Mining Markets in Southern Africa
2014

Sponsored by the Virginia Economic Development Partnership (VEDP)

Report prepared by Zurcom International

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INTRODUCTION

Southern Africa has proven reserves approaching $5 Trillion in value, with approximately 3,000 active registered mines. Virginia exporters in the mining equipment, consumables and services sectors can benefit from this large market through the services of the Virginia Economic Development Partnership. This market research report covers the mining industry in general for the southern African region, with specific reference to 10 countries in the region that have burgeoning mining sectors. The countries include Angola, Botswana, the Democratic Republic of Congo (DRC), Madagascar, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe. The report will provide an overview of the Southern African Development Community (SADC) region, going into further detail of the sub-sectors of mining that are prominent in the region. Mining equipment and consumables are also explored, followed by fact sheets specific to each country. This report has been compiled with the intention of providing useful information for the mining industry, for potential investors, companies and clients to assess the area of opportunity best suited for them. The figures used are as recent as possible, with the information provided being the current circumstances in the region.

Southern African Region

VEDP has a contract office covering this region, with staff located in South Africa (Pretoria and Durban), Mauritius, Tanzania and Zambia. The service offering includes market research, business partner and end-buyer searches, and a range of other services available through designated VEDP offices throughout Virginia.
MINING SECTOR OVERVIEW

Africa, as a whole, has experienced extraordinary growth with GDP averaging 5% per year from 2003 to 2013. Southern Africa and East Africa top this, with many countries topping over 7% growth. There is tremendous interest in Africa for growth opportunities due to the continent’s wealth of minerals and over 1,800 mining projects in various stages of development or operation in South Africa alone. Mining is an industry of strategic importance in Southern Africa. Most of the world’s chromium, vanadium, platinum, and diamonds originate in the region, along with 36% of gold and 20% of cobalt. These minerals contribute greatly to several Southern African Development Community (SADC) Member State’s gross national product (GNP) and employment, and many of them depend on mineral exports for their foreign exchange earnings. From a regional perspective, members of SADC produce two-thirds of Africa’s mineral exports by value. The easing of South Africa’s exchange control has opened the way for both local and foreign companies to make greater use of the Johannesburg Stock Exchange to raise capital for both local and international mining investments. South Africa, being the economic hub of the continent at present, sets the stage for the industry at large in many respects. Activity in South Africa often impacts and influences the rest of the region. Africa has long been a continent plagued by under-development, but relative transformation since 2000 in many spheres of governance have resulted in the continent receiving 15% of global exploration expenditure and mining investment during 2012. Investors have been buoyed by new and improved government policies that facilitate more expedient business opportunities for prospective companies.

Formal mining in the region accounts for about 60 per cent of foreign exchange earnings, 10 per cent of GDP and five per cent of formal employment. Due to the region’s endowment of world-class deposits of coal, chromite, gold, diamonds, platinum and copper, the minerals sector has played a major role in the development of infrastructure. The minerals industry has been the nucleus for the growth of many towns and cities within the sub-region. Most rail and road infrastructure was developed to serve the movement of material inputs to and outputs from the mines to local, regional and external markets. Similarly, since the mining sector uses substantial quantities of electric power, many generating units were constructed to service the sector. The infrastructure built from the development of the region’s mineral resources has had spin-off benefits to the rest of the economy. The sector therefore has the potential to contribute to increased economic growth and job opportunities as further exploration and mineral development takes place and further mineral processing occurs within the regional boundaries. In addition to these forward and backward linkages, the minerals industry is a source of rent for use in other economic and social sectors and many countries in the region have been able to develop infrastructure and improve human capital using rent from the sector.

Roughly over the last five to seven years, there has been a major shift in mining to rapid-growth economies. The development of mineral resources in rapid-growth economies had been a challenge in the past due to a number of factors, many of which continue to exist. Rapid-growth economies do not have well-developed exploration practices, and they lack strong geological information, sufficient infrastructure to support mining, and clear and well-developed mining and government policies. Their capital markets are underdeveloped and foreign investors are wary of high risks. Nevertheless, these economies are increasingly becoming better placed. Huge mining investments have been made in rapid-growth markets. The trend is set to continue in the longer term, despite some recent risk aversion.
Ernst & Young (EY) has chosen 25 fast growing markets around the globe using the following criteria:

» Proven strong growth and future potential
» Size of economy and population
» Strategic importance for business

South Africa is the chosen country in Southern Africa. Rapid-growth markets have played a significant role in the global mining and metals sector, particularly in the last decade. The minerals price boom in the last decade (most specifically during 2003–08) was primarily due to global demand for minerals from these markets. Of equal significance is the contribution of these economies to the global supply of various minerals. Growth of global minerals supply from rapid-growth economies has far outweighed the supply from developed economies. Rapid-growth markets are the key producers of a range of commodities: platinum (South Africa) and diamonds (Botswana). These markets have stepped in to incrementally meet the growing global demand for minerals and, in the process, have gained an increasing market share in global minerals trade.

Africa’s share of global exploration spending rose to 17%, making it the second-most preferred destination for exploration (includes North and West Africa). The Democratic Republic of Congo (DRC) was the most preferred destination for exploration spending. Africa had accounted for a meagre 3% of M&A deals in 2007 before it leapt to 19% by 2012. Sub-Saharan Africa received 9% attraction as a top destination for non-ferrous exploration in 2012.

AFRICA CHALLENGES AND KEY CONSIDERATIONS

» Resource nationalism
» Shortages of skilled resources
» High level of HIV/AIDS
» Access to transport and utility infrastructure
» Regulatory and fiscal regimes – complying and operating in constantly evolving regulatory and fiscal environments
» Increased regulations around climate change in some countries
» Government/indigenous ownership
» Socioeconomic and social-political challenges – these can influence competitiveness, stability and performance of labor

» High cost of capital – the lack of developed capital markets could mean high cost of capital

» Drop in rankings – Africa’s average Policy Potential Index score declined further in the Fraser Institute’s 2012/2013 mining survey. Botswana (with rank of 17) is the only African country in the top 20 nations Tax and regulatory landscape. The tax and regulatory requirements vary greatly across the continent Increasing resource nationalism – this is a common driver of the tax agenda in many African countries, with notable exceptions, such as Mozambique and Botswana Royalty rates – these vary and are often differentiated by commodity and/or by whether the company is domestic or inbound Tax deductions – some countries are making significant efforts to increase international investment by offering tax deductions on research and development, export market development costs, and pre-production expenses.

RECENT CHANGES TO TAX POLICY IN THE REGION

» DRC – increased its tax on copper and cobalt concentrates from US$60 to US$100 per metric ton to increase domestic beneficiation

» Gabon – will introduce mandated beneficiation

» Ghana – introduced the National Fiscal Stabilisation Levy Bill that will impose a 5% tax on profits of mining companies

» Mozambique – is reportedly set to introduce a 32% capital gains tax on the sale of local assets by foreign countries from January 2014

» Tanzania – will introduce mandatory procurement of at least 80% of goods and services from local businesses by 2015

Growth and enabling factors

» Vast mineral reserves – the African continent accounts for nearly two-thirds of the world’s mineral reserves and more than half of the world’s mineral reserves for gold, platinum group metals, cobalt and diamonds. Africa also has one of the largest reserves of uranium, manganese and chromium in the world

» Major minerals producer – Africa produces more than 60 minerals and is a major producer of gold, platinum group metals, diamonds, uranium, manganese, nickel, bauxite, cobalt and chromium

» High levels of exploration activity – during the last few years, exploration activities across the African continent have significantly increased. In 2012, more than 17% of global exploration costs were incurred in Africa, with the DRC holding the top place for exploration spending in Africa. Of particular interest are the recent significant findings of copper, cobalt, thermal coal, metallurgical coal, iron ore, uranium, bauxite, gold and nickel deposits

» Investment destination – rapid-growth markets, such as China and India, are investing heavily in Africa to secure supply of minerals. Botswana’s favorable mineral investment climate, low tax rates and political stability are expected to continue to attract foreign mineral investment. It has some of the lowest tax rates in the region and there is little government interference in the mining sector

» Investment-friendly policies – many African countries are taking steps to encourage investment, e.g., Mozambique has pledged not to increase mining taxes
RESOURCE NATIONALISM

The term is defined as the drive by governments and communities to proclaim control over natural resources (and the benefits thereof) located within their sovereign borders. In Africa’s context resource nationalism is a drive to increase the benefit obtained by Africans from minerals mined and exported often by foreign companies. The resurgence of this phenomenon is a result of several factors, including the achievement of a state-controlled Chinese economy; the success of state-owned companies like Brazil’s Petrobras; expectations of a continued rise in commodity prices; and the shortcomings of capitalist/free-market philosophies seen in some countries guided by the Bretton Woods Institutions – the World Bank and International Monetary Fund (IMF). Resource nationalism is the primary risk for mining companies worldwide followed by skills shortages and infrastructure access. This has been the impetus behind recent beneficiation policies coming to the fore in government’s approach to mining in the future.

BENEFICIATION

Critical current issue is that of beneficiation; governments in Southern Africa proposing value addition to minerals prior to exports. In the last year alone, Zimbabwe, Zambia, Democratic Republic of Congo (DRC), Namibia, South Africa and others have hinted at, announced or put in place measures aimed at adding value to minerals exports, which would boost tax revenue, encourage formation of new businesses and add jobs. But with falling metal prices and a drastic reduction in the capital available for the mining industry, wary companies are increasingly shying away from investment in countries where there is policy uncertainty. The top five mining companies are slashing total capital spending from a peak of about $70-billion in 2012 to an expected $46-billion in 2015. Zimbabwe, which holds the world's second-largest platinum reserves after South Africa, has taken a hard line. President Robert Mugabe late last year threatened to stop exports of raw platinum in a bid to force mining firms to process the metal domestically. South Africa is one of the wealthiest mining jurisdictions in the world, yet it continues to export most of its minerals as ores or semi-processed minerals rather than high value intermediate to finished products. South African Mineral Resources Minister, Susan Shabangu, has explained that “value addition was critical to move away from the persistent extractive nature of African mining”.

CHINESE ECONOMY

One of the biggest economic concerns for 2014 is the slow-down of the Chinese economy. China's policymakers announced that it would target 7.5% GDP growth target for 2014, which is down from 7.7% growth in 2013 (the lowest since 1999). Being the second-largest economy in the world, this slow-down has massive implications. Chinese Premier Li Keqiang has warned that the economy faces severe challenges in 2014, hinting that Beijing would tolerate slower economic expansion this year while it pushes through reforms aimed at providing longer-term and more sustainable growth. Raised speculation that the People’s Bank of China will provide some form of stimulus to reignite the slowing Chinese economy and recent comments from Fed Chair Janet Yellen that accommodative monetary policy is still required for the foreseeable future has improved appetite for risk assets. China's expansive growth strategies targeted Africa, and this boom opened development opportunities for many African countries. With a slow-down of economic growth, it is likely that specific African countries with large Chinese infrastructure products will be affected. This does provide an opportunity for companies from the USA to enter the market, at a time when African countries want to be responsible for their own development.
MINING COMPANIES

There are numerous multinational mining companies in Africa, with roots on the continent and abroad. The largest mining companies in Africa include BHP Billiton, Rio Tinto, Anglo American, GlencoreXstrata and Barrick. These mining companies, worth an estimated total of US$335 billion, are currently mining vast untapped mineral resources throughout mainland Africa.

