 120 boom-gates to 60 schools in the Erongo to safeguard pedestrians using zebra crossings.

Lastly, support to education programmes involved the sponsorship of trophies for the two top performing Engineering students at NUST.

Environment
AREVA Namibia is committed to environmental protection at all stages of mine development. While the project is under care and maintenance sufficient resources are provided to implement the environmental management plan and monitor aspects such as air and water quality, radiation, flora and fauna. The monitoring programme which covers the mine and neighbouring areas such as Arandis and Wlotzkasbaken was carried out as scheduled in 2016. Independent audits of the environmental management plan for the mine and the desalination plant confirmed a high level of compliance.

A rehabilitation trial which commenced in 2010 began to reveal which surface treatments are the most effective as restoration measures in this part of the Central Namib.
Output
Output in 2016
4,714 kg - Gold Bullion
147 kg - Silver

Employment
Permanent employees at end 2016
781
Temporary employees at end 2016
85
Contractors at end 2016
138
Expatriate employees at end 2016
19

Financial
Financial year
1 Jan – 31 Dec
Wages and salaries paid in 2016
N$358.3 million
Fixed investment in 2016
N$325 million
Exploration expenditure in 2016
N$67 million

Details
Shareholders
B2Gold Namibia (Pty) Ltd (90%)
EVI Mining Company Ltd (10%)
Mines in Namibia
Otjikoto mine
ML 169
Date of production start
December 2014
Latest estimate of life of mine
2025
Safety rating at end 2016
None
EPLs at end of 2016
EPL 2410
EPL 3195
EPL 4277
EPL 4278
EPL 4279
EPL 4280
EPL 4309
EPL 4314
EPL 5597
EPL 5598
Affirmative Action Plan
Approved
Number of bursaries awarded in 2016
5
Managing Director: Mr Mark Dawe

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Namibia’s second gold mine, the Otjikoto mine, lies between Otavi and Otjiwarongo in Northern Namibia. The mine came into production in December 2014 and has successfully entered into commercial production exceeding production targets.

**Highlights for 2016**
- Record production achieved at the Otjikoto gold mine.

**Production**
The Otjikoto gold mine produced 166,286 ounces (4,714 kilograms) of gold bullion, well exceeding the production guidance range. 2016 production benefitted from higher throughput due to the successful completion of its mill expansion project in September 2015 and also due to overall process optimizations. Mining operations in the Wolfshag zone commenced in June 2016, which also played a major role in achieving record production.

**Exploration**
Infill drilling of 7,000 metres was conducted on the Wolfshag zone and on the exploration core of 4,000 metres as well as RAB drilling totalling 5,000 metres to test targets on the mining licence.

Exploration drilling at the Ondundu deposit continued to yield encouraging results.

**Safety**
The mine suffered one fatality in 2016 when a machine operator was trapped between a dozer and a diesel truck during a refuelling operation in December 2015. Two million hours without an LTI was clocked at the end of October 2016 with a total of 343 LTI free days achieved. Two LTI’s were reported during the last two months of 2016.

Advanced technology instalsments in the mining process also allowed for less exposure to potential incidents and a safer working environment.

**Labour Relations**
B2Gold Namibia experienced harmonious labour relations during 2016. The Company’s Management and the Union’s Branch Executive Committee (BEC) aim to resolve labour-related differences amicably and ensure that sound labour relationships are maintained at the mine.

**Education and Skills**
B2Gold provided five once-off bursaries in 2016, three of which were to vocational training candidates, and two for university students. The company offered seven pre-bursars the opportunity to work for 12 months before commencing formal studies in 2017 in the following fields of study: Engineering (Electrical/Mechanical), Mining, Geology, Accounting with a Chartered Institute of Management (CIMA) specialization, and Metallurgy.

Furthermore, approximately 60 Namibian artisans who received training for the construction of the Otjikoto gold mine, and consequently part of the workforce thereof, were handpicked by Vancouver based executives to work on the construction of the new Fekola mine in Mali.

**Procurement**

**Community Relations**
B2Gold’s Corporate Social Responsibility (CSR) Programme aims to promote responsible mining, mitigate risk and demonstrate long-term sustainability from resources and to prepare communities for when the mine closes. In 2016, CSR activities and financial support involved projects in education, livelihood development, conservation and health.

**Environment**
The Environmental management plan (EMP) was reviewed in 2016, with a focus on improving operational waste management practices related to processes and infrastructure. The company proceeded with progressive rehabilitation of disturbed areas with closure planning and reclamation strategies currently being formulated.

Consultations and engagements were held with various stakeholders, including government agencies, neighbouring farmers as well as with other mines and operations in the surrounding areas. Discussions were also held with NUST to identify research opportunities.
Output
Output in 2016
1,170,000 carats

Employment
Permanent employees at end 2016
808
Temporary employees at end 2016
32
Contractors at end 2016
25
Expatriate employees at end 2016
121

Financial
Financial year
1 Jan – 31 Dec

Vessels
- Mv Debmar Atlantic
- Mv Debmar Pacific
- Mv !Gariep
- Mv Grand Banks
- Mv Mafuta
- Mv SS Nujoma
- Mv Coral Sea (on charter)
- Mv The Explorer (on charter)

Details
Shareholders
Namdeb Holdings (100%) – Government (50%) and De Beers (50%)

Related operations in Namibia
Namdeb Diamond Corporation (Pty) Ltd and Namibia Diamond Trading Company (Pty) Ltd (NDTC)

Mines in Namibia
Marine diamond mining off the coast of Namibia

Established
January 2001

Safety ratings at end 2016
ISM Certification
OHSAS 18001 Certification
ISO 14001

Affirmative Action Plan
Approved

Number of bursaries awarded in 2016
1

CEO: Mr Otto. N Shikongo

Mv The Explorer mv SS Nujoma was successfully delivered to Cape Town in August 2016.

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De Beers Marine Namibia (Pty) Ltd, trading name: Debmarine Namibia
Company registration number 85/090
Debmarine Namibia (DBMN) is the marine exploration and mining operator for the offshore licence area held by Namdeb Holdings (Pty) Ltd.

Highlights for 2016
• Operational performance exceeded budget.
• The new exploration and sampling vessel, the mv SS Nujoma was delivered ahead of schedule.

Production
DBMN achieved its production target in 2016, with a total of 12 square kilometres mined producing 1.17 million carats against an original budget of 11.1 square kilometres and 1.17 million carats.

Pre-production Development
Pre-production development sampling in 2016 in the Atlantic 1 mining licence totalled 341 days against a budget of 293 days. A total of 203 days are planned for 2017. There were no pre-production geophysical surveys in the Atlantic 1 mining licence during 2016. A total of 115 days for geophysical surveys are planned for 2017.

Exploration
Exploration sampling totalling 138 days was carried out in 2016 in the Atlantic 1 mining licence with a chartered vessel (mv The Explorer). The programme was aimed at undertaking on-going exploration (fleet and projects) and to generate inferred resource. A total of 60 days are planned for exploration in 2017.

Safety
The marine diamond mining operator retained its ISO 14001, ISM and OHSAS 18001 certifications. Five Lost Time injuries were recorded in 2016 (2015: three), with an Lost Time Injury Frequency Rate (LTIFR) of 0.29. The company also experienced ten High Potential Incidents, which were thoroughly investigated and the necessary preventative and corrective measures implemented.

Labour Relations
During the year under review, DBMN and the Union were engaged in a number of activities, all aimed at strengthening their constructive relationships. The three year wage agreement which was signed in 2014 continued and will be in place until March 2017. The two parties jointly applied to the Minister of Labour, Industrial Relations and Employment Creation, for an exemption to allow the Company to deduct money from employees for the purpose of a home ownership scheme for qualifying employees. The application was successful and the exemption was issued in November 2016. No strikes, demonstrations or disputes were reported during the period under review.

Education and skills
Skills development focused largely on in-house training, and employees participated in marine, safety, technical skills, leadership & self-worth as well as communication programmes. Trainees were also subjected to extensive skills development programmes in control and instrumentation, drilling, engine room ratings, deck ratings and seabed tool pilots among others. One Mechanical Engineering bursary was awarded in 2016 and N$50.1 million was spent on training and development.
Procurement
DBMN remains committed to supporting local enterprises in so far as local procurement is concerned and for this reason the establishment of a supply and delivery point in Namibia will continue to feature as a strategic objective. To this end, Namibian spend for 2016 amounted to N$1.421 billion representing 26% percent of total spend value.

Community Relations
The Debmarine Namibia Social Responsibility Fund (SRF) continued to sponsor worthy initiatives in 2016, with a particular focus on education, welfare, sports and capacity building. These included the Khomas Regional Science Fair, the National Science Awards, sponsorship of the Namibian Investment Conference, support to the Namibian Police and the donation of school equipment through the Debmarine-Namdeb Foundation. Greater emphasis was placed on sport development through sponsorships to the National Football Association, the Namibian Paralympic Team for the Rio2016 Paralympic games and the 100-metre gold winning paralympic athlete, Ananias Shikongo. The company contributed some N$2.4 million to the Fund in support of these projects and initiatives.

Environment
The benthic monitoring programme currently focuses primarily on soft seabed sediments. Josef Shikeva, an MSc student registered at the University of Namibia has been appointed to conduct research on the use of underwater video footage to assess the impact of mining on hard benthic surfaces in Southern Namibia. The outcomes of this project will provide inputs for a potential future continuous hard substratum monitoring programme.

Other supportive research initiated in 2016 for the benthic monitoring programme include, the application of geophysical data for the determination of physical habitat recovery, screen monitoring feasibility study and the plume modelling study in Atlantic 1 mining licence area.

Three Marine Scientific Advisory Committee (MSAC) meetings were successfully held in April, July and September 2016.
Operating Companies
Output
Output in 2016
40,869 tonnes of blister copper
191,630 tonnes of sulphuric acid

Employment
Permanent employees at end 2016
594
Temporary employees at end 2016
58
Contractors at end 2016
980
Expatriate employees at end 2016
7

Financial
Financial year
1 Jan – 31 Dec
Turnover in 2016
N$1.925 billion
Wages and salaries in 2016
N$263.7
Fixed investment in 2016
N$253.7 million
Loss in 2016
N$48.5 million
Corporate Tax paid in 2016
Nil
Dividends paid in 2016
Nil

Details
Shareholders
Dundee Precious Investments B.V (100%)
Date of production start
1963
Latest estimate of life of mine
2030
Safety rating at end 2016
No safety rating done during 2016
Affirmative Action Plan
Approved
Number of bursaries awarded in 2016
3

Vice President and Managing Director
Mr. Zebra Kasete

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Removal of impurities which have not reached desired copper percentage (98 percent or greater) via scrapping. This molten material is also known as oxide slag and is fed back into the converter.
Dundee Precious Metals Tsumeb, previously known as Namibia Custom Smelters, is located in Tsumeb, a northern town approximately 430 kilometres from Windhoek and produces blister copper from imported copper concentrates. The company has invested heavily in their new smelter, with state of the art gas filtration systems.

**Highlights for 2016**
- Official inauguration of sulphuric acid plant on 6 April 2016.
- Commissioning of the 2 new Pierce Smith Converters
- Sulphuric acid plant fully commissioned and subsequent production of sulphuric acid.

**Production**
Blister copper production fell from 45,220 tonnes in 2015 to 40,869 tonnes in 2016. The drop in production was primarily a result of an unplanned shutdown early in 2016, stemming from a nation-wide power outage.

At the sulphuric acid plant, two new Pierce Smith Converters were commissioned which have tight fitting off-gas hoods and transport the sulphur dioxide emissions to the plant. The addition of these converters significantly helped to boost sulphuric acid production in 2016 which totalled 191,630 tonnes.

**Safety**
DPMT recorded a sharp increase in the number of LTI’s recorded in during the year in review, from one in 2015 to 15 in 2016. The company continued with safety programmes focusing on critical risk control and the leadership to enhance a safe working environment.

**Labour Relations**
A three year wage agreement was concluded and the company moved away from a three shift to four shift operation.

**Education and Skills**
Three new bursaries were sponsored by DPMT in 2016 with five carried over from 2015 for internal and external candidates. The company spent approximately N$6.9 million on skills development in 2016, which included a number of in-house training programmes for operators and soft skills development as well as study assistance for employees.

**Procurement**
DPMT spent N$38.7 million on goods and services from businesses owned by previously disadvantaged Namibians, and N$774.9 million from Namibian businesses and companies.

**Community Relations**
DPMT spent approximately N$3.7 million on community projects during the year, which included support provided to Tsumeb Municipality for water infrastructure and emergency response, funding to SMEs, education, sports and culture initiatives.

**Environment**
DPMT conducted and completed a number of specialist studies to determine environmental impacts and suitable controls. These included a water balance model, groundwater model, contaminated land assessment, groundwater monitoring protocol, legacy waste identification and surface water monitoring protocol.

A nursery was built during 2016, with the intent to start phytoremediation trials in 2017.

An external consultant was appointed to conduct a number of specialist studies for the DPMT expansion project Environmental Impact Assessment (EIA). The EIA process progressed well in 2016 and draft reports for most studies were available for review towards the end of the year.
Output
Output in 2016
2,232 tonnes

Employment
Permanent employees at end 2016
309
Temporary employees at end 2016
80
Contractors at end 2016
360
Expatriate employees at end 2016
20

Financial
Financial Year
1 Jul – 30 June
Turnover in 2016
N$2.056 billion
Wages and salaries in 2016
N$224 million
Fixed investment in 2016
N$89 million
Exploration expenditure in 2016
Nil
Loss in 2016
N$2.138 billion
Corporate tax paid in 2016
Nil
Royalties paid in 2016
N$83 million
Government: N$80.4 million
Vendor: N$2.6 million

Details
Shareholders
Langer Heinrich Mauritius Holdings Ltd 100%
Ultimate Holding Company:
Paladin Energy Limited (75%)
Chinese Overseas Uranium Holdings Ltd (25%)
Related operations in Namibia
None
Mines in Namibia
Langer Heinrich mine
(ML 140)
(ML 172)
Date of production start
2007
Latest estimate of life of mine
2038
Safety rating at end 2016
4 Star NOSA Platinum
Affirmative Action Plan
Approved
Number of bursaries awarded in 2016
Nil
Managing Director: Mr Simon S Solomons

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Langer Heinrich Uranium (Pty) Ltd is owned by Paladin Energy, which is listed on the Australian and Toronto stock exchanges as well as the Namibia Stock Exchange (NSE). The mine produces “yellow cake” for export to power utilities in countries which are signatories to the Nuclear Non-Proliferation Treaty.

**Highlights for 2016**
- Langer Heinrich Uranium (LHU) successfully implemented numerous cost saving initiatives resulting in a significant decrease in total cash costs.

**Production**
LHU operated at 100.7% of Nameplate run of mine (RoM), 93.0% of Nameplate U3O8 and 90.8% of Nameplate RoM Grade during 2016. A project to reduce steam consumption and improve heat recovery was commissioned in November 2016.

Production levels were sustained due to improved operational efficiency and cost cutting measures, ensuring the company’s sustainability during trying times driven by the continued weakening of the uranium spot price and the appreciating South African rand.

**Exploration**
No exploration took place during the course of 2016.

**Safety**
Langer Heinrich retained its 4 Star Platinum NOSA rating in 2016, with a reduction in LTIs from six in 2015 to four in 2016.

**Labour Relations**
Two peaceful demonstrations were held in 2016. The first one occurred in February which arose from a request to introduce a medical incapacity procedure. A petition was delivered by the union and the procedure was implemented without further labour action. The second demonstration involved claims of incorrect overtime payments made by the company. After consulting legal advice, it was resolved that overtime remittances by LHU were paid correctly in accordance with company policy and the Namibian Labour Law.

Furthermore, seven labour disputes were recorded of which two were registered by the company, four by the union and one by an individual employee. Thirty employees were retrenched towards the end of 2016, resulting from a decision to temporarily suspend mining operations for the next two to three years due to the continued drop in the uranium price.

**Education and Skills**
LHU continued to sponsor two bursars in the fields of Metallurgy, Engineering and Mechanical Engineering in addition to providing study assistance to nine employees and internships for 24 graduate trainees and 56 technical trainees. Lastly, the company provided a host of training programmes to employees in various areas of expertise.

**Procurement**
Goods and services worth N$1.541 billion were purchased from Namibian businesses and companies by LHU, of which N$159 million was purchased from previously disadvantaged Namibians.

**Community Relations**
Despite severe operational cash constraints, the company continued to support local and regional education projects as part of its CSR drive, spending approximately N$3 million on the following; Mathematics Support and Enrichment Programme, Teachers Annual Mathematics Congress, Mondesa Youth Opportunities, sports development and human resources training to unemployed youth among a host of other initiatives.

**Environmental Issues**
In 2016, the company reviewed environmental impacts and aspects as well as carried out an Environmental Risk Assessment review. The Environmental Monitoring and Management Programmes were also reviewed after which the monitoring network was expanded. A centralised environmental database assists LHU to monitor, evaluate and report on environmental data. Any anomalies which may arise are investigated and attended to. During the period in review, no anomalies were discovered. Internal and external audits were conducted on site throughout the year.

The Mine Closure Plan was also reviewed in 2016 and mechanical rehabilitation is on-going. Field research on restoration commenced while the on-site plant nursery was revived.

Employees received training on waste management and nursery management techniques.
Output
Output in 2016
8,478 tonnes of iron ore

Employment
Permanent employees at end 2016
12

Number of temporary employees at end 2016
Nil

Contractors at end 2016
Nil

Expatriate employees at end 2016
1

Financial
Financial year
1 Jan – 31 Dec

Turnover in 2016
N$10.6 million

Fixed Investment in 2016
N$1.2 million

Exploration expenditure in 2016
N$1.6 million

Royalties paid in 2016
N$304,718

Details
Shareholders
German Institutions 50.34%
Namibian Individuals 14.91%
German National 11.19%
US Citizen 7.46%
German/US/UK Investment 16.11%

Related operations in Namibia
None

Mines in Namibia
Dordabis iron ore mine (ML 182)

Date of production start
2015

Latest estimate of life of mine
2034

EPL’s at end of 2016
EPL 3112
EPL 3839
EPL 4265

CEO: Mr Carsten Mosch

Update of activities in 2016
The Dordabis mine doubled iron ore output in 2016, totalling 8,878 tonnes of iron ore from 4,000 tonnes produced in 2015. Discussions continued with potential customers to establish future off-take agreements.

The company continued to employ and train a local workforce in mining related areas and spent approximately N$790,000 on procurement of goods and services through local businesses.

Lodestone’s exploration programme in 2016 consisted of sterilisation drilling on EPL 3112.

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Output
Output in 2016
403,000 carats

Employment
Permanent employment at end 2016
1,685
Temporary employment at end 2016
76
Contractors at end 2016
772
Expatriates at end 2016
29

Financials
Financial Year
1 Jan – 31 Dec
Details
Refer to Namdeb Holdings

Details
Shareholders
Namdeb Holdings (100%) –
Government (50%) and De Beers
(50%)
Related operations in Namibia
De Beers Marine Namibia (Pty) Ltd, trading name: Debmarine Namibia
Namibia Diamond Trading Company (NDTC)
Safety Rating at end 2016
OHSAS 18001:2007
Affirmative Action Plan
2016 Certification received
Bursaries awarded in 2016
Nil
Acting CEO: Mr Markus Johannes Lubbe
Chief Operating Officer: Mr Dirk Adriaan Burger

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Johan Breedt (Engineering Foreman) and Sebulon Shitaatala examining a pump
Namdeb Diamond Corporation is owned by Namdeb Holdings. In turn, Namdeb Holdings is owned 50:50 by De Beers and the Government of the Republic Namibia respectively. Namdeb Holdings has long-term mining concessions in the south west of Namibia both on land and offshore, adjacent to the Orange River and offshore in the shallow waters. Namdeb Diamond Corporation is the exploration and the mining operator for all land-based licences of Namdeb Holdings, with the exception of the deep off shore mining licences.

**Highlights for 2016**

- Improved safety systems and human behaviour
- Improved company union relations
- Significant progress with Oranjemund Town Transformation milestones

**Production**

Namdeb’s land based operation produced 403,000 carats in 2016. Output declined in 2016 as a result of lower grades.

**Exploration**

Evaluation sampling, using the BG36 large diameter drill was undertaken at the Elizabeth Bay mine while run of mine sampling and exploration drilling was done on the Southern Coastal Mines (SCM). The BG36 relocated to Southern Coastal Mine and completed evaluation drilling of the U60 Resource block in addition to the U80 and U90 blocks.

Sample trimming from the Elizabeth Bay mine to Oranjemund made significant progress.

Second phase percussion drilling of a carbonate at Karingarab as part of the rare-earth element (REE) programme was completed and all samples were submitted for chemical assays. The interpretation of the airborne electro magnetic survey on the Orange River licence, aiming to identify buried palaeochannels, was followed up with a short drilling programme.

In the Offshore area, a total of 30 days sampling was concluded in the midwater deposits. A boomer geophysical survey was completed in the shallow water portion of Southern Coastal Mine offshore areas. The Probe Drill Platform (PDP) continued its drilling programme in the shallow water deposits of the Southern Coastal Mine, proceeding a brief structural integrity analysis early in 2016. The sonic drill was used to drill gaps in areas where accelerated accretion has made more land available.

The Geolab macro diamond laboratory continued to deliver excellent service to the sampling plant as well as auditing Elizabeth Bay mine recovery and Red Area Complex (RAC) tailings. The RAC is the main diamond recovery unit.

**Mine Safety**

Sadly the operation suffered one fatality in 2016 which involved an operator in a dozer during a seawall/crosswall slumping incident. Namdeb recorded four lost time injuries which equates to a Lost Time Injury Frequency Rate of 0.15. Mining operations recorded a reduction in vehicle and high potential incidents.

**Labour Relations**

The relationship between the Company and the Mineworkers Union of Namibia has been fairly stable over the last few years, a situation which is largely attributable to rigorous engagement activities between the two parties. This is also further manifested through ongoing collaborative efforts between both parties on matters of mutual concern. In 2016 the parties made good progress with the revision of the Disciplinary Code and Grievance Procedure.

A Labour dispute related to the extension of a Housing Allowance was settled with the intervention of a conciliator.

**Education and Skills**

No new bursaries were offered in 2016, however Namdeb continued to provide job attachment opportunities and offer internships as well as Work Integrated Learning across various disciplines.

Skills development focused on managing talent and targeted desired behaviour in line with the aspirations laid out in 2050 Vision. Namdeb thus invested in programmes for supervisors and line managers to advance business knowledge and leadership competencies. Additionally, leadership and coaching skills were harnessed along side employee relations training, better equipping managers to deal with disciplinary and grievance cases.
Procurement
A total of N$1.6 billion was procured from Namibian registered businesses for the financial year.

Community Relations
2016 marked a significant year for Namdeb with regard to its CSR Activities. The company introduced the Social Way, a social management framework that was adopted from De Beers and Anglo American. Among others, the main aim of the framework is to strengthen relationships with host communities, identifying and understanding their needs while contributing to their socio-economic development. Vital aids were established in the surrounding communities, such as the social incidents and external community complaints procedure as well as social commitment registers. Stakeholder engagement targets direct engagement to better understand needs and address issues directly linked to mine impact.

Namdeb also played a significant role in 2016 through support provided to the Oranjemund Town Council in its sustainable transformation efforts, providing financial and in-kind support to this end.

Pertaining to direct social investment, carried out by the Debmarine – Namdeb Foundation (the joint social investment vehicle for Namdeb and Debmarine – Namibia), a number of projects focusing on women empowerment and education continued to be supported.

Environmental Issues
At the Sendelingsdrif, rehabilitation activities to re-establish a red listed species was carried out. A successful external environmental stakeholder’s forum was held at Sendelingsdrif with key specialists, De Beers and key authoritative representatives showcasing this work. Other significant issues that were discussed with stakeholders included the closure plans for Elizabeth Bay mine, rehabilitation in the licence areas and an update of the midwater project.

Namdeb Environmental Management System (EMS) is aligned to the ISO 14001:2004 standard. The company intends to transition to the new standard before September 2018. The company conducted a review on all their environmental programme reports per licence area.

Outlook
Macro-economic conditions underpinning consumer demand for diamonds remain broadly stable in aggregate, with the US expected to continue to be the main driver of global growth in 2017. The extent of global growth, however, will depend on a number of macro-economic factors, including the new administration in the US, the strength of the US dollar impacting consumer demand, economic performance in China, the effects of Indian demonetisation, and sentiment following the main US and Chinese New Year retail season.

With midstream stocks having returned to typical levels in 2016, rough diamond demand is expected to normalise in 2017, reflecting underlying consumer and retail demand.

Paulus Iileka at EBay Main Treatment Plant Washing Station Scubber 002 Area
Financial
Financial Year
1 Jan – 31 Dec

Turnover in 2016
N$10.892 billion

Wages and Salaries in 2016
N$1.616 billion

Fixed investment in 2016
N$1.962 billion

Exploration expenditure in 2016
N$323 million

Corporate tax paid in 2016
N$1.672 billion

Royalty tax paid in 2016
N$1.089 billion

Details
Shareholders
De Beers – 50%
GRN – 50%

Wholly owned subsidiaries
De Beers Marine Namibia (Pty) Ltd, trading name: Debmarine Namibia
Namdeb Diamond Corporation (Pty) Ltd

Concessions in Namibia
Orange River (ML 42)
Mining Area 1 (ML 43)
Bogenfels (ML 44)
Elizabeth Bay (ML 45)
Douglas Bay (ML 46)
Atlantic 1 (ML 47)
Midwater (ML 128 A, B and C)

Date of production start
Mining Area No 1 – 1928
Orange River – 1990
Atlantic 1 – 1990
Elizabeth Bay – 1991
Daberah – 1990
Bogenfels – 2007
Sendelingsdrif – 2015
Output
Output in 2016
1,890 kg

Employment
Permanent employees at end 2016
409
Number of temporary employees at end 2016
19
Contractors at end 2016
411
Expatriate employees at end 2016
4

Financial
Financial year
1 Jan – 31 Dec
Turnover in 2016
N$1.138 billion
Wages and salaries in 2016
N$236.3 million
Fixed Investment in 2016
N$200.6 million
Exploration expenditure in 2016
N$7.4 million
Profits in 2016
N$244.8 million
Corporate tax paid in 2016
Nil (Tax loss position)
Royalties paid in 2016
N$31.4 million

Details
Shareholders
QKR Namibia Mineral Holdings (Pty) Ltd – 92.5%
JG Investments (Pty) Ltd (EpangeloGold) - 7.5%
Related operations in Namibia
None
Mines in Namibia
Navachab Gold Mine (ML 31) ML 180
Date of production start
1989
Latest estimate of life of mine
2036
EPL’s at end of 2016
EPLs 999, 3275
Safety ratings at end 2016
OHSAS 18001: 2007
Affirmative Action plan
Approved
Number of bursaries awarded in 2016
3
Managing Director: Mr Johannes Stefanus Coetzee

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Navachab gold mine is an open pit mine, producing gold bullion which is refined for onward sales at the Rand Refinery in South Africa.