Mining is characterized by booms and bursts with its cyclical nature of commodity prices. The primary hindrances to industry development in the region have been identified as governance and infrastructure. Getting policy set right in a dynamic political and economic environment where commodity prices are on the move is proving to be a tricky balancing act. There are many mine investments which hinge upon the upgrade or establishment of entirely new roads, rail, port or electrical infrastructure. There are approximately 330 new infrastructure construction funded projects to the value of $ USD 223bn. It is evident that many African countries have already started on the journey of rehabilitating ageing infrastructure and developing the required roads, rails, ports and power sources to keep up with and facilitate growth.

An industry perspective from investors and private companies concern mainly in the area of policy and regulatory uncertainties, skills shortages, safety, security of power supply, water supply in dry countries like Namibia, and infrastructure challenges. These are strategic risks that threaten the long-term growth prospects of the larger miners, and the short-term survival of cash-strapped juniors.
Below, these are the indicators that companies and investors need to be aware of, as they are current influencing factors for the mining industry.
Below, these risks are the horizon-watchers. While they are not as critical at the moment, they need to be monitored and mitigated by mining and metals companies as risk profiles can change very rapidly in a volatile market.

**INFRASTRUCTURE**

Reports by leading global advisories suggest that African governments are at present unable to meet demand for key infrastructure including rail, ports and energy projects. In response, private participation and investment is being actively encouraged and sought after. This is in conjunction with the efforts some governments are making to develop infrastructure. There are plans in place to rejuvenate existing railways serving Tanzania, Kenya and Uganda.

Namibia continues to invest in the development of their two ports Walvis Bay and Luderitz. Walvis Bay remains the main import and export harbour. Significant investment has been planned to improve the facilities of the harbour and to improve the competitiveness to the ship repair industry supporting the developing oil exploration industry and other offshore mining activities. Luderitz is also developing as an export destination for the country’s zinc and lead exports, despite the incompletion of the TransNamib railway line from Aus to Luderitz, which is due for completion in 2014.

The National Railways of Zimbabwe, the sole rail operator is operating at between 30% – 50% of its capacity because of a myriad of challenges. Goods transport has declined, from 18 million tons in 1998 to 2 million tons in 2010. This has significantly raised the cost of transporting ore. Amongst other things, this has dropped Zimbabwe on the ease of doing business ranking.

The Zambian road network has not kept up with the country’s growth in terms of being able to handle the traffic and weight of what is being transported. The country now has several planned programmes of road infrastructure development such as ‘Link Zambia 8000’, ‘Pave Zambia 2000’ and ‘The Lusaka 4000’ to be implemented over the next 2 to 5 years. A much needed investment as exemplified by the need up in the copper belt. Currently, the road between Solwezi and Chingola (approximately 140 km), carries concentrate from Lumwana and Kinshanshi mines to the Chingola smelters. This flow of product represents more than 8% of the country’s total tax revenue. The road is quickly eroding, full of very large potholes, serious-
ly restricts normal flow of concentrate traffic. The improved roads will speed travel and reduce cost in terms of capital requirements and operating expenditure.

THE PROTOCOL ON MINING

The Protocol on Mining was launched in 2000 and serves the purpose of collaborating efforts on mining work in the region. The SADC Member States have recognised the significance of mining for their economies, in creating massive industries that provide employment and benefits for secondary and tertiary industries to develop. For this reason, the Protocol on Mining binds signatories to agree to adopt internationally accepted regional standards within the mining sector. Through the Protocol Member states agree to share information on exploitable mineral resources in the region, enhance the technological capacity of the sector as well as promote policies that will encourage and assist small scale farming. Environmental and occupational health and safety issues are highlighted.

As part of the Protocol on Mining, Member States of SADC have been engaged to harmonise their policies and procedures for mineral extraction, cooperating on improving technical capacity and sharing knowledge. With a goal to grow the mineral industry in Southern Africa, SADC Member States also agree to encourage private sector developments, including small-scale projects that promote economic empowerment of those who have been historically disadvantaged in the mining sector. Because mining can be a hazardous undertaking, the Protocol on Mining also requires that Member States observe internationally-recognised health and safety and environmental protection standards. In order to facilitate these goals, the Protocol on Mining also calls for an organisational structure consisting of a Committee of Mining Ministers, a Technical Committee of Officials, and a Mining Coordinating Unit to oversee mining operations and ensure that applicable standards are upheld.

Likewise, the Protocol on Mining prompted several Member States to sign bilateral agreements with countries outside SADC, which has boosted investment. A recent success story regarding investment comes from Tanzania, which attracted considerable investment after it modernised its mining legislation, following encouragement and support from SADC. It is now one of the SADC region's leading gold producers.

CHAMBER OF MINES

Although by their very definition, the Chambers of Mines are there to protect and promote the interests of their members, their roles have evolved to work closely with governments as major stakeholders to address major common challenges such as job creation and poverty alleviation. More jobs can only be created by increased private sector investments in exploration, mining and associated mineral beneficiation. The Chambers of Mines have a role to play in attracting FDIs and thus need to work closely with government to ensure parallel cooperation.

Deep rooted mistrust between governments and mining industry needs to be addressed. The issue of transparent exploitation of mineral resources hinges on governance and accountability by both the governments and Chamber members. The role of the Chamber of Mines is to ensure that their members abide by the respective Chamber Constitutions which amongst others, stipulate that their members shall abide by the laws of the respective Countries. Joining the Extractive Industry Transparency Initiative and regular audits are effective tools to encourage transparency. The fundamental trust is eroded if transparency and accountability is not in place.
MINING SUB-SECTOR OVERVIEW

The US Geological Survey (USGS) ranks Africa as the largest or second-largest reserve worldwide for bauxite (the main source of aluminum), cobalt (used to make alloys and batteries), industrial diamonds (needed to cut hard materials), manganese (the anticorrosive element in steel), phosphate rock (a key ingredient in fertilisers), platinum group metals (a primary component in automotive catalytic convertors), soda ash (an element in glass production), vermiculite (a component in fireproof materials) and zirconium (used to manufacture heat-resistant ceramic materials). The US Energy Information Administration (EIA) predicts that global energy demands should increase by almost 3% a year from 2005 to 2030. The majority of the energy demand increase during this period is predicted to be for fossil fuels such as coal and oil.

Mining production increased by 3,1% year-on-year in January 2014. The highest positive growth rates were recorded for nickel (27,4%), manganese ore (25,5%) and building materials (22,9%). The main contributors to the 3,1% increase were iron ore (contributing 2,1 percentage points) and manganese ore (contributing 1,3 percentage points). Coal was a significant negative contributor (contributing -2,1 percentage points). Seasonally adjusted mining production decreased by 1,1% in January 2014 compared with December 2013. This followed month-on-month changes of 5,9% in December 2013 and -3,1% in November 2013. Seasonally adjusted mining production increased by 4,0% in the three months ended January 2014 compared with the previous three months. The main contributor to the 4,0% increase was iron ore (contributing 4,8 percentage points).

Seasonally adjusted mineral sales at current prices decreased by 0,2% in December 2013 compared with November 2013. This followed month-on-month changes of -3,2% in November 2013 and 2,6% in October 2013. Seasonally adjusted mineral sales at current prices decreased by 2,2% in the fourth quarter of 2013 compared with the previous quarter. This decrease was largely driven by the sales value
of manganese ore (contributing -1.2 percentage points), gold (contributing -0.7 of a percentage point) and ‘other’ metallic minerals (contributing -0.6 of a percentage point).

Specific attention will be paid to copper, coal, iron ore, gold, diamonds, platinum materials and chrome.

COPPER

The Copper Industry in Southern Africa is dominated by Zambia, the DRC and South Africa. On a smaller scale, Namibia, Botswana and Zimbabwe are also involved within this industry. The DRC overtook Zambia as Africa’s largest copper producer and the world’s seventh largest producer in 2013. The DRC produced 942,000 tons whilst Zambia produced 915,773 tons. Zambia held the title of Africa’s largest producer for 26 years prior to 2013. South Africa’s production in 2013 stood at 94,000 tons. Currently, South Africa’s primary reserves are decreasing because the local primary copper mines are nearing their end-of-life and the remaining copper mines in South Africa do not have enough sustainable capacity and reserves to provide the necessary supply required by the local industry. This development will mean that SA will rely more on other countries for supply.

The Copperbelt is the main copper mining area in Africa. It is situated in Central Africa and runs through Zambia and the Democratic Republic of Congo. Taken together, the DRC and Zambian copper belts are the second largest global reserve of copper. The copperbelt’s deposits yield a high grade of between 2 – 3% in comparison with the global average yield of roughly 8%.

Major mines in the Zambian copperbelt area include:

- Chambishi (owned by ZCCM Investments Holdings Plc)
- Chibuluma (owned 85% by Jinchuan Group Company Ltd and 15% by ZCCM Investment Holdings Plc)
- Kansanshi (largest copper mine in Africa, 80% owned by Kansanshi Mining PLC, a First Quantum subsidiary and 20% by ZCCM Investment Holdings Plc)
- Konkola (owned by Konkola Copper Mines PLC (KCM) a subsidiary of Vedanta Resources Plc)
- Lumwana (owned by Barrick Gold Corporation)
- Mopani (owned 73.1% by Glencore International AG, 16.9% by First Quantum Minerals Ltd and 10% by ZCCM Investment Holdings)
- Nchanga (owned by Konkola Copper Mines PLC (KCM) a subsidiary of Vedanta Resources Plc)

Major mines in Democratic Republic of Congo copperbelt area include:

- Tenke Fungurume (owned 56% by Freeport- McMoRan Copper & Gold Inc. (“FCX” or “Freeport”) is the operating partner, 24% by Lundin Mining and 20% free carried interest by La Générale des Carrières et des Mines (“Gécamines”), the Congolese state mining company)
- KOV (opened by Katanga Mining Ltd)
- Etoile (owned by 99.68% - Chemaf and 0.32% - Shiraz Virji and Abbas Virji. 5% undertaking to DRC Government)
- Ruashi (owned 67% by Metorex Ltd and 23% by state owned Gécamines)
- Kinsevore (owned by China Minmetals Corp)
- Luwishi
- Kipoi (owned 60% by Tiger Resources and 40% by the state owned Gécamines)
- Dikuluwe
Major mines in South Africa where copper is mined:

» Insizwa (BSC Resources)
» Musina Copper Project (owned by New Hana Copper Mining)
» Bokoni Platinum Mines (Atlatsa Resources)
» Foskor (Phalaborwa) (owned by Industrial Development Corporation)
» Northam Platinum (Zondereinde) (owned by Northam Platinum)
» Palabora Mining (Palabora Mining Company, member of Rio Tinto)
» Union Section (Swartklip) (Anglo Platinum)
» Rooipoort Platinum Project (owned by Caledonia Mining)
» Palabora Mining & Smelter Refinery (Palabora Mining Company, member of Rio Tinto)
» Nkomati Mine (Norilsk Nickel & African Rainbow Minerals)
» Bafokeng Rasimone Platinum Mine (Royal Bafokeng Platinum & Anglo Platinum)
» Barplats (Eastern Platinum)
» Kroondal Platinum Mine (Anglo Platinum & Aquarius Platinum)
» Marikana Platinum Mine (Anglo Platinum & Aquarius Platinum)
» RPM – Rustenberg Section (Anglo Platinum)

Copper Development Association Africa (CDAA) – www.copper.org

COAL

Currently, coal production in southern Africa is dominated by South Africa followed by Zimbabwe and Botswana. Coal production in the region is expected to reach 308 million tonnes by 2018. The increasing global and regional demand for energy, coupled with rising coal prices and copious coal reserves, would warrant the implementation of coal expansion projects in Southern Africa. Data from Frost & Sullivan shows that southern Africa had 53 coal expansion projects in 2012, worth about US$45.6bn and the total coal production in the region stood at 266.1mn tonnes. Part of this production was used for exports to Europe, India and China. The region relies heavily on coal for electricity generation and for powering the cement- and steel-manufacturing industries.