**Highlights for 2016**

- ML 180 approved and issued
- Three Major plant expansion projects completed and commissioned

**Production**

Gold production remained steady at the Navachab gold mine, posting an output of 1,890 kilograms. Mining of the Western Pushback continued, in order to expose new ore which is planned for mining in 2018 and 2019. An upgraded pit dewatering system was successfully implemented to supplement water supply to the Mining and Processing operations. All CIP (Carbon in Pulp) plant projects were fully commissioned and became operational while the PCP (Pre-Concentration) plant commissioning continued a steady ramp up.

**Exploration**

A total of 11 Reverse Circulation (RC) holes were drilled on EPL 999 to follow up on rock chip and channel sample anomalies. Drilling on EPL3275 comprised of 17 RC holes aimed at infilling the 2011 grid and targeting zones of high gold in soil values from the 2009 soil geochemistry. Exploration on the mining licence area focused on probing the down-plunge extension of the main and second shoots drilling from North Pit 3.

Brownfield exploration on ML31, ML180 and EPL999 for 2017 will focus on extensive mapping and modelling, followed by rock chip and channel sampling, trenching and ultimately drilling of delineated anomalous zones.

**Safety**

The mine was audited in April of 2016 and retained its OHSAS 18001 certification and reported a fatality free 2016, although seven LTI’s occurred.

**Labour Relations**

Labour relations remained stable throughout 2016.

**Education and Skills**

Three new bursars were sponsored in 2016 in the fields of Metallurgy, Mining and Electrical Engineering. The company also offered self-study assistance to 23 employees in various fields of tertiary studies. Skills development training included training on new mining trucks, excavators and rock breakers for Mining Operators.

**Procurement**

Purchases from Namibian suppliers for the year totalled N$771.5 million, which represents approximately 83% of total purchases.

**Community Relations**

CSR initiatives involved projects in poverty eradication, education, and health and youth development. The main focus of support was the karakul sheep project in which 24 households were targeted.

**Environment**

The mine retained its ISO14001 certification and continued with its EMP in 2016. During the year, Navachab ran a campaign on a hydrocarbon waste clean-up and built a sewage treatment wetland to recover waste water for operational use. A geo-hydrological study was conducted to assess alternative water source options and to better manage pit and storm water surrounding the Anomaly 16 area.
Output
Output in 2016
80,560 tonnes zinc concentrate
14,862 tonnes lead concentrate

Employment
Permanent employees at end 2016
463
Temporary employees at end 2016
4
Contractors at end 2016
104
Expatriate employees at end 2016
8

Financial
Financial year
1 Jan – 31 Dec
Turnover in 2016
N$977 million
Profit in 2016
N$133 million
Wages and salaries paid in 2016
N$211 million
Fixed investment 2016
N$177 million
Exploration expenditure in 2016
N$360,000
Corporate tax paid in 2016
N$81 million
Royalties paid in 2016
N$25.3 million

Details
Shareholders
Glencore - 80.08%
Jaguar Investments – 15.57%
PE Minerals – 3.15%
Rosh Pinah Employee Empowerment – 1.19%

Related operations in Namibia
None

Mines in Namibia
Rosh Pinah mine (ML 39)

Date of production start
1969

Latest estimate of life of mine
+/- 2025

EPLs at end of 2016
EPL 2616

Safety ratings at end 2016
OHSAS 18001
ISO 14001

Affirmative Action plan
Approved

Number of new bursaries awarded in 2016
Nil

Managing director: Mr Christo Horn

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Rosh Pinah is an underground mine producing zinc and lead concentrates. Both lead and zinc concentrate are sold to the international market.

**Highlights for 2016**

- RPZC reached a safety milestone, recording 471 LTI free days – a first in the history of the mine.
- Started producing Run of Mine (RoM) from a new ore body, which will be the primary source of ore supply in the foreseeable future.

**Production**

Zinc and lead production were severely affected by a two-month strike, from February to April 2016. Zinc concentrate fell from 99,665 tonnes produced in 2016 to 80,560 tonnes in 2016, while lead concentrate declined from 18,521 tonnes produced in 2015 to 14,862 tonnes in 2016.

**Exploration**

In 2016 RPZC limited its exploration activities in line with a strategic decision to focus on improving confidence of the measured mineral resource. A total of 3,091 metres was drilled while a high-resolution aeromagnetic and radiometric survey was conducted.

**Safety**

Unfortunately, three LTI’s were recorded after the operation reached its 471 LTI free days’ milestone. RPZC continued to implement global best practice initiatives in line with Glencore policies and guidelines to ensure zero harm.

**Labour Relations**

Labour relations were constrained during 2016. A dispute involving wages registered at the Labour Commissioner’s office resulted in a legal strike which lasted 54 days.

The strike was resolved by signing a two-year wage increase after the initial one-year offer.

**Education and Skills**

RPZC undertook various training initiatives for the year under review, which included three job attachments and other in-house training and skills development programmes.

**Procurement**

The mine spent some N$ 346 million on locally produced goods and services in 2016.

**Community Relations**

RPZC contributed some N$3.85 million to communities in the Rosh Pinah area. These included financial support to schools, hospitals, the Karakul Carpet project and the Leather Handbag project.

**Environment**

An integrated environmental management programme ensures limited environmental impact on-site and the immediate surroundings. New dust suppression technologies were implemented to reduce dust pollution at its source.

RPZC is part of the Rosh Pinah Community forum where all interested and affected parties of mine operations regularly meet and discuss issues of mutual concern.
### Output
- Output in 2016: 1,850 tonnes

### Employment
- Permanent employees at end 2016: 949
- Temporary employees at end 2016: 31
- Contractors at end 2016: 752
- Expatriate employees at end 2016: 4

### Financial
- Financial year: 1 Jan – 31 Dec
- Turnover in 2016: N$3.071 billion
- Wages and salaries in 2016: N$613.8 million
- Fixed investment in 2016: N$169.3 million
- Exploration expenditure in 2016: Nil
- Profit in 2016: N$107.1 million
- Corporate tax paid in 2016: Nil (Company in tax loss position)
- Royalties paid in 2016: N$80.4 million
- Dividends paid in 2016: N$1.487 billion

### Details
- Shareholders:
  - Rio Tinto (68.62%)
  - Iran Foreign Investment Company (15.29%)
  - Industrial Development Corporation of South Africa (10.22%)
  - Government of Namibia (3.38%)
- Related operations in Namibia: None
- Mines in Namibia: Rössing mine (ML 28)
- Date of production start: 1976
- Latest estimate of life of mine: 2025
- Safety rating:
  - Rio Tinto All Injury Frequency Rate: 0.82
  - ISO 14001
- Affirmative Action plan: 2016-2018 Pending
- Number of bursaries awarded in 2016: 6
- Managing Director: Mr Werner Duvenhage

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Rössing Uranium, which is majority owned by Rio Tinto plc, is one of Namibia’s two uranium producing mines and is the country’s longest running open pit uranium mine which has been in operation for 40 years. Rössing produces uranium oxide for nuclear power utilities in countries which are signatories of the Nuclear Non-Proliferation Treaty.

**Highlights for 2016**

- The mine celebrated its fortieth year of production.
- 2016 marked the first full year of continuous operations following two years of curtailed production.

**Production**

Considerable success was achieved in removing bottle necks and improving mining efficiencies. This resulted in increased mill throughput and a 48% rise in production from 1,245 tonnes of yellow cake produced in 2015 to 1,850 tonnes in 2016. Full year production fell short of planned production by approximately 10%.

**Exploration**

No exploration was undertaken during the year in review.

**Safety**

As part of the Rössing safety strategy, the organisation continued implementing its three-tiered approach in managing safety namely; fatality elimination, reduction of injuries and catastrophic event prevention. The adoption of this approach yielded a number of safety milestones in 2016. The company scored an impressive rating of 2.41 against a set group target of 2 in the on-boarding phase of its fatality elimination initiative, Critical Risk Management.

The second milestone achieved was the reduction of Potential Fatal Incidents (PFI) by 30% compared to 2015. In addition, investigation training for Superintendents and Managers led to further improvements in the quality of such undertakings and in identifying root causes so as to implement sustainable actions, avoiding repeat incidents. Finally, the severity of injuries was reduced by more than 40% with a decline in LTI’s from nine in 2015 to five in 2016.

Although the approach yielded notable safety improvements in these areas, the All Injury Frequency Rate (AFIR) of 0.82 was 12% higher than in 2015.

**Labour Relations**

Rössing maintained sound labour relations with the trade union and its employees during 2016. A monthly Company/Union Forum takes place where both sides work to understand and resolve issues. No new agreements were put in place.

**Education and skills**

The company spent a total of N$7.59 million on skills development in 2016. This included 11 bursaries, 26 students provided with educational assistance through the Rössing Dependent Scholarship, ten trade related job attachments, one apprenticeship, 11 employees pursuing part-time and full-time degrees, five employees pursuing limited contact studies in various fields, seven employees undergoing graduate
development and lastly a host of in-house technical training provided to a large range of personnel.

Procurement
Namibian spend in 2016, excluding non-discretionary expenditure amounted to N$1.672 billion. This included approximately N$90 million that was spent on businesses owned by PDN’s.

Community Relations
Since the mine commenced operations in 1976, Rössing has recognised the importance of developing and contributing to their surrounding communities. The company invested some N$15.4 million either directly or through the Rössing Foundation in 2016, with their CSR programmes focusing primarily on education and enterprise development.

Environment
Mineral waste generated in 2016 amounted to 25.7 million tonnes including 9.2 million tonnes of tailings and 16.5 million tonnes of waste rock. Tailings were deposited on the existing tailings storage facility, mainly in the re-activated deposition areas which were prepared in 2015. The tailings footprint extended by 4.65 hectares into a partially disturbed area to the immediate north of the facility.

Rock waste generated was deposited on the existing rock dumps close to the open pit with no extension of the footprint. The total mineral waste inventory generated by Rössing over the last 40 years now consists of 1.36 billion tonnes covering a total footprint of 1,377 hectares.

In June 2016 a new waste management contractor was appointed by Rössing. The contractor handles recyclable materials like scrap metal and packaging materials including containers, paper and wooden pallets. Waste sorting has been introduced on site to reduce volumes of waste disposal through the separation of recyclable material. Non-recyclable material is bailed and taken to the Swakopmund domestic waste site. The Rössing land fill site which was in operation for 40 years has since been closed. An oil recycling company buys the mine’s old oil for recycling.

Radioactive contaminated waste is co-disposed on the Rössing tailings storage facility and other hazardous non-radioactive wastes are disposed at the hazardous waste facility of the Municipality of Walvis Bay.
Output
Output in 2016
Nil

Employment
Permanent employees at end 2016
23
Temporary employees at end 2016
Nil
Contractors at end 2016
Nil
Expatriate employees at end 2016
2

Financial
Financial year
1 Jan – 31 Dec
Wages and salaries in 2016
N$5.89 million
Fixed investment in 2016
N$21 million
Exploration expenditure in 2016
N$17.3 million

Details
Shareholders
Atligo (76%)
Epangelo Mining (8%)
Longlife Mining (10%)
National Youth Service (2%)
Employees (4%)

Related operations in Namibia
LL Namibia Phosphates
Samicor Diamond Mining
LLD Diamonds Namibia

Mines in Namibia
ML 36A-J, ML 103A and ML 51 (Samicor), ML 159 - (LL Namibia Phosphates)

New and Pending applications
ML 163, ML 164, EPL 5063 (Samicor)
ML 191 (LL Namibia Phosphates)

EPL’s at end of 2016
EPL 3946, EPL 5285 - (LL Namibia Phosphates), EPL5063 (Samicor)

Number of bursaries awarded in 2016
None

Managing Director: Mr Kombadayedu Kapwanga

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LL Namibia Phosphates, is embarking on a project in which it plans to produce fertilisers using phosphates mined from a marine deposit off the coast of Lüderitz.

Update on activities during 2016

Samicor Diamond Mining
A contract diamond miner proceeded with trial diamond mining on the high grade deposits of ML 151. The crawler, however was unable to maintain a sufficient mining rate in testing mining conditions. In 2017, the contractor will pursue lower grade areas, with easier to mine, thinner sediment, following planned exploration work. Research is scheduled to run concurrently as how best to modify the tool for optimal mining in high grade areas.

LL Namibia Phosphates (Fertiliser Project)
The Phosphate Demonstration plant hot commissioning during 2015 identified several design optimisations to be implemented. During 2016 these optimisations have been designed and implementation is on-going.

LL Namibia Phosphate (LLNP) designed and built a phosphate grab sampling system that was operated from a large vessel in order to reduce weather down time at sea. This was executed during the sampling programme and the phosphate was successfully processed at the Separation Test Facility. The sampling programme consisted of 265 grab samples. The grab sampling programme is planned to continue into 2017, exploring the whole licence area to establish higher confidence in fertiliser production potential.