For the near future, Southern African coal production is forecasted to grow at a CAGR of 2.5% between 2012 and 2018. Rising global demand for energy, increasing regional demand for energy, rising coal prices, and abundant coal reserves will drive continued growth of Southern Africa’s coal industry. Ports and railway capacity constraints, environmental concerns, and safety concerns are likely to inhibit the continued growth of Southern Africa’s coal industry, which is the reason behind the proliferation of new expansion projects to improve infrastructure. With a plentiful abundance of thermal and coking coal, some estimates suggest that Mozambique will be producing 25% of the world’s coking coal by 2025. Mozambique is poised to become Southern Africa’s second largest coal producer following Vale and Rio Tinto’s entry into the country’s coal sector.

COAL PRODUCTION IN ZIMBABWE

Because of massive re-capitalisation by coal mining firms, Zimbabwe’s coal production increased last year by 40% to 1.2 million tonnes. Accounting for at least 10% of the world’s coal production, a geological survey conducted in Zimbabwe reveals that the country is comprised of over 502 million tonnes in coal reserves.
Hwange Colliery: Explores, mines, processes and markets coal, coke and associated by-products. The Company aims to produce more tonnes of coal per annum in order to satisfy the domestic and export customers.

Chiredzi: The company was granted mining rights in April 2006 and commenced operations in May of the same year. The primary objective of the mining venture was to meet internal coal demands for operations at the Masvingo sponge iron plant. It is located in the Masvingo Mining District in Chiredzi. Mining capacity: 250000 tons per month

COAL PRODUCTION IN MOZAMBIQUE

Mozambique is likely to overtake Zimbabwe as the region’s second largest coal producer. The Mozambique government recently awarded four coal concessions amounting to US$5 billion. More than 1 000 permanent jobs will be generated from the coal production projects underway in Mozambique. Large-scale coal development projects, coupled with the upgrading of ports and railway infrastructure, will sharply increase the country’s coal production.

Benga coal mine: Opened in May 2012, undertook its first coal exports in June 2012.

Benga Colliery: Owners/companies (percentage stake): Rio Tinto Ltd. (65%), Tata Steel Ltd. (35%). Commodities mined: thermal Coal, Coking coal.

Minas Moatize: Owners/companies (percentage stake): Beacon Hill Resources Plc (95%), Government of Mozambique (5%). Commodities mined: Coal (Thermal and coking).


Rio Tinto: Rio Tinto Coal Mozambique holds mining and exploration licences in the Moatize Basin in the Tete province of Mozambique. Rio Tinto Coal Mozambique manages the Zambeze Project (100 per cent); Tete East Project (100 per cent); Benga Mine (65 per cent); and the Zululand Anthracite Colliery (74 per cent).

COAL PRODUCTION IN BOTSWANA

Morupule Coal Mine: Started production in 1973 as an Anglo American Corporation subsidiary with the main objective being to supply coal to the then Bamangwato Concessions Limited mine (now BCL) and BPC power plant situated in Selebi Phikwe.

COAL PRODUCTION IN SOUTH AFRICA

Large-scale coal development projects in South Africa will consolidate the country’s lead as largest coal producer in Southern Africa. The coalfields are located in the Central basin of Mpumalanga, which comprises the Witbank, Ermelo and Highveld coalfields. To meet the increase in energy demand, Eskom (the electricity utility) is building two new power stations and has re-commissioned another three power stations. Domestically, South Africa consumes almost 190-million tons a year of coal, which is expected to increase to 250-million tons a year in the next ten years. Eskom will require almost 200-million tons a year of coal by 2017, a significant increase from the 140-million tons a year the utility currently consumes.

Sasol (the energy and chemicals group), which accounts for almost 30% of the country’s transportation fuel requirements, is expanding the capacity of its synthetic fuels (synfuels) production plant, in Mpumalanga. The company’s expansion projects will result in the consumption of an additional 25-million tons of coal a year when the project is completed. This will expand Sasol’s synfuels manufacturing capacity, which will, in turn, reduce South Africa’s oil import bill and exposure to oil price hikes. Lower-quality
thermal coal, traditionally used by Eskom for power generation, is being exported to India, China and the European Union, because of the low ash and sulphur content in coal from SA.

South Africa has several small to medium scale producers that produce coal primarily for the domestic market as well as specific export markets such as anthracite. Here Canadian listed AfriOre have a 50% interest in the Springlake anthracite JV that produces nearly 1 Mt of high quality export anthracite per year. Through its subsidiary Wakefield Investments, Metorex operates the Leeuwwfontein Colliery located near the town of Kendal, east of Johannesburg. Leeuwwfontein consists of three collieries, viz. Leeuwwfontein, Bankfontein and Lakeside that collectively produce approximately 1.3 Mt of coal per year.

Coal mines in South Africa

» Ingwe (South Africa’s largest coal producer and one of the world’s largest steam coal exporters)
» Anglo Coal – (A division of Anglo American plc and is one of South Africa’s major coal producers and exporters)
» Xstrata (Following a year of consolidation for Glencore, subsidiary Xstrata has purchased Glencore’s South African and Australian coal interests to become a premium coal producer. Glencore will remain a major shareholder of Xstrata with 40%)
» Sasol Mining (A division of Sasol Ltd and is the world’s seventh largest coal mining enterprise)
» Kumba Resources (The new unbundled mining arm of the South African Iron and Steel Company. Nearly 75% of Kumba’s domestic coal production is used as feed to Eskom with the remainder being used primarily in Iscor’s steel works located in Vanderbijlpark, Vereeniging, Saldanha and Newcastle)
» Eyesizwe Coal (South Africa’s fourth largest coal producer and was formed in late 2000 as a black empowerment initiative between Ingwe and Anglo American)

IRON ORE

Africa’s Iron ore production is dominated by South Africa. Zimbabwe produces minor amounts mainly for domestic consumption. Angola has significant iron ore potential with the possible reopening of the large Cassinga mine, depending on the security situation in the country. South Africa’s position as the number three supplier of iron ore to China emphasises the strategic importance of iron ore deposits in the country and its importance as a significant iron ore contributor worldwide. South Africa is the seventh largest producer of iron ore and has also traditionally been the fourth largest exporter worldwide. Projections forecast iron ore to average US$99/tonne over 2014-2017 compared to a peak average of US$176/tonne in 2011. Most of Africa’s iron ore producers are operated and controlled by the State. South Africa’s Kumba Resources is an exception, being Africa’s largest iron ore producer, producing iron from two opencast operations, Sishen and Thabazimbi in South Africa.

Iron Ore in South Africa

» Bushveld Iron Ore Projects (Owned by Bushveld Minerals)
» Northern Lights Iron Ore Projects (Owned by Midwinter Resources, Australia)
» Thabazimbi Project ( Owned by Aquila Resources, Australia)
» Turquoise Moon Iron Project (Owned by Ferrum Crescent)
» Palabora Mining (Owned by Palabora Mining Company)
» Thabazimbi Iron Ore Mine (Owned by Kumba Iron Ore)
» Idwala Magnetite (Owned by Idwala Industrial Holdings)
» Mapochs mine (Owned by Evraz Highveld Steel & Vanadium)
» Beeshoek Iron Ore Mine (Owned by African Rainbow Minerals & Assmang)
» Sishen (Owned by Kumba Iron Ore)
» Koegas FeMn ( Owned by Unimin Africa Resources)
» Lehating Project (Owned by Lehating Mining)

Iron Ore in Angola
» Cassinga Iron Ore Mine (Owned by Angola Exploration Mining Resources (AEMR))

Iron Ore in Botswana
» Xaudum Iron Ore Projects (Owned by Tsodilo Resources, USA)

Iron Ore in Zimbabwe
» Buchwa Iron Mining Company

GOLD
Africa is a major producer of gold, producing up to 30% of global production. South Africa being one of the global leaders in gold production, also has the highest average production costs in the world. Gold mine production is centred on underground and open pit operations mainly in South Africa and Zimbabwe. South Africa holds 35% of global gold resources and exports 99% of gold output. The last few years have seen some major restructuring of South Africa’s major gold producers with AngloGold, recently listed on the LSE and NYSE, and Gold Fields having become the country’s major producers. Other major producers in South Africa are Harmony, Durban Roodepoort Deep, ARM Gold and Avgold. Zimbabwe is richly endowed with deposits of gold, making its gold reserves among the largest in Africa. In 2013 gold production increased by 13%, in 2012 was 14,742kg, a 13.5% increase from 12,992kg in 2011. Gold is East Africa’s biggest mining resource with Tanzania being the largest regional miner of the yellow metal at present, while exploration has also been conducted in the country for nickel and uranium. Gold reserves in the country are estimated to be over 30 million ounces, with only a small part of it currently being mined. These reserves equate to nearly 850 tonnes of gold, which at current production levels imply a lifespan of over 20 years left for gold mining bar any significant new discoveries.

Gold Mines in Democratic Republic of Congo
» Kibali Gold Mine (Owned by Randgold Resources & AngloGold Ashanti)
» Mongbwalu Mine (Owned by AngloGold Ashanti)
» Twangiza Gold Mine (Owned by Banro)

Gold Mines in South Africa
» DRD Lease; Rand Leases (Owned by West Wits Mining)
» East Champ d’or Lease (Owned by Mintails)
» Doornkop Mine; Tshepong Mine; Phoenix Surface Operations; Unisel Mine (Owned by Harmony Gold Mining Company)
» Voorspoed Diamond Mine ( Owned by De Beers Consolidated Mines)
» South Deep Gold Mine (Owned by Gold Fields)
» Barberton Mines (Owned by Pan African Resources)
» Modder East Gold Mine (Owned by Gold One International)
Gold Mines in Tanzania
» Geita Gold Mining (Owned by AngloGold Ashanti)
» Golden Pride (Owned by Resolute Mining)
» Tulawaka Gold Mine (Owned by African Barrick Gold & MDN)

DIAMONDS

Africa is the world's largest producer of diamonds, producing as much as 50% of global production. To date, Africa has produced over 75%, in value, of the world's diamonds with more than 1.9 billion carats worth an estimated $US 158 billion mined. Angola, Botswana and South Africa are the leading producers of diamonds in the Southern African region. Mining activities are centred around South Central Africa, with diamonds being produced primarily from Kimberlite mines (South Africa, Angola, DRC, Ghana, Tanzania, Lesotho and Botswana), followed by alluvial dredging operations (Angola, CAR, Namibia and South Africa) and offshore marine diamond activities (South Africa and Namibia).