The marine mining industry is still struggling to find a way forward for their phosphate mining operations. The Ministry of Marine Resources and Fisheries (MFMR) and lobby groups have impeded progress relating to the Environmental Impact Assessment of marine phosphate mining, despite wide consultation on studies required. Environmental Performance Assessment Report (EPAR’s) are submitted bi-monthly for the Demonstration Test Facility in Luderitz and every six months for all other licences.

Discharge water sampling was replaced by biological sampling on MFMR’s request. Given the limited diamond mining and very small impact from phosphate sampling, environmental impact from Samicor’s operations were minimal in 2016. LLNP’s full Environmental Impact Assessment (EIA) will commence once a decision is reached regarding Namibia Marine Phosphate’s Environmental Clearance Certificate (ECC).
Salt & Chemicals (Pty) Ltd

Output
Output in 2016
698,590 tonnes

Employment
Permanent employees at end 2016
37
Temporary employees at end 2016
4
Contractors at end 2016
Nil
Expatriate employees at end 2016
Nil

Financial
Financial year
1 Jul – 31 Aug
Turnover in 2016
N$112 million
Wages and salaries in 2016
N$30 million
Fixed investment in 2016
N$74 million
Exploration expenditure in 2016
Nil
Profit in 2016
N$5.33 million
Corporate tax paid in 2016
Nil (Company had an assessed loss due to development expenditure on expansion project)
Royalties paid in 2016
N$2.2 million
Dividends paid in 2016
N$3 million

Details
Shareholders
Walvis Bay Salt Holdings (Pty) Ltd (100%)
Related operations in Namibia
• Walvis Bay Salt Refiners (Pty) Ltd
• Ekango Salt Refiners (Pty) Ltd
Mines in Namibia
Walvis Bay salt pan (ML 37)
Established
1964
Safety ratings at end 2015
OHSAS 18001
NOSA 4 Star
Affirmative Action plan
Approved
Number of bursaries awarded in 2016
Three
Managing Director: Mr CAA. Snyman

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Salt & Chemicals (Pty) Ltd produces coarse salt at Walvis Bay through solar and wind evaporation for exports to South Africa as well as other markets. The coarse salt is also refined and beneficiated at the Salt and Chemical’s sister companies Walvis Bay Salt Refiners and Ekango Salt Refiners.

**Highlights for 2016**
1. Inauguration of salt pan expansion project on 18 July 2016, raising annual salt slat production to 1 million tonnes as from 2020.
2. The operation was certified by the USA National Science Foundation (NSF) in November 2016, allowing access to markets in the USA.
3. ML expansion to cover the pumping facilities was approved by MME.

**Production**
There were no changes in production processes, however, efforts were centred on the quality of salt produced. The operation produced 698,590 tonnes of salt in 2016, an increase from the 614,980 tonnes produced in 2015.

Marketing of the Walvis Bay Salt Refinery product continued throughout the year with scheduled visits to the USA, with customer requirements being evaluated and consultations with potential clients are on-going.

**Exploration**
The expansion upgrade was completed in 2016, while ponds are currently being filled and brine is concentrated.

**Safety**
In general, safety and health management at the Salt & Chemicals mine site, which includes the entire Walvis Bay Salt Holding operation, has remained laudable achieving a NOSA safety rating of two in 2014, four in 2015 and three in 2016. Employee participation and ownership in the Occupational Health and Safety (OHS) Management has improved and can be seen in the reduced number of incidents/injuries reported. The severity of incidents has dropped significantly from 25 shifts in 2015 to 19 shifts in 2016. The combined LTIFR for the mine for 2016 was 1.09, also a reduction from 1.43 recorded in 2015.

**Labour Relations**
Labour relations eased during 2016, with a new Branch Executive Committee which was elected. Quarterly feedback sessions were continued, which ensured employees were informed on the company’s performance and goals. Daily meetings between Managers and Supervisors also helped to address concerns raised at the shop floor. Further initiatives are planned for 2017 to improve communication. Regular meetings held with the employee representative committee also allowed management to address concerns and issues as they arose.

**Education and Skills**
In 2016, the skills and development initiatives were focused on First Line Development Management. All team leaders and supervisors underwent a year-long First-line Management development programme while two Senior Supervisors pursued Management Development at the University of Stellenbosch, and two employees continued with their Masters in Business and Administration (MBA).

The company also continued to provide apprenticeships in a number of trades and introduced internships, which adhered to their strategy of developing current and future human capital. Six apprentices and four interns were accommodated in 2016.

**Procurement**
The company spent approximately N$45 million on local goods and services in 2016, of which N$14.1 million was procured by firms owned by PDNs.

**Community Relations**
The company continued to provide transport to special needs children attending the Sunshine Kids Centre, to and from their homes on a daily basis and reconfirmed their commitment to manage the centre in 2016. They also hosted several schools/tertiary institutions for educational tours of the operation. Financial and supportive assistance was provided to the Namibian Mathematics Education Project and to the annual cricket development week hosted in Walvis Bay, which includes primary school children from across the country.

**Environment**
As part of the water demand management programme, additional water meters were installed for improved monitoring and measurement of water use per business unit. The hummock
monitoring programme was continued to identify any discrepancies or anomalies of the hummock population due to the salt field expansion.

Solid waste management programme which was implemented in 2015 proved successful for recycling of waste materials.

The mine plan closure plan was compiled and submitted to MET for review and approval.
Skorpion Zinc (Pty) Ltd

Output
Output in 2016/17
85,427 tonnes

Employment
Permanent employees at end 2016/17
811
Temporary employees at end 2016/17
4
Contractors at end 2016/17
650
Expatriate employees at end 2016/17
23

Financial
Financial year
1 Apr 2016 – 31 Mar 2017
Turnover in 2016/17
N$2.937 billion
Wages and salaries in 2016/17
N$372.9 million
Fixed investment in 2016/17
N$89.21 million
Exploration expenditure in 2016/17
N$28.9 million
Profits in 2016/17
N$933.1 million
Royalties paid in 2016/17
N$15.63 million
Dividends paid in 2016/17
No dividends were paid as money has been retained to fund future expansion project of the refinery conversion.

Details
Shareholders
Vedanta Resources plc through its subsidiary company Vedanta Limited (100%)

Related operations in Namibia
Skorpion Mining Company (Pty) Ltd
Namzinc (Pty) Ltd

Mines in Namibia
Skorpion Zinc Mine (ML 108 and ML 127)

EPL’s at end of 2016/17
EPL 2229   EPL 5283
EPL 5261   EPL 5262
EPL 5263   EPL5264

Date of production start
Skorpion Mining Company - 2002
Namzinc – 2003

Latest estimate of life of mine
2020

Safety ratings at end 2016/17
OSHAS: 18001:2007

Affirmative action
Approved

Bursaries awarded in 2016/17
No new bursaries awarded
Bursaries in place: 8

General Manager: Mr. Irvinne Simataa

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Highlights for 2016/17

- Water abstraction: Permission obtained from the Ministry of Agriculture, Water and Forestry to re-treat the water from the pit. Skorpion Zinc (SZ) is engaging with local suppliers to provide the best technological solutions to do this. This will potentially relieve the pressure on the Orange River system.

- The Pit 112 Project was approved as the next phase of mine development. The project will be executed as a contractor-mining project. Restarting Pit 112 will mitigate production loss and mine closure in 2017/2018. The pushback will extend the life of mine by another three years to 2020.

- Ore from Pit 103 is scheduled for depletion in June 2017 with a cessation of mining activities.

Production

Production for FY16/17 was 85,427 tonnes of Special High Grade (SHG) zinc which is a significant increase from 2015/16 considering the operational challenges encountered: inter alia ore depletion, declining ore grade and difficult mining conditions due to dewatering challenges among others. The rising cost of water, electricity, fuel, equipment repairs and mining consumables also remained an operational constraint.

Skorpion Zinc safely and successfully completed the Refinery maintenance shutdown in October 2015 since its start-up in 2002 at a cost of N$86 million. The goal of the shutdown was to improve the reliability of the Refinery in the foreseeable future. Furthermore, methods have been developed to process low grade material. To maximise output, the company also imported ore from Turkey and Morocco.

Exploration

SZ is one of few mining companies in Namibia pursuing an aggressive Greenfield exploration strategy. It forms part of the Vedanta Zinc International growth vision to produce 1 million tonnes of metal. The exploration strategy for Vedanta Zinc International has put in place a minimum exploration programme to meet long-term production targets. It is also aimed at addressing all parts of the project pipeline, from Greenfields exploration to resource development for Pre-Feasibility and Feasibility studies. As reported in the 2015/16 report, all exploration activities were focused on the southern EPL’s through the integration of exploration methodologies.

Safety

The Skorpion Zinc Mine strives towards Zero Harm through continued improvement plans, employee engagement programmes and is certified according to the ISO 9001:2008, 14001:2004 and OSHAS: 18001:2007 requirements. The mine recorded three LTI’s for the period which resulted in 87 days lost time.

The Risk Management Programme equips employees with relevant risk management tools to ensure that detailed risk assessments are conducted on all potential high-risk activities. SZ is equipped to respond promptly and effectively manage emergency situations. The health of employees is monitored on an ongoing basis through medical and occupational hygiene surveillance programmes in terms of their specific exposures and minimum medical fitness requirements.

HSE remains a top priority and since the last fatality in 2015, SZ has worked relentlessly to ensure that their safety standards are on par with international best practices. To date, no fatality has been recorded.

Labour Relations

SZ and the MUN are committed to maintaining sound labour relations. The union and the company have in place a Redundancy/Termination Agreement in terms of Section 34 of the Labour Act, Act 11 of 2007 that was signed by both parties in 2016. To enable the technical and economic viability of the Pit 112 project, Skorpion Zinc took a decision to outsource its mining activities to a competent and capable mining contractor. As part of its business restructuring, about 192 of our existing SZ employees have been seconded to Basil Read while only a minimal number will be retrenched. A collective redundancy agreement was successfully concluded between the Union and SZ on 31 March, 2017.
Education and skills

During the period in review, SZ sponsored seven bursars in various fields including Engineering, Finance and Commerce. SZ has an active Graduate Development Programme which is geared towards professional development, assisting fourth year students to gain experience in their fields of expertise. The company currently employs 17 Namibian graduates, three interns and three apprentices.

Procurement

A total of N$953 million was spent on Namibian goods and services of which N$414 million was spent in Rosh Pinah.

Community Relations

Various CSR interventions were carried out in the //Kharas Region, particularly in Rosh Pinah, where SZ supports communities and implements projects for the socio-economic development of the individuals and towns.

In 2016/17, the company supported CSR ventures in the following areas: Education, Health, Youth & Sport and Livelihood Upliftment (including Skills Development). A total of approximately N$ 3.9 million was spent on CSR activities for the year.

One of the flagship CSR initiatives for SZ is the Goat Project. In 2016/17, five new beneficiaries received goats (31 goats per beneficiary), bringing the total number of beneficiaries to 21. The sustainable design of the project allows for the project to grow and reach out to other community members without incurring a huge cost. However, due to drought impact in 2016, in consultation with the Ministry of Agriculture Extension Officers, SZ had to assist the farmers with veterinary supplements for the animals to avoid loss of stock.

A group of women also organised themselves and formed a self help group (SHG). It is the wish of the company to see many women take on the responsibility of alleviating poverty, first and foremost, at a micro level (their own homes) before they can do it for the community. The initiative taken by these women to venture into a self help tailoring group incentivised the support by SZ to establish themselves. Successes of this project include the refurbishment of old linen from SZ and tenders awarded for the supply of school uniforms.

Other successful projects include the Gardening Project run by women, a youth project by Omayambeko Hope Foundation, involving the youth in various constituencies of the //Kharas Region.

Environment

During the financial year 2016/17, the following new Environmental Clearance Certificates were issued to Skorpion Zinc:

• Environmental Clearance Certificate for EPL 5263
• Environmental Clearance Certificate for the Abstraction and Disposal of Groundwater for Dewatering Purposes.

Skorpion Zinc is investigating the treatment of groundwater abstracted as part of the mines’ dewatering activities. Licence to treat the water and use in the ore treatment process was granted by the Ministry of Agriculture, Water and Forestry.

Biodiversity preservation remains one of Skorpion’s key focus areas. In 2016 SZ partnered with the Namib Ecological Restoration and Monitoring Unit (NERMU) of the Gobabeb Research and Training Centre, which is the leading institution in arid restoration. The Skorpion Biodiversity Action Plan (BAP) prioritises the development of arid-adapted restoration techniques and improving such knowledge, as well as to gain a better understanding of the mine’s impacts on biodiversity out of a suite of biodiversity opportunities.
**Employment**
Permanent employees at end 2016 1,488
Temporary employees at end 2016 27
Contractors at end 2016 300

**Financial**
Financial year 1 Jan – 31 Dec
Fixed investment in 2016 Over US $ 2 billion spent to date

**Details**
Shareholders
Taurus Investments (Pty) Ltd (90%) – owned by China General Nuclear Power Holding Company (CGN) and China-Africa Development Fund (CAD Fund); Epangelo Mining Company (10%)

Mines in Namibia
Husab mine
ML 171

Date of production start
Fourth quarter of 2016

Latest estimate of life of mine
2037

EPLs at end of 2016
EPL 3138
EPL 3439

Number of bursaries awarded in 2016
Two

Chief Executive Officer: Mr Zheng KePing

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First barrel of yellow cake produced on 30 December 2016.
Swakop Uranium (SU) represents a partnership between the people and governments of the Republic of Namibia and the People’s Republic of China. The interaction has nurtured a unique culture, in which employees from both countries learn from each other with great agility, to breed a High Performance Culture of excellence and success.