### Top Diamond Producing Countries (2013)

<table>
<thead>
<tr>
<th>Country</th>
<th>Carats</th>
<th>Price / Carat</th>
<th>Value</th>
<th>Percent of World Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>21,000,000</td>
<td>$76</td>
<td>$1,613,000,000</td>
<td>22 %</td>
</tr>
<tr>
<td>South Africa</td>
<td>10,000,000</td>
<td>$101</td>
<td>$985,000,000</td>
<td>14 %</td>
</tr>
<tr>
<td>Angola</td>
<td>3,600,000</td>
<td>$150</td>
<td>$544,000,000</td>
<td>8 %</td>
</tr>
</tbody>
</table>

SOUTH AFRICA

South Africa, as one of the diamond hot-houses of the world, and produces approximately US$1.5 billion worth of diamonds a year. Some of the most priceless diamonds in the world have being discovered in the mining field of this nation.

ANGOLA

Angola is the world's fourth-largest diamond-producing country by value and sixth by volume. Currently, Angola has 12 mining productions that are running and also has another 15 scheduled to go online over the next few years. Angola produces approximately US$1.5 billion worth of diamonds a year. In December 2013, the Angolan diamond sector produced over 742,000 carats of diamonds, with the country planning to increase production at an annual average rate of 5 percent, by 2017.

**Angola Diamond Production in Carats**
BOTSWANA

Botswana is the highest producer of diamonds by value in the world, with approximately US $3.3 billion worth of diamonds a year, dominating the mining industry in the country. Large scale diamond production in the country began nearly 25 years ago and majority of the diamond produced in Botswana is of gem quality. Diamonds account for 80% of Botswana’s export revenue, 45% of the government revenue, and 33% of the gross domestic product.

PLATINUM

The Platinum mining Industry in Southern Africa is dominated by South Africa and Zimbabwe.

SOUTH AFRICA

The South African PGM mining sector is one of the largest components of the South African mining sector on the basis of GDP and export earnings and is a significant contributor to the South African economy. In 2012, the PGM mining industry generated R69 billion in sales; was responsible for 23% of the country’s mining exports (9% of total merchandise exports); and has significant direct, indirect and induced multipliers into the rest of the economy, which makes it a significant contributor to the fiscus. South Africa’s PGM production contracted by 13% from 250.7 tons to 217.8 tons in 2012. Platinum production also contracted by 16% to 127.4 tons. The global platinum market swung into oversupply of approximately 13.9 tons in 2011 (450 000 ozs) to an estimated deficit of 11.7 tons (375 000 ozs) in 2012. Global supply fell by 13% to 175.4 tons (5.64 million oz) – the lowest level in 12 years. The main reason for this change was that platinum shipments from South Africa fell by 16% to 127.4 tons (4.10 million oz) in 2012, losing approximately 750 000 ozs due to legal and illegal strike action, safety stoppages and mine closures. Recycling contracted slightly from 64 tons (2.060 million ozs) in 2011 to 63 tons (2.030 million ozs) in 2012.

On average, the platinum mining sector accounts for 2.4% of GDP directly. When one includes the side stream beneficiation multipliers as well as a downstream platinum beneficiation sector, the total contribution (direct, indirect and induced), is approximately 5.7% to South Africa’s GDP. South Africa currently produces 13% of the world’s platinum catalytic converters using 1.2 million ounces of PGMs fabricated by the world’s leading catalytic manufacturing companies. In due course, South Africa could become the leading country in the fabrication and adoption of critically important technologies such as platinum fuel cells. Substantial research in the Platinum Beneficiation Committees (I and II) highlighted the potential for further beneficiation in South Africa and the recommendations from these processes need to be assessed and implemented. However, the substantial downstream platinum catalytic converter industry is under threat due to changes to the incentive programme for the automotive sector.

Platinum Mines in South Africa

- Marula Platinum Mine ( Owned by Impala Platinum)
- Northam Platinum ( Owned by Northam Platinum)
- Palabora Mining ( Owned by Palabora Mining company)
- RPM – Mogalakwena Section ( Owned by Anglo Platinum)
- Smokey Hills ( Owned by Platinum Australia)
- Modikwa Platinum Mine ( Owned by African Rainbow Minerals & Anglo Platinum)
- Mototolo Platinum Mine ( Owned by Xstrata Alloys & Anglo Platinum)
- Bafokeng Rasimone Platinum Mine ( Owned by: Royal Bafokeng Platinum & Anglo Platinum)
- Eland Mind ( Owned by GlencoreXstrata South Africa)
- Impala Platinum Mine ( Owned by Impala Platinum)
ZIMBABWE

Zimbabwe has the second-largest known deposits of platinum in the world. There are three mines currently, namely Zimplats, Mimosa and Unki Platinum. In terms of global incremental output, it is expected that South Africa be overshadowed by Zimbabwe over the next five years and thus South Africa's share of global platinum production to decline. Should Zimbabwe achieve political stability, South Africa could lose out on essential investment to its northern neighbour. In January 2013, Zimplats ceded 51% of its operations to indigenous Zimbabweans as part of the government's indigenisation programme. The company is the largest platinum producer in Zimbabwe with output in 2012 of around 187koz platinum. Zimbabwe considers the PGM resource to be an important aspect of the country's mineral development in the future. Current platinum production is at 188 000 ounces per year. There are currently, two producing mines with a third at an advance stage of mine development. Five other platinum projects are at different stages of resource identification. In addition to gold, the platinum industry has the greatest prospect for immediate development.

Platinum Mines in Zimbabwe

- Mimosa Platinum Mine (Owned by Aquarius Platinum)
- Unki (Owned by Anglo Platinum)
- Bokai Platinum Project (Owned by Eurasia Natural)
- Zimplats (Owned by Zimbabwe Platinum Mines – Zimplats)

CHROME

World resources are estimated to be greater than 12 billion tons of shipping-grade chromite, sufficient to meet demand for centuries. In the region of 95% of the world’s chromium resources are concentrated in Southern Africa and Kazakhstan. South Africa is the world’s largest producer of ferrochrome. The country holds about 70% of the world’s total chrome reserves, mostly located in the Bushveld Igneous Complex (BIC) ores, and produces 75% of the world’s ferrochrome. There are over 4000 registered Chromite mining claims that are current.

SOUTH AFRICA

Chrome Mines in South Africa

- Thaba Mine (Owned by Cronimet Chrome)
- Dilokong Chrome Mine (Owned by Asa Metals)
- Dwarssrivier Chrome Mine (Owned by African Rainbow Minerals & Assmang)
- Eastern Chrome Mines (Owned by Samancor)
- Helena Mine (Owned by GlencoreXstrata South Africa)
- Chromite Tailings Retreatment Project (Owned by Sylvania Platinum)
- Horiaon Chrome Mines (Owned by GlencoreXstrata South Africa)
- Lesedi Mine (Owned by International Ferro Metals)
- Marico Chrome Mine (Owned by Verref Minerals)
- Maroelabult & Bokfontein Mines (Owned by Hernic Ferrochrome)
- Rustenburg Chrome Mine (Owned by Lanxess Mining)
» Sky Chrome Project (Owned by International Ferro Metals)
» Stellite Chrome Mine (Owned by Ruukki Group)
» Western Chrome Mines (Owned by Samancor)
» Zeerust Chrome Mines (Owned by Assore)

**Chrome Smelters/Refineries in South Africa**

» Lannex, Millsell, Steelpoort, Mooinooi, Doornbosch & Tweefontein (Owned by Sylvania Platinum)
» Machadodorp Ferrochrome Works (Owned by African Rainbow Minerals & Assmang)
» Tubatse Ferrochrome (Owned by Samancor)
» Hernic Ferrochrome works (Owned by Hernic Ferrochrome)
» Rustenburg Plant (Owned by Merafe Resources & GlencoreXstrata)
» Wonderkop Plant (Owned by Merafe Resources & GlencoreXstrata)

**ZIMBABWE**

Of the global claims of 4000 registered chromite mines, 46% are held by indigenous Zimbabweans. The balance is held by five large scale mining companies. Major players in chromite production are Zimasco, Zimbabwe Alloys, and Maranatha. Annual production of chrome ore is about 500,000 tons per year. Zimbabwe’s chrome ore grades range between 42% and 48%. The chrome smelting facilities at Zimasco, Zimalloys and Maranatha process chrome ore into High Carbon Ferrochrome, Low Carbon Ferrochrome and Ferrosilicon Chrome. Although there are exports of chrome ore fines, the government is encouraging the local beneficiation of chrome ore before exports can be effected.

» Zimasco (installed capacity capable of producing 180,000 tonnes of high carbon ferrochrome annually and accounts for around 1.2% of global ferrochrome production)
» Zimbabwe Alloys Ltd (manufactures and markets low carbon ferrochromium, ferrosilicon chromium, high carbon ferromanganese, chrome ore, and quartz)
» Maranatha Ferrochrome (Pvt.) Ltd (manufactures ferrochrome)
» Masminerals

**MADAGASCAR**

Chromite production is the major mineral export of Madagascar. The state-owned Societe Kraomita Malagasy (Kraoma), which is Madagascar’s main chromite producer, outputs around 40,000 t/y of concentrates plus 80,000 t/y of lumpy ore from the Andriamana complex, and a further 20,000 t/y from the Befandriana mine. The company exports around 110,000 t of chromite per year - destined for China and Japan. Most production comes from the Andriamana complex, which has identified several additional reserves. Beneficiation by KRAOMA produces a chromite concentrate grading between 48% to 50% Cr2O3 with 0.002% to 0.003% phosphorus and lumpy chrome ore grading from 42% to 44% Cr2O3. Crude ore generally contains 0.007% phosphorous. The Bemanevika mine has been estimated to have reserves totalling 3 Mt of chromite. As most of Madagascar’s chrome resources are located in the northern parts of the country, long term investment in upgrading rail infrastructure is critical to expanding production in Madagascar, which is the world’s 10th largest chrome producer.

» Bemanevika & Ankazotaolana (Owned by Kraomita Malagasy)
MINING EQUIPMENT COMPANIES IN SOUTHERN AFRICA

The countries with a more established mining industry, including supporting infrastructure and regulations, will have more secondary and tertiary mining equipment companies, providing essentials for projects and operations. In this scenario, companies providing alternative products and services with a competitive advantage should fare well, as they are developing the industry further with a unique product offering. In the countries where the mining industry supporting structures are not in place, there are less-established companies that dominate the market, and provides more opportunity for entrants into the sector, to capitalise on the expanding and growing industry.

MINING EQUIPMENT COMPANIES IN ANGOLA

» Cimertex Angola  
  Tel: +244 923 5888 40  
  Web: www.cimertexangola.com

» Promaq Angola  
  Web: www.promaangola.com

MINING EQUIPMENT COMPANIES IN BOTSWANA

» Duneton  
  Tel: +267 397 3951

» Turbo Agencies  
  Tel: +267 71330782  
  Web: www.turbo-agencies.com

» Parts Sales Botswana  
  Tel: +267 3957044  
  Web: www.partssales.co.bw

MINING EQUIPMENT COMPANIES IN THE DEMOCRATIC REPUBLIC OF THE CONGO

» BIA Africa  
  Tel: +243 997 027 918  
  Web: www.biaoverseas.com

» ECM Congo  
  Tel: +243 814 035136  
  Web: www.ecmining.com

MINING EQUIPMENT COMPANIES IN MADAGASCAR

» Rasseta CIE  
  Tel: +261 20 22 25 770

» Triumph International Madagascar  
  Tel: +261 20 224 2494
MINING EQUIPMENT COMPANIES IN MOZAMBIQUE

» Trak Auto Limitada
  Tel: +258 84 301 2858
  Web: www.trak-auto.com

» Bell Equipment Mozambique
  Tel: +258 21 722 022
  Web: www.bellequipment.com

» Agro Alfa
  Tel: +258 21 465911
  Web: www.agroalfa.co.mz

MINING EQUIPMENT COMPANIES IN NAMIBIA

» Lewcor Bulk Mining
  Tel: +264 62 500991

» BM Earthmoving CC
  Tel: +264 (0) 81 128 42 57

» VBKom Namibia
  Tel: +264 81 143 6009

» Arandis Services (Pty) Ltd
  Tel: +264 - 64 – 463928

» Barex Equipment CC
  Tel: +264 61 229 010

» Cymot Namibia
  Tel: +264 61 295 6000
  Web: www.cymot.com

» Windhoek Hire Sales and Services
  Tel: +264 61 233 693
  Web: www.whssnamibia.com

MINING EQUIPMENT COMPANIES IN SOUTH AFRICA

» Dakota Mining and Quarrying Equipment
  Tel: +27 82 832 0969
  Web: www.dakotaequipment.co.za

» LH Lategan
  Tel: +27 18 469 1201
  Web: www.lhlategan.co.za

» BK Afriquip
  Tel: +27 33 343 4639
  Web: www.afriquip.co.za

» DPH
  Tel: +27 11 454 2904
  Web: www.dph.co.za
» Afrimine  
Tel: +27 11 326 3500  
Web: www.afriminesa.co.za

» STM Mining Equipment  
Tel: +27 11 894 6192  
Web: www.stmmining.co.za

» NA.DI Mining Equipment Supplies and Services  
Web: www.nadi-mining.com

» Equipment Spare Parts  
Tel: +27 11 398 1700  
Web: www.espa.co.za

» ELB Equipment  
Tel: +27 11 306 0700  
Web: www.elbequipment.com

» TGS  
Tel: +27 10 001 9200  
Web: www.tgs.co.za

» DGI Trading  
Tel: +27 82 894 5924  
Web: www.dgitrading.com

» Tribix  
Tel: +27 12 345 1059  
Web: www.tribix.co.za

» Eqstra Holdings Limited  
Tel: +27 11 966 2000  
Web: www.eqstra.co.za

MINING EQUIPMENT COMPANIES IN TANZANIA

» Geofields  
Tel: +255 769 976 352  
Web: www.geofieldstz.com

» PanAfrican Equipment  
Tel: +255 222 861 883/1  
Web: www.panafricangroup.com

» Achelis Limited  
Tel: +255-22-2700760  
Web: www.achelis.co.tz

» Delta Industrial Equipment  
Tel: +255 222 860 160  
Web: www.deltagroup.com.eg

MINING EQUIPMENT COMPANIES IN ZAMBIA

» Bloomberg Equipment and Truck Sale
Tel: +260 212 228 057

» **Bresmar Investment Limited**
  Tel: +260 218 821 344

» **BUK Truck Parts**
  Tel: +260 211 845 792
  Web: [www.buktruckparts.co.zm](http://www.buktruckparts.co.zm)

» **CP Engineering**
  Tel: +260 212 218 433

» **Kaufect Zambia**
  Tel: +260 966 950 910

» **Nuco Industrial Services**
  Tel: +260 212 210 731

» **Rock Mech**
  Tel: +260 977 695 097

» **EC Mining Limited**
  Tel: +260 212 210642
  Web: [www.ecmining.com](http://www.ecmining.com)

» **Fluid Base Industries**
  Tel: +260212229930

» **Reliant Zambia**
  Tel: +260 212 251205
  Web: [www.reliantzambia.com](http://www.reliantzambia.com)

**MINING EQUIPMENT COMPANIES IN ZIMBABWE**

» **Zim Mining and Industrial Supplies**
  Tel: +263 772 138 152
  Web: [www.zimis.co.zw](http://www.zimis.co.zw)

» **Viking Hardware Distributors**
  Tel: +263 972 912
  Web: [www.viking.co.zw](http://www.viking.co.zw)

» **Plant and Equipment Sales Pvt Ltd**
  Tel: +263 732 910

» **Bell Pta Ltd Zimbabwe**
  Tel: +263 4 660 687
  Web: [www.bellequipment.com](http://www.bellequipment.com)

» **Machinery Exchange**
  Tel: +263 4 447180/2

» **TGS Zimbabwe**
  Tel: +263 4 485-771-5
  Web: [www.tags.co.za](http://www.tags.co.za)
COUNTRY FACT SHEETS

The following section includes individual fact sheets of ten countries in the Southern African region, including Angola, Botswana, the Democratic Republic of Congo (DRC), Madagascar, Mozambique, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe. The information is specific to each country with essential facts, regulations and projections for the mining industry in each country. The figures used are the most recent that were available.

ANGOLA

Capital: Luanda
Population: 19,088,106
Population growth rate: 2.78%
Area: 1,246,700 sq km
GDP: $131.8 billion
GDP - real growth rate: 5.6%
GDP - per capita: $6,300
Inflation rate: 8.9%
Unemployment: 8%
Languages: Portuguese (official), Bantu and other African languages
Currency: Angolan Kwanza (AOA)
Exchange rate: 1USD = 97.5AOA

OVERVIEW

Angola is still rebuilding its country since the end of a 27-year civil war in 2002. Fighting between the Popular Movement for the Liberation of Angola (MPLA), led by Jose Eduardo Dos Santos, and the National Union for the Total Independence of Angola (UNITA), led by Jonas Savimbi, followed independence from Portugal in 1975. Peace seemed imminent in 1992 when Angola held national elections, but fighting picked up again in 1993. Savimbi’s death in 2002 ended UNITA’s insurgency and cemented the MPLA’s hold on power. President Dos Santos pushed through a new constitution in 2010 with presidential elections having been abolished.

Angola’s mining industry continues to provide the country with foreign earnings. Mining contributes 12% of Angola’s GDP (excluding the oil sector). The outlook for the near future remains positive, with economic growth projected to reach 7.8% in 2014. Mining in Angola has only explored 40% of the country’s estimated diamond resources – suggesting opportunities and future growth. Angola’s main mineral products are oil and diamonds.

Angola is Africa’s second-largest oil producer, producing more than 1.9 million barrels per day. But with estimated reserves of over 13 billion barrels, the country will not run dry in the near future. Much of the oil is pumped from offshore rigs and transferred directly to large tankers. In 2006, Angola joined the Organi-
zation of Petroleum Exporting Countries. The offshore oil has been unlocked by international companies, who have the resources to construct platforms which can extract oil from deep sea waters. Some of Angola’s oil lies more than 160km (100 miles) from land. International petroleum companies operating in Angola included BP, Chevron, Eni, Exxon Mobil Corp. of the United States, and Total. Economic growth and fiscal sustainability are still highly dependent on the oil revenues. However, the oil sector is capital-intensive, lacks linkages to the real economy, and employs less than 1% of the total labour force.

Angola is the third largest producer of diamonds in Africa and is the second-largest export commodity after oil. The country’s production volume has remained relatively stable at 8 million carats per year since 2006. The industry was hit hard in 2008 but prices are slowly increasing.

Angola is a diverse resource-rich country, with large deposits of manganese, copper, gold, phosphates, granite, marble, uranium, quartz, lead, zinc, wolfram, tin, fluorite, sulphur, feldspar, kaolin, mic, asphalt, gypsum and talc. In order to diversify the economy away from diamonds, the country is now focused on developing copper and iron ore deposits, which were produced before the civil war. The government had set up a $405-million survey to explore alternative mineral deposits. Work continues on the Cassinga Iron Ore Project in Huila Province. Copper mining has occurred largely in the Mavoio region.

Input into infrastructure projects have commenced, with planned investments in rail connections between Benguela Port, the Democratic Republic of Congo and Zambia. Improvements in infrastructure and governance are key factors for growth opportunities in the country.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

- Policy perception: 108
- Best practice mineral potential: 80
- Investment attractiveness: 97
- Current practices mineral potential: 109
- Room for improvement: 40%


LAWS AND REGULATIONS

A new Private Investment Law and Mining Code were enacted in 2011, to consolidate the majority of the rules and regulations applicable to the mining industry and governing mineral operation. The government is also reforming the private sector to develop an effective private sector framework to improve business operations and attract more investment. The state owns minerals, as provided for in the country’s Constitution, and although foreign investment is encouraged in Angola, generally it is required that foreign investors will partner with Endiama, the state-owned mining operator. The Angolan company tax rate is currently 35% of net profit.

DIAMOND PRODUCTION

Diamonds were first discovered in Angola in 1912. For the next 40 years, the industry was exclusively based on alluvial diamond mining and was operated as a monopoly by the Diamontes de Angola - Diamang, a joint Portuguese - Belgian producer. During the civil war in Angola, rebel groups traded diamonds to fund armed conflict (known as conflict diamonds). In response, the UN applied sanctions to ban the rebels’ trade in conflict diamonds. Today, conflict diamonds are no longer traded in Angola as the country is a participant of the Kimberley Process, a unique joint initiative by government, the diamond industry and non-governmental organisations, to prevent conflict diamonds from entering the legitimate diamond supply chain.
DIAMOND MINES

There are three big diamond mines in Angola: Catoca, Fucuama, and Luarica. Most diamond mines are found in the areas of Lunda Norte and Lunda Sul. The Catoca diamond mine is the fourth largest diamond mine in the world and extracts diamonds from a kimberlite pipe. The mine was established in 1993 and has acquired several other alluvial concessions in the country over the years. Catoca and the other (alluvial) concessions account for nearly 70% of Angola’s diamond production. The mine is owned by Endiama, with a 32.8% stake, and a consortium of international mining companies, including Russia’s Alrosa which owns 32.8%, Brazilian Odebrecht Mining Services with a 16.4% stake, and (Bukharian-Israeli) Lev Leviev’s Daumonty Financing Company with 18%. This diverse ownership of the Catoca mine indicates that various countries are interested in Angola’s diamond reserves. More countries, including China and South Africa are also eager to gain a foothold in the sector.