The Company completed the construction of the world class uranium Husab Mine, located near Swakopmund on the west coast of Namibia. Husab Mine will become the second largest uranium mine in the world.

**Update of Activities for 2016**
Following the construction of the mine, processing plant and associated infrastructure which began in 2013, the first drum of yellow cake was produced on Friday, 30 December 2016.

Mining operations commenced in 2014, removing overburden stripping to expose the uranium bearing ore ready for the start of the processing operations, and significantly, over 6 million tonnes of ore have been removed to date.

During 2017, the plant will continue to be optimized, and throughput will be progressively ramped up towards the target of nameplate operation.

**Safety**
No Fatalities were recorded in 2016, and only one LTI was reported in October 2016 equating to an LTIFR of 0.33.

Swakop Uranium was awarded with certificates in compliance with the international OHSAS18001, ISO9001 & ISO14001 safety, health and environmental standards in 2016.

**Labour Relations**
The Company and MUN continued to build a sound relationship based on the SMART (Sound, Measurable, Agreed Upon, Realistic, Time-related) principles. As a result of the partnership, both parties signed a historic three year wage agreement for the period 2016 to 2018. Both parties, with the involvement of the Ministry of Labour, signed the Settlement Agreement on Continuous Operations, aligned to the provisions of the Labour Act.

No strikes or industrial action occurred in 2016.

Labour relations involving construction employees with the Metal and Allied Workers Union of Namibia (MANWU), contractor companies and SU ceased when construction of the processing plant was completed in 2016. MANWU thanked SU for setting up a Recognition and Procedural Agreement between the three parties to work together as “One team” for the construction of the mine, within budget and adherence to the project schedules. MANWU hailed the Agreement as “best in class” for other construction projects to follow.
Education and Skills
A number of Swakop Uranium employees are given the opportunity to visit China and gain exposure to the high standards and quality applied at nuclear power plants. Returning employees enhance the Company’s management and supervisory practices to uplift productivity and work ethics. Over 500 employees, which involved mining and processing operators as well as graduate artisans, received practical on-site training in their respective fields.

The company awarded two new bursaries, while five students completed their tertiary education, bringing the total number of SU graduates to 20. In addition to the comprehensive graduate programme, the company also facilitated 26 internships from various institutions across the country.

Community Relations
The Company established a social responsibility trust, the Swakop Uranium Foundation. In association with the local communities, the Erongo Development Foundation (EDF) and the Erongo Regional Governor’s office, the Foundation collaborates to help uplift the living standards of the communities, focusing on the poor, the elderly and disadvantaged communities. The Swakop Uranium Foundation set aside N$800,000 in 2016 to assist with areas such as youth unemployment, a Food Bank, drought relief, improving sanitation, vocational education training and rural enterprising. Overall, the Foundation spent N$2.4 million in 2016. The Foundation’s focus areas are strongly aligned with Government’s development agendas, such as Vision 2030, National Development Plans and the Harambee Prosperity Plan.

Environment
A fully fledged Environmental section was established within SU to focus on environmental matters, involving various sections of Ministries and other authorities. Good progress has been made to ensure the Company is compliant to the environmental legislative and best practice processes.
Output in 2016
Tschudi mine
16,391 tonnes of copper cathode

Employment
Permanent employees at end 2016
112
Temporary employees at end 2016
33
Contractors at end 2016
612
Expatriate employees at end 2016
1

Financial
Financial year
1 Jul – 30 June
Turnover in 2016
N$1.278 billion
Wages and salaries in 2016
N$73.6 million
Fixed investment in 2016
N$51.4 million
Exploration expenditure in 2016
Nil
Loss in 2016
N$344.2 million
Royalty tax paid in 2016
N$37.5 million

Details
Shareholders
Weatherly Mining Namibia Ltd (WMN) is 99% owned by Weatherly (Namibia St Lucia) Ltd, which is in turn owned 100% by Weatherly International plc, a public company listed on AIM on the LSE, with shareholding in WMN of 97.5% and Labour investment Holdings of 2.5%

Mining Licences in Namibia
ML 3: Matchless
ML 10 and ML 22: Otjihase
ML 125: Tschudi mine

Date of start
Otjihase mine: 1976 (re-start in 2011, suspended in 2015)
Matchless mine: 2005 (re-start in 2011, suspended in 2015)
Tschudi mine: January 2015

Latest estimate of life of mine
Tschudi mine: 2027
Otjihase & Matchless: ten years

Safety ratings at end 2016
Not applicable

Managing Director: Mr Craig Thomas

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Weatherly Mining Namibia operates the Tschudi opencast copper mine near Tsumeb. The mine uses heap leaching and SX-EW processing to produce pure refined copper metal on site.

Weatherly also owns the Otjihase and Matchless copper mines in the Windhoek area. Production was suspended at these underground mines during September 2015 as a consequence of the marked decline in world copper prices. Both mines have been converted to project development status while progressing plans to prepare for a resumption of production at expanded volumes, when copper prices improve adequately.

**Highlights for 2016**
- Zero fatalities recorded and over three million hours were worked without an LTI as of October 2016.
- 16,391 tonnes of LME grade A copper cathode produced, trebling Namibia’s copper production.

**Production**
**Tschudi mine:**
After an extended ramp-up period in 2015, Tschudi first achieved quarterly nameplate production in March 2016. In May 2016, the open pit intersected the anticipated groundwater table and dewatering quantities were several times higher than expected. Enhanced infrastructure to cope with the amount of water was installed over a period of four to five months. Open pit ore production and copper production were both negatively impacted. Groundwater management was brought under control and by October, pit production and copper production was restored to nameplate. The mine transitioned also from faster-leaching oxide ore to slower-leaching transitional ore.

**Exploration**
No exploration was conducted in 2015.

**Safety**
Weatherly is committed to ensuring the safety of employees and contractors each day through effective teamwork and leadership, as well as to ensuring that the safety management system encompasses the entire workforce.

The company recorded 688 working days without an LTI as of October 2016. In partnership with contracting companies Weatherly further improved safety systems, policies and procedures to enhance safety awareness and promote safer working practices.

**Labour Relations**
Labour relations at Tschudi remained reasonably stable. The mine recognised that the Mining, Metal, Maritime and Construction Workers’ Union (MMMCWU) has majority representation amongst the employees. As such, a recognition and procedural agreement was signed with the MMMCWU in August 2016.

**Education and Skills**
The company provided a number of job attachment opportunities for technical services students. Several employees completed management development programmes and one employee successfully completed a master’s degree in Metallurgy.

**Procurement**
Weatherly spent N$1.047 billion on goods and services from Namibian suppliers in 2016.

**Community Relations**
Weatherly formally donated the land on which the informal settlement of Kuvukiland at Tsumeb is located, to the Tsumeb municipality. The area covers 67.5 hectares and is valued at N$31.6 million. The handover presents an opportunity for the servicing of land and provision of basic infrastructure as well as for residents to formally own the land. The company continues to work with the local authorities and organisations such as the Shack Dwellers Federation of Namibia to improve the quality of life for the residents.

The company sponsored the annual open day for the Tsumeb Community Skills Development Centre (COSDEC) and supported the municipality and community at the annual Copper Festival in Tsumeb.

**Environment**
Weatherly’s environmental monitoring program focuses on collecting and assessing data associated with surface and ground water, noise and air quality. This information is made publically available via a quarterly presentation to the Environmental Forum, which includes representatives from Weatherly, Government, local council, communities and neighbouring property owners who review environmental performance relating to our operations.

Weatherly aims to firstly identify then mitigate potential impacts to the environment and community in which it operates. No reportable environmental incidents occurred and no penalties for non-compliance were received during the reporting period.
### Employment
- **Permanent employees at end 2016**: 14
- **Number of temporary employees at end 2016**: 3
- **Contractors at end 2016**: 2
- **Expatriate employees at end 2016**: Nil

### Financial
- **Financial year**: 1 Jan – 31 Dec
- **Wages & Salaries in 2016**: N$11.2 million
- **Fixed Investment in 2016**: N$235,000 million
- **Exploration expenditure in 2016**: Nil

### Details
- **Shareholders**
  - Imerys Graphite & Carbon 51%
  - Gecko Namibia 49%
- **Related operations in Namibia**
  - Imerys Gecko Graphite Namibia (Pty) Ltd
  - Imerys Gecko Okanjande Mining (Pty) Ltd
- **Mines in Namibia**
  - Okanjande graphite mine (ML 196- pending)
- **Date of production start**: 2017
- **Latest estimate of life of mine**: 2037
- **EPL’s at end of 2016**
  - EPL 3037
  - EPL 4717
- **Chief Operating Officer**: Mr Hans George Nolte

### Contact Details
- **PO Box 81307, Windhoek**
- **067-305404 | hans.nolte@imerys.com**
- **www.imerys-graphite-and-carbon.com**
Update of activities in 2016
The acquisition of the Okorusu processing plant was concluded in March 2016, after which the joint venture company between Imerys and Gecko was established. Plant refurbishments to process graphite ore began in April 2016 while mine development continued concurrently.

No exploration occurred during the year in review due to development activities, however 36 diamond drill holes with a total of 1,190 are planned for 2017.

No LTI’s or severe incidents were recorded in 2016 and the labour relations remained cordial. Staff compliment was not fully realised as the project was still in development phase.

The company spent some N$96 million on goods and services procured in Namibia, of which 10% was acquired by businesses owned by Previously Disadvantaged Namibians (PDNs). Various CSR initiatives were undertaken including the building of a new school hall in Okarara, sponsorship to the running and cycle event at Spitzkoppe, famously known as “The Rock”, and support to the San community.

Full Environmental clearance from the Ministry of Environment and Tourism (MET) was granted for mining operations.
Bannerman Mining Resources Namibia

Etango Project
Pending renewal of licences
EPL 3345

Pending Licence
Mineral Deposit Retention Licences
MDRL 3345

Highlights for 2016
• In operation for the last 7 years without a Lost Day Injury
• Appointed Mr. Brandon Munro as CEO of Bannerman Resources Limited, replacing Mr. Len Jubber
• Completed the 6-phase metallurgical program at the Heap Leach Demonstration Plant which exceeded key metallurgical assumptions and demonstrated opportunities for further cost reduction.
• Appointed Ms. Twapewa Kadhikwa for the subsidiary board replacing Ms. Monica Kalondo;
• Successfully raised AUD 4 million on the Australian Stock Exchange (ASX)

The successful completion of the 6 - phased metallurgical programme carried out at the Heap Leach Demonstration Plant significantly elevated the attractiveness of the Etango project. The positive results harnessed AUD4 million which was raised on the ASX, positioning Bannerman favourably for the anticipated recovery in the uranium price in the medium term.

Bannerman spent some N$361,00 on Community activities during the year in review. 2016 marked the 6th year of running the Early Learner Assistance Scheme in Partnership with the Ministry of Education, Arts and Culture whereby underprivileged primary school children in the Erongo Region receive assistance with school uniforms. To date, more than 1,600 scholars have received assistance through this scheme. In partnership with the Topnaar Traditional Authority, permanent water supply to a Children’s Day-Care Centre situated about 40 kilometres up the Kuiseb River from Walvis Bay was provided. Sponsorship also continued to the Hospitality Association of Namibia and specifically to the best Joint Venture Lodge in Namibia, enabling Conservancy members working at the lodge to receive skills training.

In promoting conservation and environmental awareness, Bannerman erected additional signage along the ‘moon landscape’ tourist road to discourage the public from illegal off-road driving in the National Park and also rehabilitated areas that were damaged by such activities.

In 2017, Bannerman plans to update the Etango Definitive Feasibility Study following the outstanding results yielded by the Heap Leach Demonstration Plant. Metallurgical parameters will be reviewed and the processing flow sheet adjusted where appropriate to improve the capital and operating costs of the Etango Uranium Project. This will continue to position the project in a rising uranium price environment.

Bannerman expects the uranium price to recover in the next few years, and once it reaches a term price (the U3O8 price where contracts are signed) of above US$65/lb, the financing of the Etango Project can commence.

CEO: Brandon Munro
Managing Director - Namibia: Mr Werner Ewald

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wewald@bannermanresources-na.com | www.bannermanresources.com.au
Omitiomire Copper Project:  
Pending renewal of licences  
EPL 4055  
EPL 4150  
EPL 3589  

Pending new licences  
ML 197

Reduced exploration and development was conducted during the year in review, due to pending mining and exploration licences and ongoing challenges to access farm Omitiomire. Craton conducted geochemical surveys covering 570 hectares, with 809 sediment samples taken and 12 geochemical assays submitted. Ground geophysical surveys of 2,300 hectares were also undertaken using ground and electro magnetics.

The Company intends to proceed with development once the mining licence for the Omitiomire deposit has been received.

The Craton Foundation continued to build classrooms in the Windhoek area and continued with the eye screening programme for several thousand school children, as well as providing glasses to those who needed them. The Craton Foundation uses an annual budget of N$300,000 for CSR activities.

Exploration Manager: Mr Karl Hartmann

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karl.hartmann@craton-me.com | www.interbasemets.com
Current exploration licences
EPL 4167
EPL 4185
EPL 4426

Pending licence renewal
EPL 3037
EPL 4365
EPL 4153
EPL 4154

Pending new Licence
EPL 4717
ML 196
EPL 6996

Highlights for 2016
• The group acquired the Okorusu Mine from the Solvay Group during April 2016
• Gecko Graphite concluded a JV agreement with Imerys Carbon and Graphite to develop the Okanjande Graphite project. Construction started in May 2016 and start-up
• Gecko Salt started to produce first salt at the end of 2015 and continued to ramp up it production during 2016.