The Fucuama diamond mine is still under construction in the Lunda Norte province of Angola. The mine is also owned by a consortium of companies: the two largest stakeholders being Endiama with 40% and Trans Hex Group with 35%. Endiama and Trans Hex also have two large stakes in the Luarica mine, 38% and 32% respectively.

BOTSWANA

Capital: Gaborone
Population: 2,155,784
Population growth rate: 1.26%
Area: 581,730 sq km
GDP: $34 billion
GDP - real growth rate: 3.9%
GDP – per capita: $16400
Inflation rate: 6.1%
Unemployment: 13.6%
Languages: English (official); Setswana;
Currency: Pula
Exchange rate: US$1.00 = 8.72

OVERVIEW

Formerly the British protectorate of Bechuanaland, Botswana adopted its new name upon independence in 1966. Four decades of uninterrupted civilian leadership, progressive social policies, and significant capital investment have created one of the most dynamic economies in Africa. Mineral extraction, principally diamond mining, dominates economic activity, though tourism is a growing sector due to the country’s conservation practices and extensive nature reserves. Botswana has one of the world’s highest known rates of HIV/AIDS infection, but also one of Africa’s most progressive and comprehensive programs for dealing with the disease.

Botswana stands out in Africa as a politically stable country and has an attractive business environment with a liberalised exchange rate, a low tax burden on private business relative to other countries in the region and other market-friendly policies. Overall, the economy continues to grow at a steady rate as
there is demand for commodities and support from India and China. Botswana has been ranked by international organizations as the fourth best destination for mining investment in the world.

The country currently produces diamonds, copper-nickel, soda ash, salt and small quantities of gold for the export market. Coal, clay, silica sand and crushed stone are produced for local consumption. There is strong potential for growth due to the government's focus on diversifying away from diamond production, with several copper, silver and gold deposits set to come online in coming years. Because Botswana is a landlocked country, transport infrastructure remains a key challenge for minerals exports. Mining takes up about 20% of the entire employment sector. And 80% of the mining manpower are employed in two mining companies of Debswana (merger between De Beers Pty Ltd and Botswana Government) and BCL.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

- Policy perception: 25
- Best practice mineral potential: 30
- Investment attractiveness: 24
- Current practices mineral potential: 14
- Room for improvement: 15%

The Ibrahim Index for African governance ranks countries based on socio-economic development, human rights promotion, safety and rule of law. Botswana scored 02/52 for 2013.

DIAMOND PRODUCTION

Diamonds are the most important source of income for Botswana and their discovery in the country has changed the pace of Botswana’s development. Botswana is the largest diamond miner by value in the world and sources 70% of its export receipts and 40% of state revenues from this resource. There are three diamond mines – Jwaneng in the Southern Kalahari and Orapa and Letlhakane in the central Kalahari – whose combined earnings account for roughly 77% of the total export earnings and about 45% of GDP. These mines are jointly owned by De Beers and the Botswana Government. Debswana, along with Russia’s state-owned ALROSA produce around three-quarters of world diamond production.

Diamond mining towns are located in: Damtshaa, Gope, Jwaneng, Lerala, Letlhakane, Orapa.

COAL PRODUCTION

Aside from the country’s well-known diamond reserves, coal production is likely to become of increasing value to Botswana following the lifting of a moratorium on new prospecting licences for coal, coal-bed methane and related minerals in 2011. The Coal Road Map unveiled in 2011 is a strategic plan to plot development of the coal sector through 2018 and beyond. The country is estimated to have more than 212 billion tonnes of coal reserves - much of which are untapped. The Botswana government established a Coal Development Unit within the Ministry of Minerals, Energy and Water Resources to oversee and ensure the implementation of a strategic coal monetisation plan and coal value chain improvements, as well as to coordinate related infrastructure projects.

Coal mining towns include: Palapye (Morupule) and Mmamabula. Debswana’s wholly owned colliery the Morupule coal mine (MCM) is the only colliery operating in the country currently, however, there are a few companies with projects currently in the development phase, including projects managed by diversified mining major Anglo American and diversified resources group Exxaro Resources. Recognising this potential, and that the coal sector could be the most propitious new export sector and a potential substitute for Botswana’s diamond revenue in time, development of the coal sector has become a key priority.
MINING REGULATIONS

Botswana has a strong legal framework and investor-friendly environment. It has some of the lowest tax and corruption rates in the region and there is little government interference in the mining sector. The government cut taxes in 2012 and maintains a pro-business approach to mining taxation. Plans are underway to enhance the minerals legislative framework to attract non-diamond miners into the sector. In Botswana, mineral rights are vested in the state. A new Mines and Minerals Act was passed in 1999. The new mining laws are geared to ensure stability, deregulation and government transparency.

Licences: there are three types of licences:

» Retention Licence: This licence provides retention for prospectors who deem a project economically unviable in the short-term. The first three-year licence remains exclusive while a second three-year licence provides limited rights for third parties to reassess a prospect.

» Mining Licence: This licence is initially valid for a period of up to 25 years, as is reasonably required to carry out the mining programme. The holder of a licence may apply for unlimited reviews for a period up to 25 years. Additionally, mineral rights holders may be required to permit the government to hold up to a 15% minority interest in undertakings. This will be on commercial terms with the Botswana Government paying its pro rata share of costs incurred.

» Minerals Permits: This permit allows companies to conduct small-scale mining operations for any mineral other than diamonds over an area not exceeding a half square kilometre. It is for five years, with unlimited renewals of up to five years.

Royalties: the rate varies depending on the resource type mined – precious stones (10%), precious metals (5%) and other minerals (3%).

Foreign investment is welcomed in Botswana and recent legislative amendments have been designed to further increase opportunities for foreign investors. There are no restrictions on foreign ownership although the payment of royalties will be required.

IMPORTANT WEBSITES

» Department of Mines: www.mines.gov.bw
» Chamber of Mines: www bcm.org.bw
DEMONCRATIC REPUBLIC OF CONGO

Capital: Kinshasa
Population: 74.7 million
Population growth rate: 2.5%
Area: 2.345 million km²
GDP: $27.6 billion
GDP - Real growth rate: 7.1%
GDP - per capita: $400
Inflation rate: 9.3%
Unemployment: N/A
Languages: French (official), Lingala, Kingwana, kikongo, Tshiluba
Currency: Congolese Franc (CDF)
Exchange rate: US$1.00 = 921,000 CDF

OVERVIEW

The political environment in the Democratic Republic of Congo (DRC) remains fragile. Growth is dependent on agriculture, the extractive industries, trade and construction and public works. Extractive industries include: copper, zinc, cobalt and diamonds. Mining activities are concentrated in the eastern and south-eastern parts of the country, where the Copper-belt extends into the DRC from Zambia near Lumbumba-shi, although the security situation in these regions is unstable.

Mining has been the main pillar of the economy since colonial times, and still accounts for around 80% of export earnings. In recent years the mining sector has become an integral and increasingly important part of the economy despite the country’s relatively high levels of political risk. In 1966 the central government nationalised Union Miniere du Haut Katanga as Gecamines, a state-owned mining company. However, new mining contracts have been approved, which could improve the country’s fiscal position and GDP growth, combined with high mineral and metal prices. To improve governance, the government has adopted planning instruments and budgetary programming in the provinces. Redundant taxes and illegal levies have been abolished in an effort to improve the business culture and attract foreign investment.

Insufficient power supplies, weak infrastructure, inadequate roads, almost non-existent rail links and declining world prices of certain commodities pose a challenge to the growth of the sector. Fleurette is financing a $320-million deal with Congo’s national electricity company (SNEL) to rehabilitate hydropower generators in an effort to secure power supply for their operations.

DRC also mines other key commodities such as silver, zinc, cassiterite, coltan and tin, but on a smaller scale. More than 1,100 different mineral substances are thought to be found in the DRC. In 2012, 12% of tantalum came from the DRC. It is possible for the mining sector to grow by 12% p.a. during 2013-16, largely driven by the very positive outlook for precious and base metal production. The World Bank predicts that the gross production value of the mining sector will range between US$2 billion and $2.7 billion annually for the 10 years to 2017.
The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

» Policy perception: 85
» Best practice mineral potential: 26
» Investment attractiveness: 63
» Current practices mineral potential: 74
» Room for improvement: 40%

The Ibrahim Index for African governance ranks countries based on socio-economic development, human rights promotion, safety and rule of law. The DRC scored 51/52 for 2013.

MINING REGULATIONS

Higher taxes on copper and cobalt concentrates and the fact that the government is looking to raise the stake it takes in mining projects from 5% to 15%, detracts from foreign investment. There is also some uncertainty due to the government's history of cancelling licences with little notice. The government is planning to revise the mining code to gain larger revenues from the expanding mining industry.

Regarding current practices in the industry, ownership from foreign companies requires that the holder automatically transfers 5% of the shares in the registered capital of the company to the state, upon award of an exploitation permit. Policy and law changes indicate that from 2014, all businesses registered in the DRC will have to adhere to the requirements of OHADA (Organisation pour l’Harmonisation en Afrique du Droit des Affaires) or the “Organisation for the Harmonisation of Business Law in Africa”.

There are limited restrictions on foreign investment, except for small-scale miners where local incorporation, at a minimum, is required. A Code of Conduct was signed in early 2011 by stakeholders including miners, buyers, traders and government officials in the DRC to increase transparency and cooperation with local government officials. In 2009, African Business magazine estimated the total untapped mineral wealth of the DRC to be US$24 trillion – equivalent to the Gross Domestic Product of Europe and the United States combined.

COBALT PRODUCTION

The DRC holds almost half of the world’s cobalt reserves and in 2012 cobalt produced in the DRC covered 55 per cent of global production. Many of the most important mining operations in the DRC consist in copper and cobalt production taking place in the copper belt region of the southern Katanga province.

COPPER PRODUCTION

DRC is Africa’s largest (previously held by Zambia for 26 years) and the world’s seventh-largest copper producer. In 2013, copper production was 942,000 tons. Gertler has interests in Kamoto Copper Co (KCC) and MUMI, both in partnership with commodities giant Glencore Xstrata, in the copper-rich Katanga province.

GOLD PRODUCTION

Kibali gold mine in the Democratic Republic of the Congo (DRC) is the largest gold mine in Africa. This is owned by AngloGold Ashanti. Rich deposits of gold have been exploited in the districts of Kilo and Moto, both located in the Ituri region of the Oriental province. The other major deposits are found in the Twangiza-Namoya gold belt in Kivu province, also in the east of the country. Recent gold exploration has also focused on Katanga province in the southeast.
DIAMOND PRODUCTION

Diamonds are located mainly at Kasaï Occidental and Kasaï Oriental, Katanga, Kivu as well as in the North of the country. With approximately 150 million carats, the DRC is believed to have the world’s largest reserves of diamonds. However, in terms of value, DRC’s deposits come after Botswana’s and Russia’s as only a relatively small proportion of the country’s diamonds reserves (6%) are of gem quality.

MAJOR MINING MULTINATIONALS IN DRC

Mining companies in the DRC include organisations operating in the formal, informal and government sectors. (ASM) Artisanal and Small-Scale Mining companies in the DRC make up the majority of mining operations in the country. Government policies, unique to the country, further ensure a degree of nationalisation of mines and mining companies in the DRC. Anvil Mining NL (based in Australia) is one of the most active mining companies in the DRC, owning 70% of the Kinsevere Crushing Plant project.

The main mining companies in the Democratic Republic of Congo (DRC) are listed in Canada, Australia and the US. Canadian companies: Anvil mining limited, Banro Corporation, First Quantum minerals limited, Katanga mining limited, Mato Goldmines Ltd and Tenke mining Corp. Australian companies: Mawson west Ltd, Pacific Road capital, Anvil mining Ltd, and Tiger resources ltd. U.S companies: Tenke Fungurume mining (TFM), Mineral mining company (MIMINCO), OM group and Skyline Assayers and laboratories.

IMPORTANT WEBSITES

» Mining Registry: www.cami.cd
» Federation of Enterprises: www.chamber-commerce.net
» SA-DRC Chamber of Commerce: www.sa-drctic.co.za

MADAGASCAR

Capital: Antananarivo
Population: 23,201,926
Population growth rate: 2.62%
Area: 587,041 sq km
GDP: $10.53 billion
GDP – real growth rate: 2.6%
GDP - per capita: $1,000
Inflation rate: 8.8%
Unemployment: N/A
Languages: French (official), Malagasy (official), English
Currency: Malagasy Ariary
Exchange rate: 1.00 USD= 2,319.97 MGA
OVERVIEW

Madagascar experienced relatively slow growth during 2010 to 2013 – which is attributed to the political instability in the country at the time. Since Hery Rajaonarimampianina took office in December 2013, it is expected that the political environment will stabilise, allowing opportunity for economic growth in 2014.

Madagascar’s finance minister, Lantoniaina Rasoloelison, has forecast its economy could grow by 3% in 2014 and possibly reach 12% in 5 years’ time. Currently the state budget can offer little beyond keeping the state functioning. New businesses are opening and most firms are in trade-related activities. As a consequence of the slowdown in development aid flows, there has been no infrastructure development since 2010 and maintenance has been kept to a minimum.

COMMODITIES

The mining and agricultural sectors are expected to be among the main contributors to growth in 2014. Currently, agriculture, including fishing and forestry, is a mainstay of the economy, accounting for more than one-fourth of GDP and employing 80% of the population. Mining is anticipated to be the chief engine of growth in the coming years with production having commenced at the country’s biggest mine at Ambatovy.

Madagascar has a large number of minerals spread over the entire country, but the minerals industry is not well-developed. The resources are largely unexplored or underexploited and subsequently contribute a minimal amount to the country’s GDP. This provides opportunity for exploration and future growth. Mining currently contributes 3% to GDP. The country is noted for its production of quality chemical- and metallurgical-grade chromite, crystalline flake graphite, mica and semi-precious stones. Gems that include the garnet, amethyst, tourmaline and beryl. In the beginning of the 21st century, about half of the world’s sapphires were mined in Madagascar.

Madagascar has rich deposits of nickel, titanium, cobalt, ilmenite, iron, coal and uranium, as well as hydrocarbon prospects. The country’s coal potential has been estimated to contain as much as 100Mt of good quality coal. Nickel-cobalt and ilmenite have attracted the majority of foreign direct investment. The Ambatovy project, a six billion dollar investment, started production in 2012. The company exports highly refined nickel products. In the first year of production, nickel became Madagascar’s main export, worth an average $30 million a month, the World Bank said, and the company is still ramping up towards full capacity. In the southern part of the country, Rio Tinto runs an ilmenite mine, which has been operational since 2009. Prospects for future years relate to coal mining, iron ore and other deposits of ilmenite.

In addition to minerals, Madagascar has potentially significant hydrocarbon deposits. The existence of oil has been known for over a century but production was not considered commercially viable for a long time. This is changing due to new technology and high world prices. Currently at least 17 oil companies are active on some of the country’s 20 onshore and over 200 offshore oil blocks. So far exploration activities have concentrated on onshore fields. Madagascar Oil started producing crude oil at the Tsimiroro field in 2013, and oil exports are scheduled to start in 2014.

Recovering investors’ confidence in the extractive sector following years of political instability will be challenging. Any efforts by the new president to attract mining investment will come at a bad time for the industry after metals prices have slumped. Infrastructure in the country is not developed which is a major deterrent for some.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

» Policy perception: 103
» Best practice mineral potential: 48
» Investment attractiveness: 80
Current practices mineral potential: 95
Room for improvement: 40%

The Ibrahim Index for African governance ranks countries based on socio-economic development, human rights promotion, safety and rule of law. The Madagascar scored 37/52 for 2013.

MINING REGULATIONS

Perhaps the largest trade challenge moving forward is further integration of the extractive industries sector. Mining permits have proliferated and extraction is expected to grow exponentially. Firms in Madagascar need to obtain licenses for everything from initial research to final production. Investment and mining in the country is controlled by the Investment Code, Law 85-001, and the Mining Code, Law 89-017 of 1990. In 1999, a new mining law designed to liberalise the sector and to eliminate direct government intervention, rationalise the licensing system and reduce the royalties and taxes on mining products was approved by the National Assembly.

In a 2011 peace deal between conflicting Madagascan parties, all new permits were frozen as a condition to end the political crisis. This situation has resulted in most existing miners having been unable to extend their operations.

Madagascar’s legal system is based on French civil law. Private property rights are differentiated by property types, with commercial law ascribed largely to the Code of Commerce and Annexed Laws and land rights governed through a mosaic of laws and norms established and altered with varying levels of success throughout the various periods of Malagasy history. The Code of Commerce and Annexed Laws is applied with a relative lack of discrimination. Since 1996, this has included a bankruptcy law and, in 2000, a Malagasy Arbitration and Mediation Center (CAMM) was created as a private organization to mediate commercial disputes. This has served as an important tool, avoiding the often problematic court system. Madagascar is largely in conformance with international norms on commercial property rights arbitration.

IMPORTANT WEBSITES

» Mines Sector Development: www.mines.gov.mg
» Chamber of Mines: www.chambredeminesdemadagascar.com
MOZAMBIQUE

Capital: Maputo  
Population: 24.1 million  
Population growth rate: 2.45%  
Area: 799,390km²  
GDP: $14.67 billion  
GDP - real growth rate: 7%  
GDP - per capita: $1,200  
Inflation rate: 4.4%  
Unemployment: 17%  
Languages: Portuguese (official), Tsonga, Nyungwe, Ronga, Ngoni, Chopi, Tonga, N'dau, Tswana, Swahili, Makhuwa, Sena  
Currency: Mozambican Metical (MZN)  
Exchange rate: US$1.00 = 32.04 MZN

OVERVIEW

Mozambique was long synonymous with political instability and conflict, as the country was engulfed in civil war that lasted more than two decades and since its end Mozambique has been striving for its development and today is referred to as southern Africa’s ‘boom town’. This has been driven by economic and fiscal reforms, increasing foreign direct investment, attractive mining sector policies, as well as increasing infrastructure development.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

» Policy perception: 76
» Best practice mineral potential: 105
» Investment attractiveness: 99
» Current practices mineral potential: 79
» Room for improvement: 40%

The Ibrahim Index for African governance ranks countries based on socio-economic development, human rights promotion, safety and rule of law. The Mozambique scored 20/52 for 2013.

MINING REGULATIONS

Mozambique’s mining law states that the government owns all mineral resources and allows autonomous mining extraction operations by private companies with mineral exploration rights determined by the scale of proposed operations. It is required that a local company be incorporated into an operation, all applications for exploration and mining rights have to be addressed to the Minister of Mineral Resources and Energy for processing by the National Directorate of Mines.

Ownership: There must be between 5% and 20% local shareholders in every major concession or big mining project.
Policy and law: Foreign companies need to buy 30% of what they purchase locally.

COAL PRODUCTION

Vast coal reserves and significant potential mineral deposits in Mozambique’s places the country as one of the most important growth stories in the global mining sector going forward. According to Frost & Sullivan, Mozambique’s coal mining is the fastest growing industrial segment. Significant reserves of coking coal have been discovered in the Tete region and Zambezi area, which has in the past few years attracted a number of international mining companies. Vale Mining and Rio Tinto are developing mines in the country and constructing key infrastructure to facilitate in the exportation of mining commodities. Brazilian company Vale has been producing coal from the Moatize mine since July 2011; the company has been developing two railroad projects for the transporting of coal from the Moatize mine to the sea ports for exportation.

According to Business Monitoring International’s forecasts, Mozambique is set to benefit from large coal demand from China and India, and could well become one of the 10 largest coal exporters by 2017. Coal output is forecast to reach 41.8 million tons by 2017, driven mainly by Vale and Rio Tinto. Mozambique also mines other key commodities such as tantalum, ilmenite, rutile, zirconium, and beryllium, but on a smaller scale.

GOLD PRODUCTION

Mozambique’s gold production is expected to increase significantly; this is driven mainly by Auroch Minerals Manica Gold Project. Despite being largely overshadowed by its booming coal sector, gold is still expected to boost the mining industry and economy. Mozambique’s gold production is expected from 25,000 ounces in 2011 to 85,000 by 2017.

ALUMINUM PRODUCTION

The production of aluminium is one of the most important revenue generators for Mozambique. The Moal aluminium smelter operated by BHP Billiton is one of the largest aluminium smelters in Africa. Currently, Mozambique is actively seeking investments from more developed economies. In June of 2013, South Korea agreed to work closely with Mozambique to develop the country’s rich energy and other natural resources. The Moal aluminium smelter is the only aluminium producer in the country and sources its electricity primarily from South Africa.

NATURAL GAS PRODUCTION

Mozambique’s natural gas industry is also expanding; a natural gas reserve of 32 trillion cubic metres has been discovered close to Mozambique’s Pemba region. This discovery may make Mozambique one of the largest coal exporters of natural gas to Asia. According to Frost & Sullivan gas field operations are expected to be more operational between 2014 and 2016. In the year 2011, US based company Anadarko Petroleum estimated that its natural gas reserves in the country might reach 850 billion cubic meters of recoverable natural gas. During the following year Italy’s largest oil company, Eni SpA, announced the discovery of a second natural gas field near the Mamba South gas field. This new discovery of 212.5 billion cubic metres is expected to increase the natural gas resource in Mozambique to 850 billion cubic metres.

MINING EQUIPMENT INDUSTRY

Although relatively small in scale, Mozambique’s mining equipment industry is set to increase as mining activity in the region continues to grow. In 2012, Mozambique’s Minister of Trade and Industry appealed to small, micro and medium-size businesses in the country to link up with the mining projects that are operating or being developed in the country to ensure that the products and services needed by the
multinationals are supplied locally. In 2011 Rio Tinto alone bought goods and services worth $120-million from Mozambican suppliers.

Mozambique’s growing mining sector has also created opportunities for foreign suppliers and service providers to set up in the region. In June 2013 Aury Africa opened a branch in the Mozambique’s Tete province. Aury Africa is a subsidiary of Aury Australia, a screening and vibrating equipment solutions supplier. Companies such as Barloworld, BMG and Bureau Veritas also are also physically present in the country.