Gecko Namibia is a privately owned company, 100 percent owned by Namibians, and has local affiliates in Gecko Salt, Gecko Limestone, Gecko Phosphate, Imerys Gecko Graphite, Gecko Laboratories, Gecko Chemicals, Gecko Exploration, Gecko Mining and Gecko Drilling. Gecko mainly focuses on the development of projects in the industrial mineral sector exploration in Namibia.

Gecko spent N$18.18 million on exploration in 2016. Exploration consisted of 30 diamond drilling holes, totalling a length of 3,318 metres, with approximately 1,200 litho samples taken and 1,300 geochemical assays submitted.
Gecko enjoyed sound labour relations, with no strikes, demonstrations or major labour disputes. Gecko sponsored an employee to further studies in Logistics Management at the Business School of Excellence and also provided internships to five Geology students.

The Gecko Namibia (Pty) Ltd fund through the Gecko Foundation supports various social initiatives in regions across the country in areas of sport, health and welfare with a contribution of N$350,000. The company spent N$65 million on goods and services procured from Namibian registered companies.

Gecko is currently conducting EIA’s for the following projects: Cape Cross Salt mine development, SwaCa mine and processing/production of GCC (ground calcium carbonate) and burned lime products, the Nonidas Industrial township development and the Wlotzkasbaken Dolerite Crusher. Gecko and its partner organisation, Ondonga-Uukwambi Mining Enterprises, are still engaging with MET regarding the appeal against their decision to decline the Environmental Clearance Certificate for the development of the Otjivalunda project.

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pine@gecko.na | www.gecko.na
Namibia Rare Earths is a Canadian public company listed on the Toronto Stock Exchange and is 100% owned by Cayman Namibia Rare Earths Ltd. The company’s main focus in Namibia is the Lofdal Rare Earths project which it plans to develop in the near future. Lofdal is an early stage, district scale exploration project with known and defined rare earths deposits. In October 2014, the results from the preliminary economic assessment Area 4 of Lofdal indicated an average annual production of 1,500 tonnes of separated rare earths oxides.

Through its team of Namibian consultants and contractors, the company spent N$10.6 million, with the bulk of expenditures directed towards the Environmental Impact Assessment and associated baseline studies, and technical reports for the Mining Licence application. Two Hundred litho samples were taken and 50 geochemical assays submitted during the course of regional prospecting.

In 2016, the project was managed by only Namibians through the exclusive use of Namibian consultants at site, and the company provided support to the geological team for Geographic Information Systems (GIS) related software.

Namibia Rare Earths continued to support the Sunrise Orphanage in Khorixas. They also engaged with the Khorixas Town Council, Traditional Authorities and local farmers for assistance on various aspects. They provide direct support to local farms for maintenance and operation of water supply systems.

The EIA was completed in 2016 and submitted to MET as well as bi-annual independent environmental audits. On-going monitoring and baseline was collected on site. A Mining Licence application was submitted and the Company awaits outcomes from MET and MME on the respective submissions. EPL 3400 has been renewed with a 50% reduction in surface area.

Director: Mr Don Burton

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North River Resources Namibia is 100% owned by North River Resources PLC. The company is currently developing its flagship asset, the Namib Lead Zinc project located 25 kilometres from Swakopmund. The old lead mine was previously operational from 1968 to 1991. The project has a total JORC resource of 1.25 million tonnes, with a resulting underground in situ metal content of 31,000 tonnes of lead, 81,000 tonnes of zinc and 1.7 million ounces of silver. There is significant additional exploration potential within this licence area, with the resource open on strike and down dip.

A 300 metre underground exploration tunnel in the Northern section of the Namib Mine was successfully developed to create drill positions or cubbies for underground diamond drilling for resource extension and infill drilling operations. North River drilled a total of 4,659 metres mainly from this tunnel, but also from elsewhere in the mine. Drill targets were also identified within the regional exploration areas through geochemical sampling, but primarily on the Southern licence EPL 5075.

On-the-job training was provided for employees on geological software.

Groundwater monitoring and sampling were continued as well as weather station recordings. The company plans to update their feasibility study once their mining licence is granted.

CEO: James Beams
PROJECTS

Reptile Uranium Namibia (Pty) Ltd (RUN) (wholly owned subsidiary)
Omahola, Shiyela Iron, Tubas Sand & Tumas Projects.

Current licences
EPL3496
EPL3497
ML176

Nova Joint Venture – held in Nova Energy (Namibia) (Pty) Ltd with RMR as Manager
(RMR 65%, Nova Energy Africa (Pty) Ltd 25%, Sixzone Investments (Pty) Ltd 10%)

Current licences
EPL3669
EPL3670

RUN as Manager of Oponona Investments (Pty) Ltd’s Tenements

Current licences
EPL4604
EPL4605

Aussinanis Joint Venture
(RUN 85%, Epangelo 5% and Oponona Investments (Pty) Ltd 10%)

Current licences
EPL3498

PENDING RENEWAL OF LICENCES, 2016
EPL3498
EPL3669
EPL3670
EPL4604
EPL4605

Highlights for 2016

• Bulk sampling conducted at Tumas Zone 1
• Particle size distribution and metallurgical test work on Tumas 1 material for Marenica UpgradeTM process evaluation
• Change of executive management at Deep Yellow Limited level 23 October 2016, after which Marenica work suspended and renewed focus on large scale uranium discoveries.

RMR Namibia is 100 percent owned by Deep Yellow Limited (Australia), which is listed on the Australian Stock Exchange (ASX) and the Namibian Stock Exchange (NSX).

RMR spent N$11.9 million on exploration through a team of seven permanent employees.

Bulk sampling carried out at the Tumas Palaeochannel on which metallurgical test work was conducted on new sample material to evaluate the effectiveness of the Marenica U-pgradeTM technology. Five geochemical assays were submitted in 2016. This work was suspended in November 2016.

RMR continued with skills development initiatives for employees, which included on-the-job training, regular workshops, monthly toolbox meetings. These skills development initiatives focused on radiation and excel training, safety and health, International Financial Reporting Standards (IFRS) and tax, anti-bribery and corruption as well as governance training.

The Company spent N$4.13 million on locally procured goods and services.

RMR continued to provide support to Namib-Naukluft National Park wardens for park installation and signage to better control unauthorised access in the Park. They also sponsored local soccer teams and a local exhibition, along with the donation of office equipment to the Hanganeni Primary School and stationery to Mondesa Youth Opportunities.

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info@reptile.com.na | www.deepyellow.com.au
RMR concluded an agreement with Bannerman Mining Resources (Namibia) (Pty) Ltd to jointly fund appropriate Corporate Social Responsibility (CSR) projects. The initial project involved installation of infrastructure at the Topnaar Community. Through the partnership, both companies are better positioned to make a meaningful CSR impact in difficult economic times for the uranium sector.

Continuous communication with key stakeholders at all levels was carried out which included government authorities, management consultants, employees and contractors. The Company monitored contractor activity through regular inspections and reported illegal off-road driving in Namib-Naukluft National Park. Since 2009, RMR has been monitoring ten (10) Welwitschia mirabilis plants monthly.

Managing Director: Mr John Borshoff
Norasa Uranium Project ("Norasa")
Pending licence renewal: EPL 3638 (Namibplaas Project)

Update of activities in 2016
Forsys Metals Corporation flagship project is Norasa which includes the wholly owned Valencia project which has a 25 year mining licence (ML 149). In addition, the Company has a 100% interest in the Namibplaas project (EPL 3638), which is located 7.5 km north east of Valencia. Both projects have NI 43-101 compliant uranium resources and reserves. Forsys Metals Corporation, is listed on the Toronto, Frankfurt and Namibian Stock Exchanges.

As of December 2016, Measured and Indicated Resources were updated to 265 million tonnes with 52,100 tonnes of uranium oxide with the associated Mineral Reserve declared at 206 million tonnes with 41,100 tonnes of uranium oxide.

A total of N$1.4 million was spend on Namibian goods and services in 2016.

Valencia continued, at a reduced rate, to invest in the Usakos Community Vegetable Garden project, in cooperation with the Usakos Town Council. By the end of 2016, Valencia contributed N$4 million towards the project in total.

Managing Director: Mr Marcel Hilmer

Valencia Uranium (Pty) Ltd
Zhonghe Resources Namibia

Current exploration licenses
EPL 3600
EPL 3602

Pending Mining License Renewal
ML 177

Highlights for 2016
• Supplementary exploration design implemented before mine development.
• Sampling for ore leaching testing and assessment of industrial utilization.

Zhonghe Resources is 58 percent owned by China Uranium Corporation Limited, 21 percent owned by Springbok Investment (Pty) Ltd, and 21 percent owned by Namibia-China Mineral Resources Investment Development (Pty) Ltd. The Zhonghe Uranium project is situated between Usakos and Swakopmund.

Through its team of two Namibian employees and three expatriate employees, Zhonghe Resources conducted geochemical surveys covering 28.1 square kilometers and submitted 255 geochemical assays. Ground geophysical surveys were conducted covering 28.1 square kilometers.

Labour relations remained stable throughout the year. Rehabilitation activities were carried out following the completion of trench, geochemical and geophysical surveys.

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MINING AND THE ECONOMY

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CHAMBER OF MINES
ANNUAL REPORT 2016
Mining and the Economy

The Namibian economy started to flag signs of structural weaknesses in 2016, following two consecutive quarterly contractions, confirming the end of a pro-cyclical monetary and fiscal policy era. In the midst of this slow-down, avenues to pursue pro-growth policies have thus largely been exhausted as a result. In the midst of this slow-down (state economic contraction as released by NSA), avenues to pursue pro-growth policies have thus largely been exhausted as a result. In 2016, the Government debt to GDP ratio surpassed its sustainable threshold of 35%, reaching levels of around 42%. These developments lead to the international ratings agencies, Moody’s and Fitch, to change the outlook on investment ratings from stable to negative, placing even greater risk on external debt financing instruments and options for Government.

With the tabling of the mid-term budget review in 2016 and more recently, the 2017/18 budget, much required fiscal consolidation measures have taken centre stage in the Medium Term Expenditure Framework. Economic growth is thus expected to remain weak in the foreseeable future.

The on-going drought and water shortages, and the continued contraction of the South African economy also contributed to weak growth in 2016 through strong trade ties with Namibia.

The mining sector was fortunately not directly impacted by these domestic challenges, with some mineral components performing better than others, and was largely buoyed by a broad based increase in the prices of precious and base-metals. Where other mineral commodities did not perform as well as expected, these were mostly a result of internal and operational challenges.

Commodity Prices: A mixed bag of surprises

In 2016, commodity prices tended to follow trends which upended predictions and expectations. Metals commodity prices performed better than expected, driven by stronger demand in China, and while the performance of precious metals was volatile, they posted overall gains. The uranium price, however, bucked out at its lowest levels in a decade towards the end of 2016, amidst positive sentiment that the demand for this commodity would recover.

Copper

Overall, the copper price posted steady gains of 27% in 2016, as indicated on the graph below. Price increases were bolstered by growing demand in China, which continued to grow at 6.5% spurred by continued government stimulus and spending on infrastructure. Furthermore, the outlook for the copper price remains positive as demand in the USA is set to pick up under the new administration’s US$1 trillion infrastructure spending plans. These sentiments bode well for Weatherly’s Tschudi copper mine and could potentially see the re-opening of the Matchless and Otjihase copper mines.

Lead & Zinc

Similarly the prices of lead and zinc posted impressive price increases, also owing to economic stimulus in China.

Gold

It was an interesting year for the spot price of gold, which performed exceptionally well in the first half of 2016, increasing by 25% following heightened political uncertainty hinged on the outcome of the Brexit vote and the US presidential elections. During the second half of 2016, however, the price of the precious metal retracted following policy announcements by the Trump administration to boost the US economy as well as a hike in the Federal Reserve rate in December 2016.

The gold price is underpinned by changes in investor confidence, which is being marred by uncertainty through the outcome of Brexit negotiations and growing populist sentiment for the Euro area. However, the US labour market continues to add more jobs and the inflation rate is meeting the Federal Reserve’s upper target levels, pointing to further hikes in the Federal Reserve rate and a subsequent decline in the price of gold. It should be remembered however, that these potential price decreases could be offset by growing demand for jewellery demand in the US and India on the back of better performing economies. The outlook for gold thus remains mixed.

Diamonds

According to the DeBeers Group, the rough diamond price recovered in 2016 after a significant drop in 2015, as trading in rough diamonds improved and demand from China increased. Similar to gold, the outlook for the price of rough diamonds remains positive, driven by improving incomes in China, USA and India as these economies are expected to grow in the medium term.

Uranium

2016 was a devastating year for the uranium price, which reached its lowest level in 12 years at US$18.75/lb in November, with a corresponding fall in the long-term contractual price by more
than 50%. Despite the 54 reactors currently under construction, the uranium market continued to be plagued by oversupply driven by increasing stockpiles and inventories at utilities.

The long-term outlook for the demand of uranium remains positive as China pursues its nuclear energy programme to reduce its carbon footprint, with 20 reactors currently under construction. Furthermore, demand is expected to be further boosted by the steady start-up of reactors in Japan, post Fukushima. However, in the short-term there is still a major down-side risk as consumers continue to purchase at current low price levels. Spot market sales are more commonly being conducted and preferred over long-term contracts, where there is no longer a concern as to the security of supply for buyers and producers are not willing to enter into contractual agreements below break-even prices.

**Performance of the Namibian Mining Sector**

**Gross Domestic Product**

Preliminary statistics produced by the Namibia Statistics Agency show that the mining sector contributed 11.1% to GDP in 2016 and recorded an overall contraction of 4.9% in real terms. The contraction was largely the result of a decline in the output of diamonds, lead and zinc. However, the Chamber is of the opinion that this contraction has been overstated as it has not properly captured the trebling of high value refined copper production in 2016 and the 10% year-on-year increase in gold bullion output. In addition, the Chamber believes that contribution by these two minerals has been further understated in light of the recent increases in the prices of gold and copper as highlighted above.

Overall, mining contribution is also diluted by the exclusion of output from zinc refining and copper smelting activities.

Notwithstanding the decline in output of some minerals, the mining sector continued to create positive spin-offs in the Namibian economy. Statistics collated by the Chamber revealed that the mining sector generated some N$28.85 billion in foreign revenue earnings in 2016 in nominal terms. Of this N$11.7 billion was spent on locally procured goods and services which accounts for 64% of the total procurement spend by the mining sector.

Apart from the sector’s direct contribution to permanent employment, foreign exchange and government earnings, the sector’s biggest impact is made in the massive local spend through up-stream and side-stream linkages. Although much of this spend is on goods and services procured from local suppliers, the majority of inputs are still manufactured outside the country. There is thus a huge opportunity for the manufacture of some inputs locally to further increase value addition in these linkages.
Despite the recorded contraction, the mining sector is expected to continue growing. Swakop Uranium’s Husab mine produced its first barrel of yellow-cake on 30 December 2016 and is expected to ramp-up to full production in 2019 which will significantly boost mining’s contribution to GDP by approximately 5%. The Chamber also expects to see other mining related investments come to fruition as commodity markets improve and issues within the current policy and regulatory framework are resolved.

**Fixed Investment**
Fixed investment made by the mining sector continued to taper off from N$5.48 billion in 2015 to N$3.46 billion in 2016 from the record highs recorded in 2014, which was driven by the construction of three new mines and the sulphuric acid plant. Fixed investment levels are thus expected to remain steady at these levels following the extraordinary situation in which three mines were being constructed at once.

Exploration expenditure also remained stable at N$510 million, a slight increase from 2015, which was driven by a rise in commodity prices. Investments into exploration underpin the livelihood of the sector, through the extension of operations in existing mines and the discovery of new ones. The Chamber thus remains hopeful that positive prospects in commodity markets and the resolution of policy propositions and proposals by Government will revive investors’ appetite for expenditure on such activities.

**Employment**
At the end of 2016 all Chamber members directly employed 9,574 permanent employees, 699 temporary employees, and 5,400 contractors. In the last three years, the mining sector created above average direct employment ranging from approximately 16,000 jobs in 2013 to 19,000 in 2015, which dropped to approximately 16,000 in 2016 as Swakop Uranium completed the construction of its Husab mine.

**Taxation**
The mining sector remains an important generator of Government revenue. In 2016 Chamber members paid a total of N$3.2 billion in taxes and royalties, a 15% reduction from N$3.76 billion paid in 2015. The decline was largely a result of reduced diamond output which constitutes the Lion’s share of mining taxes and royalties. This amount, however, excludes PAYE which totalled N$844 million and dividends of approximately N$1 billion, bringing the total contribution by the mining sector to Government coffers to roughly N$4.9 billion.
### Output by Mine

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</tr>
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<tbody>
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<td>Diamond Fields (carats)</td>
<td>6 692</td>
<td>16 740</td>
<td>25 401</td>
<td>16 762</td>
<td>29 477</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Langer Heinrich (tonnes of uranium oxide)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Namdeb Holdings (total carats)</td>
<td>1 289 776</td>
<td>1 320 308</td>
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<td>1 275 899</td>
<td>1 454 756</td>
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<tr>
<td>Debrema Namibia (Carats)</td>
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<td>Beach and marine contractors (carats)</td>
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<td>Navachab (kg of gold)</td>
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<td>2 399</td>
<td>2 694</td>
<td>2 650</td>
<td>2 298</td>
<td>2 068</td>
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<td>2 675</td>
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<td>B2Gold</td>
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<tr>
<td>Dundee Precious Metals Tsumeb*</td>
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<tr>
<td>Blister Copper (tonnes)</td>
<td>5 082</td>
<td>27 015</td>
<td>17 850</td>
<td>26 306</td>
<td>26 306</td>
<td>22 563</td>
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<td>Ocean Diamnd Mining Holdings Ltd (carats)</td>
<td>73 327</td>
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<td>Okorusu Fluorspar (wet metric tonnes of Fluorspar)</td>
<td>57 700</td>
<td>66 128</td>
<td>81 245</td>
<td>81 084</td>
<td>79 349</td>
<td>104 767</td>
<td>114 886</td>
<td>132 249</td>
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<td>Zinc concentrate (tonnes)</td>
<td>69 193</td>
<td>73 535</td>
<td>70 610</td>
<td>77 587</td>
<td>107 920</td>
<td>123 272</td>
<td>126 123</td>
<td>105 134</td>
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<td>Lead concentrate (tonnes)</td>
<td>19 283</td>
<td>20 665</td>
<td>26 182</td>
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<td>24 690</td>
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<td>3 201</td>
<td>2 640</td>
<td>2 751</td>
<td>2 401</td>
<td>3 582</td>
<td>3 711</td>
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<td>Sakawe Mining Corporation (carats)</td>
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<tr>
<td>Salt &amp; Chemicals (tonnes of coarse salt)</td>
<td>429 230</td>
<td>482 000</td>
<td>500 441</td>
<td>552 000</td>
<td>567 000</td>
<td>717 000</td>
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<td>576 000</td>
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<td>Skorpion Zinc (tonnes of SHG zinc)</td>
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<td>The Salt Company (total product - tonnes)</td>
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<td>75 650</td>
<td>70 000</td>
<td>116 526</td>
<td>85 374</td>
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<td>58 000</td>
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<td>66 994</td>
<td>61 423</td>
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<td>16 353</td>
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<td>56 994</td>
<td>3 633</td>
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<td>Khusib Springs</td>
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<td>Lodestone Dordabis Iron Ore Mine (tonnes of iron ore)</td>
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*Source: Chamber of Mines Namibia*
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<td>2,228</td>
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<td>Namdeb Holdings (total carats)</td>
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<td>67,110</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<td>n/a</td>
<td>n/a</td>
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<td>Blister Copper (tonnes)</td>
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<td>26,306</td>
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<td>n/a</td>
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<tr>
<td>Okorusu Fluorspar (wet metric tonnes of Fluorspar)</td>
<td>57,700</td>
<td>66,128</td>
<td>81,245</td>
<td>81,084</td>
<td>79,349</td>
<td>104,767</td>
<td>114,886</td>
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<td>Rosh Pinah Zinc Corporation Zinc concentrate (tonnes)</td>
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<td>107,920</td>
<td>123,272</td>
<td>126,123</td>
<td>105,134</td>
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<td>Lead concentrate (tonnes)</td>
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<td>31,453</td>
<td>27,188</td>
<td>24,690</td>
<td>21,974</td>
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<td>Rossing Uranium (tonnes of Uranium oxide)</td>
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<td>2,640</td>
<td>2,751</td>
<td>2,401</td>
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<td>3,711</td>
<td>3,617</td>
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<td>Sakawe Mining Corporation (carats)</td>
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<tr>
<td>Salt &amp; Chemicals (tonnes of coarse salt)</td>
<td>429,230</td>
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<td>500,441</td>
<td>552,000</td>
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<td>576,000</td>
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<td>The Salt Company (total product - tonnes)</td>
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<td>89,726</td>
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<td>Coarse salt (tonnes)</td>
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<td>Refined salt (tonnes)</td>
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<td>Otjihase mine &amp; Matchless mine Copper concentrate (tonnes)</td>
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<td>Khusib Springs Copper concentrate (tonnes)</td>
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*Dundee Precious Metals Tsumeb, formerly known as Namibian Custom Smelters
**Weatherly formerly known as Ongopolo Mining and Processing from 2000 to 2006, and TCL until 1998
## Permanent Employment by Mine

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Source: Chamber of Mines Namibia

*Dundee Precious Metals Tsumeb formerly known as Namibian Custom Smelters

**Weatherly formerly known as Ongopolo Mining and Processing from 2000 to 2006, and TCL until 1998
### Mining and the Economy

#### Value added (N$ m current prices)

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<th>2002</th>
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#### As % of GDP

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#### Value added (N$ m 2010 constant prices)

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#### % Growth

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#### as % of value added

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<td>1 318</td>
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<tr>
<td>Total mining export (N$ m current prices)</td>
<td>5 243</td>
<td>5 768</td>
<td>7 275</td>
<td>5 167</td>
<td>7 195</td>
<td>8 198</td>
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<tr>
<td>Total export of goods</td>
<td>9 217</td>
<td>10 414</td>
<td>13 453</td>
<td>13 054</td>
<td>13 917</td>
<td>16 048</td>
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<tr>
<td>Diamonds as % of merchandise exports</td>
<td>43%</td>
<td>40%</td>
<td>39%</td>
<td>27%</td>
<td>35%</td>
<td>31%</td>
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<tr>
<td>Minerals as % merchandise exports</td>
<td>57%</td>
<td>55%</td>
<td>54%</td>
<td>40%</td>
<td>52%</td>
<td>51%</td>
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</tbody>
</table>

**Source:** NSA Namibia

**Exploration expenditure by Class D members (N$ m current prices)**

| Source: CMN annual reports | 167.0 | 249.0 | 146.0 | 264.0 | no info | no info |

| Number of Class D members | 24    | 15    | 14    | 14    | 15      | 15      |

**Source:** CMN annual reports
### Minerals as % merchandise exports

<table>
<thead>
<tr>
<th>Year</th>
<th>Total export of goods</th>
<th>Total</th>
<th>Other Minerals</th>
<th>Minerals and the Economy</th>
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</thead>
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</tbody>
</table>

#### Total export of goods

- **2006**: 4 591
- **2007**: 3 646
- **2008**: 5 971
- **2009**: 2 616
- **2010**: 4 741
- **2011**: 4 255
- **2012**: 8 148
- **2013**: 10 683
- **2014**: 12 434
- **2015**: 11 733
- **2016**: 10 708

#### Total

- **2006**: 673
- **2007**: 2 245
- **2008**: 4 159
- **2009**: 3 250
- **2010**: 1 778
- **2011**: 1 505
- **2012**: 2 223
- **2013**: 1 900
- **2014**: 1 459
- **2015**: 1 384
- **2016**: 1 474

#### Other Minerals

- **2006**: 1 171
- **2007**: 1 376
- **2008**: 1 145
- **2009**: 1 351
- **2010**: 1 144
- **2011**: 909
- **2012**: 1 066
- **2013**: 1 387
- **2014**: 1 529
- **2015**: 2 818
- **2016**: 4 696

#### Minerals and the Economy

- **2006**: n/a
- **2007**: 219
- **2008**: 566
- **2009**: 759
- **2010**: 961
- **2011**: 934
- **2012**: 1 164
- **2013**: 2 124
- **2014**: 2 247
- **2015**: 1 517
- **2016**: 936

#### Other mining

- **2006**: n/a
- **2007**: 6 654
- **2008**: 7 833
- **2009**: 12 034
- **2010**: 8 177
- **2011**: 8 598
- **2012**: 7 833
- **2013**: 13 562
- **2014**: 16 218
- **2015**: 16 939
- **2016**: 16 872

#### 53 055

- **2006**: 61 583
- **2007**: 70 111
- **2008**: 75 214
- **2009**: 82 599
- **2010**: 90 108
- **2011**: 106 863
- **2012**: 122 817
- **2013**: 138 471
- **2014**: 147 479
- **2015**: 159 105

### Gross Fixed Capital Formation (N$m current prices)

<table>
<thead>
<tr>
<th>Year</th>
<th>Mining and quarrying</th>
<th>Other mining</th>
</tr>
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</table>

#### Mining and quarrying

- **2006**: 1 760
- **2007**: 5 961
- **2008**: 5 513
- **2009**: 2 690
- **2010**: 5769
- **2011**: 5 976
- **2012**: 5 728
- **2013**: 5 180

#### Other mining

- **2006**: n/a
- **2007**: 54%
- **2008**: n/a
- **2009**: 1 532
- **2010**: 1 517
- **2011**: n/a
- **2012**: n/a
- **2013**: n/a

### Other mining

- **2006**: n/a
- **2007**: 5 735
- **2008**: 1 087
- **2009**: 5 768
- **2010**: 1 483
- **2011**: 1 335
- **2012**: 1 392
- **2013**: n/a
- **2014**: 1 738
- **2015**: 9 725
- **2016**: 5 246

### GDP (N$m current prices)

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<th>Year</th>
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#### Mining and quarrying

- **2006**: 20 968
- **2007**: 5 293
- **2008**: 9 246
- **2009**: 1 145
- **2010**: 1 483
- **2011**: 1 335
- **2012**: 1 392
- **2013**: n/a
- **2014**: 1 738
- **2015**: 9 725
- **2016**: 5 246

#### Other mining

- **2006**: n/a
- **2007**: 20 968
- **2008**: 5 293
- **2009**: 9 246
- **2010**: 1 145
- **2011**: 1 483
- **2012**: 1 335
- **2013**: n/a
- **2014**: 1 738
- **2015**: 9 725
- **2016**: 5 246

### % Growth

- **2006**: -8.4%
- **2007**: 4.2%
- **2008**: 54%
- **2009**: 14%
- **2010**: 29.929
- **2011**: 24
- **2012**: 2.6%
- **2013**: -8.2%
- **2014**: 53.6%
- **2015**: 140.7
- **2016**: 15 301

### Time Series

- **2006**: 38.0%
- **2007**: -3.1%
- **2008**: -52.2%
- **2009**: -5.4%
- **2010**: 3.9%
- **2011**: 10.9%
- **2012**: 0.8%
- **2013**: 0.1%
- **2014**: 0.9%
- **2015**: 6.7%
- **2016**: 11.3%

#### Prior to 2000

- “Uranium”, “Metal Ores” and “Other Mining and Quarrying” were grouped under “Other mining”.
## Tax Revenue

<table>
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<tr>
<th>Tax Revenue</th>
<th>99/00</th>
<th>00/01</th>
<th>01/02</th>
<th>02/03</th>
<th>03/04</th>
<th>04/05</th>
<th>05/06</th>
<th>06/07</th>
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<td>Revenue (N$m)</td>
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<td>106.2</td>
<td>283.9</td>
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<td>0.9</td>
<td>350.7</td>
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<td>199.3</td>
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<td>Total tax revenue</td>
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<td>9 064.8</td>
<td>10 853.6</td>
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<td>Non-diamond mining as % of tax revenue</td>
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<td>0.5%</td>
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<td>2.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Diamond mining as % of tax revenue</td>
<td>6.2%</td>
<td>8.7%</td>
<td>12.4%</td>
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<td>5.3%</td>
<td>6.3%</td>
<td>4.9%</td>
<td>5.2%</td>
<td>4.1%</td>
</tr>
<tr>
<td>All mining as % of tax revenue</td>
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<td>9.2%</td>
<td>13.7%</td>
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<td>7.3%</td>
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</tr>
</tbody>
</table>

*Source: MoF*

## Licenses Granted

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<tbody>
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<td>Non-Exclusive Prospecting Licences issued</td>
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<td>404</td>
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<td>Claims Registered</td>
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*Source: MME*
### Annual Report 2016

#### Tax Revenue 99/00 - 19/18

<table>
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<tr>
<th>Year (08/09 to 19/18)</th>
<th>Non-diamond mining</th>
<th>Non-diamond mineral royalties</th>
<th>Diamond mining - budgeted</th>
<th>Diamond mining - actual</th>
<th>Diamond profits - budgeted</th>
<th>Diamond profits - actual</th>
<th>Diamond export - budgeted</th>
<th>Diamond export - actual</th>
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<th>Diamond royalties - actual</th>
<th>All mining - budgeted</th>
<th>All mining - actual</th>
<th>Total tax revenue</th>
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#### Percentage of Tax Revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-diamond mining</th>
<th>Diamond mining</th>
<th>All mining</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3.2%</td>
<td>6.2%</td>
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<tr>
<td>2017</td>
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<td>2016</td>
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<td>2015</td>
<td>2.9%</td>
<td>16.7%</td>
<td>19.6%</td>
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#### Source:
MoF
Chamber Committee as at 14 December 2016

Exploration Committee
Volker Petzel (Chairperson)  B2Gold Namibia (Pty) Ltd

HR Committee
Sam Januarie (Chairperson)  Imerys Gecko Holdings (Namibia) (Pty) Ltd

Safety Committee
Benadicta Uris (Chairperson)  Dundee Precious Metals Tsumeb (PTY) Ltd

Mine Surveying Committee
Edmund Nel (Chairperson)  Namdeb Diamond Corporation (Pty) Ltd

Mining Consultative Forum
Kombadayedu Kapwanga  President, The Chamber of Mines of Namibia
Johan Coetzee  1st Vice President, The Chamber of Mines of Namibia
Veston Malango  CEO, The Chamber of Mines of Namibia
Raimo Hausiko (deceased)  President, Mine Workers Union of Namibia
Ebben Zarondo  General Secretary, Mine Workers Union of Namibia
Bro-Matthew Shiguandja  Ministry of Labour, Industrial Relations and Employment Creation
Erasmus Shivolo  Ministry of Mines and Energy
Chamber Members as at 14 December, 2016

Class A Founder Members
Namdeb Holdings (Pty) Limited
Rössing Uranium Ltd
Weatherly Mining Namibia

Class A Members
Skorpion Mining Company
QKR Namibia
Rosh Pinah Zinc Corporation (Pty) Ltd
Langer Heinrich Uranium Ltd
AREVA Resources Namibia
Swakop Uranium (Proprietary) Ltd
B2Gold Namibia (Pty) Limited

Class A Founder Members
O. N. Shikongo
W. Duvenhage
C. Thomas
A. Thomson

Class A Members
I. Simataa
J. Coetzee
C. Horn
S. Solomons
M. Chalmers
H. Mbako
Z. KePing
M. T. Dawe

Class B Members
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OHORONGO Cement (Pty) Ltd
Zhonghe Resources (Namibia) Development (Pty) Ltd
Imerys Gecko Holdings (Namibia) (Pty) Ltd (Okorusu mine)
Namibia Marble & Granite (Namagra) (Pty) Ltd
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Class B Members
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L. Jubber
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Otjozondji Mining (Pty) Ltd
R.E.D. Graniti Namibia (Pty) Ltd
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Rio Tinto Mining & Exploration Limited
Hallie Investment No. 14 (Pty) Ltd
North River Resources (West Africa Gold)
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Marenica Energy Ltd
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African Huaxia Mining (Pty) Ltd
AVONLEA Minerals Limited
Ladestone Namibia (Pty) Ltd
Namibian Marine Phosphate (Pty) Ltd
Afri-Can Marine Minerals Corporation
Pitchstone Exploration Namibia (Pty) Ltd
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NABIRM Energy Services (Pty) Ltd
“Petunia Investment Three” (Pty) Ltd
Namibia East China Non-Ferrous Investment (Pty) Ltd
Osho Resources Namibia (Pty) Ltd
Epangelo Mining Company (Pty) Limited
Manila Investment (Kombat Copper Inc.)
Jindal Mining Namibia (Pty) Ltd
Top Storey Investment
Zander Mineral Investments (Pty) Ltd

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A. Li
D. Riekie
A. Mayrick
H. Scheepers
B. J. Tourillon
S. J. Blower
E. Pekema
O. O. Arowolo
E. Repina
L. Ming
F. Ngorima
E. Hawala
A. Tizard
I. Prasad
F. Van Vuuren
P. Lemmon
C. Mutizwa
K. Kaura
J. H. Akwenye
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C. Thomas
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J. Lusse
H. Schierschmidt
R. Scholtz
S. Masiza
L. Strauss
A. Speiser
J. Hosking
A. Palfi
S. Ndjaba
E. Freyer
I. Namaseb and L. van Schalkwyk
P. Coetzee
A. Bruckner
S. Jordaan
P. J. M Koster
A. Lang
C. Groenewald
F. Schutz
J. Crafford
G. Symons
E.D.G. Mueller
F. Foord
Dr. L. Maartens
W. Joubert
G. McGregor
C. Murta
M. Diedericks
B. Schiekerling
B. Muller
G. Leicher
A. Grobler
H. Herrlich
A. Kostopoulos
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Kraatz Marine (Pty) Ltd

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R. Wartha
J. Kaitungwa and N. Du Plooy
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J. Hosking
A. Palfi
S. Ndjaba
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I. Namaseb and L. van Schalkwyk
P. Coetzee
A. Bruckner
S. Jordaan
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B. Muller
G. Leicher
A. Grobler
H. Herrlich
A. Kostopoulos
D. van Niekerk

P. Zietzman
S. S. McGregor
V. Simumba
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N. Muller
M. von Dorsten
G. Dreyer
T. Tjazuko
D. Roeseman
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Cymot (Pty) Ltd
Desert Mining Supplies
ALS Laboratory Namibia (Pty) Ltd
Taurus Maintenance Products (Pty) Ltd
Shali Group Holdings (Pty) Ltd
African Bounty cc.
Mincon Namibia (Pty) Ltd
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Namibia Mining Industrial Solutions
Weir Minerals Pumps & Mining Solutions.
Power Line Africa (Pty) Ltd
Verminen Mining Services CC.
3M Personal Safety Namibia  A. Nel
Basil Read Mining Namibia (Pty) Ltd
BARTKO Mining Namibia (Pty) Ltd
Bulk Mining Explosives Namibia
ADP Namibia (Pty) Ltd

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<td>T. Lamboy</td>
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</table>

**Honourable Life Members**
Honourable A Toivo ya Toivo
Mr. Steve Galloway

**Oil and Gas Members**
Eco (Atlantic) Oil & Gas Ltd
Chariot Oil & Gas
Petrobras Oil & Gas B.V.

<table>
<thead>
<tr>
<th>G. Holzman</th>
<th>A. Friedman</th>
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<td>R. Mwanachilenga</td>
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<td>R. Maueler</td>
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</tbody>
</table>
Chamber of Mines Namibia
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1st Vice President: Mr Johan Coetzee
2nd Vice President: Mr Hilifa Mbako
Chief Executive Officer: Mr Veston Malango

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Useful Documents and Websites
Ministry of Mines and Energy: www.mme.gov.na
- Diamond Act 1999 (Act No. 13 of 1999)
- Minerals Policy of Namibia (Ministry of Mines and Energy)
- Minerals Amendment Act 2008 (Act No. 8 of 2008)

Ministry of Environment and Tourism: www.met.gov.na
National Planning Commission: www.npc.gov.na
Bank of Namibia annual and quarterly reports: www.bon.com.na

References
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Fax: +264 61 284 8363/ 220 386

Permanent Secretary
Mr Simeon Negumbo
Tel: +264 61 284 8312
Fax: +264 61 220 386
<table>
<thead>
<tr>
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<tr>
<td>AFIIR</td>
<td>All Frequency Injuries Rate</td>
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<tr>
<td>ASX</td>
<td>Australian Stock Exchange</td>
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<td>BFS</td>
<td>Bankable Feasibility Study</td>
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<td>CGNPC</td>
<td>China General Nuclear Power Holding Company</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>DBMN</td>
<td>Debmarine Namibia</td>
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<td>DFS</td>
<td>Definitive Feasibility Study</td>
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<td>DIFR</td>
<td>Disabling injury frequency rate</td>
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<td>DPMT</td>
<td>Dundee Precious Metals Tsumeb</td>
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<td>ECC</td>
<td>Environmental Clearance Certificate</td>
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<td>EDF</td>
<td>Erongo Development Foundation</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EMP</td>
<td>Environmental Management Plan</td>
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<td>EMS</td>
<td>Environmental Management System</td>
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<td>EPAR</td>
<td>Environmental Performance Assessment Report</td>
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<td>EPL</td>
<td>Exclusive Prospecting Licence</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GFCF</td>
<td>Gross Fixed Capital Formation</td>
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<td>GRN</td>
<td>Government of the Republic of Namibia</td>
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<td>HSE</td>
<td>Health, Safety, Environment</td>
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<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<td>ISO</td>
<td>International Organisation for Standardisation</td>
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<td>JSE</td>
<td>Johannesburg Stock Exchange</td>
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<tr>
<td>JV</td>
<td>Joint Venture</td>
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<td>lb</td>
<td>imperial pound</td>
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<td>LME</td>
<td>London Metal Exchange</td>
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<td>LoM</td>
<td>Life of mine</td>
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<td>LTI</td>
<td>Lost time injury</td>
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<td>LSE</td>
<td>London Stock Exchange</td>
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<td>LTIFR</td>
<td>Lost time injuries frequency rate</td>
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<td>MANWU</td>
<td>Metal and Allied Workers Union of Namibia</td>
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<td>MET</td>
<td>Ministry of Environment and Tourism</td>
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<td>MFMR</td>
<td>Ministry of Fisheries and Marine Resources</td>
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<td>ML</td>
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<td>Ministry of Finance</td>
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<td>MUN</td>
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<td>mv</td>
<td>Motor vessel</td>
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<td>NEEEF/B</td>
<td>New Equitable Economic Empowerment Framework/Bill</td>
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<td>NIMT</td>
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<td>NOSA</td>
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<td>NUI</td>
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<td>Previously Disadvantaged Namibian</td>
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<td>PDP</td>
<td>Probe Drill Platform</td>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>ppm</td>
<td>parts per million</td>
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<td>R&amp;D</td>
<td>Research and Development</td>
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<td>RC</td>
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<td>SADC</td>
<td>Southern African Development Community</td>
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<td>SEA</td>
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<td>SEIA</td>
<td>Social and Environmental Impact Assessment</td>
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<td>SHEQ</td>
<td>Safety, Health, Environment and Quality</td>
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<tr>
<td>SHG</td>
<td>Special High Grade</td>
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<tr>
<td>SME</td>
<td>Small and Medium Sized Enterprises</td>
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<tr>
<td>st</td>
<td>short ton (equivalent to 0.907 tonnes)</td>
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<tr>
<td>troy oz</td>
<td>troy ounce (equivalent to 31.104 g)</td>
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<td>UNAM</td>
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<td>VAC</td>
<td>Value Addition Committee</td>
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<td>WNA</td>
<td>World Nuclear Association</td>
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