The lack of proper infrastructure, which results in inability to meet the demands of the mining sector is a deterrent. As a result, Vale is investing in the development of the Nacala corridor project for transporting coal from the mine to the sea port of Nacala. The 912-kilometre transport corridor will have a transport capacity of 18 million tons of coal per year. Furthermore, Mozambique is almost entirely focused on coal, which makes the country highly susceptible to fluctuations in the price of coal. To curb its looming infrastructure woes in light of the expected growth in the mining sector, Mozambique will have to invest substantially in electricity supplies, export infrastructure and transport routes. The railway line linking Vale’s Moatize mine to the port of Beira is in the process of being expanded and rehabilitated to meet increased capacity demand.

**NAMIBIA**

- **Capital:** Windhoek
- **Population:** 2.2 million
- **Population growth rate:** 0.67%
- **Area:** 825,615 km2
- **GDP:** $16.8 billion
- **GDP - real growth rate:** 4.0%
- **GDP - per capita:** $7,772
- **Inflation rate:** 6.7%
- **Languages:** English (official), Oshiwambo, Damara, Afrikaans, Rukwangal, Otjiherero
- **Currency:** Namibian dollar
- **Exchange rate:** US$1.00 = 10.56 Namibian dollar

**OVERVIEW**

Namibia has enjoyed political stability since independence in 1990 with SWAPO being the political party in power. Mining is the biggest contributor to Namibia’s economy in terms of revenue and is expected to continue to grow. The mining industry is set to increase its worth to about N$37.8-billion by 2017. The Namibian mining sector’s strong performance over the past two decades is definitely sustainable due to the positive outlook for diamond mining. Carat production is expected to rise by 9.1% p.a. over the next five years. Economic activity is constrained by several structural bottlenecks that negatively affect the efficiency and competitiveness of the private sector. The most significant challenges include high levels of concentration in key economic sectors’ regulations that undermine competitiveness, energy shortages and a lack of skilled workers.
Namibia has a mineral endowment rivalled by few other countries with the focus of major exploration on diamonds, zinc, uranium, copper and lead. Semi-precious stones and dimension stone occur widely. Mineral exports constitute almost half of the country's total export earnings. It's principal mining operations are the alluvial diamond fields along the southern coast and inland along the Orange River, as well as the Rossing uranium mine in the central Namib Desert. In the African context, Namibia is a major producer of copper, silver, cadmium arsenic, lithium, fluor spar, iron pyrite (sulphur) and salt. The slag dumps of the Tsumeb metallurgical complex also hold germanium and gallium resources.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

» Policy perception: 34
» Best practice mineral potential: 47
» Investment attractiveness: 34
» Current practices mineral potential: 39
» Room for improvement: 20%


Namibia is covered with the remains of abandoned and un-rehabilitated mines. Problems can arise if no measures are taken to rehabilitate the area and make it safe. Un-rehabilitated mines can cause visual pollution. One of the big challenges faced by mining in Namibia is a general inability by government to deal with license applications and approval processes in a way that is totally transparent.

MINING REGULATIONS

Government announced plans to introduce new legislation that would allow an increase in state participation with respect to the mining of strategic minerals. Under the proposed law, coal, copper, diamond, gold, rare-earth minerals, and uranium would be designated as strategic minerals. Government also proposed amendments to the tax law, which include a tax rate of 15% on the value of supplied or imported goods, a 5% export levy, and an increase in corporate taxes to 44% from 37.5%.

The government scrapped plans for a tax hike to 44% but the mining sector remains a key target for government revenue. All future mining projects will be awarded to a state-owned company under plans unveiled by the government, although currently the majority of mines operating in Namibia are owned by foreign entities. The government does encourage foreign investment with increased projects to improve infrastructure, particularly in terms of water and power supply.

Policy and law: It takes six weeks to register a new company. Ownership: Government has declared a list of strategic minerals in which the state-owned mining company, Epangelo (Pty) Ltd, must have a share of any investments or mineral licences issued in these strategic minerals.

URANIUM PRODUCTION

The Rössing Uranium Mine is one of the largest and longest-running open pit uranium mines in the world. It is located in the Namibian Desert 65 kilometers from Swakopmund near the town of Arandis. Discovered in 1928, it started operations in 1976 as Namibia's first uranium mine and in 2012, produced 2,699 tons of uranium oxide, producing 4 per cent of the world's uranium.

As of 2013 the cost of uranium production in Namibia is among the highest of major producers due to the remote desert location of deposits.
DIAMOND PRODUCTION

Diamond Fields International and De Beers both mine for diamonds in Namibia. The Namdeb Diamond Corporation (Pty) Limited, Namibia’s largest diamond company, is split equally between the Government of the Republic of Namibia and De Beers Centenary AG, a company of De Beers.

1.67 million carats of rough diamonds were produced in Namibia in 2012, by the end of 2013; the annual production figure will drop to 1.64 million carats. However, by 2014, the yearly diamond out of the country should once more increase, by 2.5%, due to the development of marine diamond deposits. Namibia is one of the top five diamond producing countries in the world and is at the top of the list for water-borne diamonds.

GOLD PRODUCTION

Namibia’s main precious metal, gold, is currently mined and processed at the Navachab mine, situated a few kilometres from the town of Karibib in central-western Namibia.

More than 85% of the gold occurs as native gold and the remainder as maldonite (Au2Bi). Navachab Gold Mine has the capacity to treat 1.32 million metric tonnes of ore per year.

31 December 2012, Navachab had gold Mineral Resources of 4,410,000 ounces and gold Ore Reserves of 2,100,000 ounces. In the year ended 31 December 2012, Navachab produced 74,000 ounces of gold at a cash cost of US$929 per ounce and for the nine months ended 30 September 2013 produced 46,000 ounces of gold at a cash cost of US$755 per ounce.

MAJOR MINING MULTINATIONALS IN NAMIBIA

Namibia’s mining industry consists of numerous multinationals such as, NAMDEB, Rosh Pinah, Rössing, Tsumeb Corporation and Navachab, generate more than 95% of the mining income. NAMDEB, a diamond mine located in the Sperrgebeit, is jointly owned by the Namibian government and by De Beers Centenary. Rössing is the fifth biggest uranium mine in the world and is located just east of Swakopmund. The Skorpion zinc mine which was opened in 2003 by Anglo American, cost N$454 million to build and is projected to produce 12,500 tons of pure zinc per month. Copper and other base metals are mined and smelted at Tsumeb, whilst Gold is mined near Karibib.

IMPORTANT WEBSITES

» Ministry of Mines and Energy: www.mme.gov.na
» Chamber of Mines: www.chamberofmines.org.na
SOUTH AFRICA

Capital: Pretoria
Population: 48,375,645
Population growth rate: -0.48%
Area: 1,219,090 sq km
GDP: $595.7 billion
GDP - real growth rate: 2%
GDP - per capita: $11,500
Inflation rate: 5.8%
Unemployment: 24.9%
Languages: English (official), Isizulu, Isivenda, Sotho, Afrikaans, Ndebele, Xhosa,
Currency: Rand
Exchange rate: US$1.00 = R10.53

OVERVIEW

The South African economy is the most advanced on the African continent. It has a sophisticated financial system that includes one of the top 10 stock exchanges in the world. It also has well developed physical, telecommunications, and energy infrastructures. As an emerging market in the global economy, South Africa is a leader and a competitive producer of raw commodity exports and value-added goods. Although mining only makes up around 6% of South Africa's GDP, it accounts for around 60% of the country's total exports by revenue. The South African government is generally stable and its business environment is one of the best on the continent. There are few obstacles for foreign companies wishing to enter.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

» Policy perception: 64
» Best practice mineral potential: 37
» Investment attractiveness: 53
» Current practices mineral potential: 55
» Room for improvement: 15%


MINING REGULATIONS

In December 2012 the African National Congress (ANC) rejected proposals to nationalize mines in favour of implementing higher taxes and other measures to increase government revenue from the country's mineral resources. Following the events at Marikana, it is likely that the government will pursue greater regulation regarding working conditions and pay which will raise costs for miners. Companies operating in South Africa face restrictions on hiring workers and must observe Black Economic Empowerment (BEE). For the most part, mining companies have reached the required number of non-white workers and this legislation has caused few difficulties for miners.
COAL PRODUCTION

South Africa is the world's seventh largest coal producer and the largest in Africa. It is expected that South Africa's coal production will experience strong growth. This will have important implications for the country's power sector (South Africa currently depends on coal for 77% of its electricity generation) and help make Southern Africa a global coal export hub. Indian investment in South Africa's coal sector is set to increase in the coming years.

Major companies who operate within this sector are Anglo Thermal Coal, Xstrata, BHP Billiton and Exxaro.

IRON ORE PRODUCTION

Over the past four years, roughly 83% of South Africa's total iron ore production has been exported. Of these exports, around 70% went to China. The bulk of this production is accounted for by Kumba Iron Ore, which is majority-owned by Anglo American. South Africa is set to remain Africa's largest producer of iron ore, however, large iron ore projects are due to come online in West Africa.

GOLD PRODUCTION

South Africa is now the sixth-largest gold miner in the world, with output of 5.9m oz (mn ounces) in 2012, 6.0% of global production. The country's key gold producers, AngloGold Ashanti, Gold Fields and Harmony Gold, together account for over 60% of the country's gold output.

DIAMOND PRODUCTION

South Africa's diamond sector will continue its slow recovery following the global recession as miners gradually increase production. South Africa's diamond production came in at 7.1mn carats in 2012, accounting for approximately 10% of global output.

The sector is dominated by De Beers, the world's largest diamond mining company and Petra Diamonds, which together account for around 85% of the country's production. Diamcor is conducting preliminary prospecting at the Hardcastle and Doornkloof deposits, but has yet to announce estimates on the reserves. It is likely that South Africa's share of global output will fall over the next decade due to the increase in production in countries such as Botswana.

PLATINUM PRODUCTION

The main companies involved in this sector are Impala Platinum, Lonmin, Amplats and Aquarius Platinum. They account for around 87% of South Africa's production. It is expected to become more diversified over the long term as Royal Bafokeng, Northam and Wesizwe look to increase platinum production over the next few years. However, these projects could be delayed or scaled back given the weakness in platinum prices and declining margins. It is expected that South Africa's share of global production will decline as Zimbabwe's reserves come online and Russian production increase. There is little potential for growth in South Africa's platinum production as diminishing margins cause.

PALLADIUM PRODUCTION

South Africa is world's second largest palladium producer and account for approximately 36% of global output. Output in 2012 was 2.33moz. (mn ounces). Output is expected to slow over the next five years, in line with the platinum sector, as the two metals are generally found in the same ores and mined together. Anglo Platinum has a dominant position in the industry and is responsible for more than half of the country's total palladium production. The outlook for new projects and expansions is fairly weak as companies seek to cut production rather than expand in the current climate. Exploration carried out by
Aquarius Platinum has identified sizeable supplies of palladium available for future mining, but it is likely that these will only become viable projects over the much longer term.

NICKEL PRODUCTION

In 2012 South Africa was the 12th largest producer, accounting for 2.0% of global refined nickel production at 32.1kt. Nickel is mined as a by-product alongside platinum, it is primarily consumed in the production of stainless steel.

CHALLENGES TO SOUTH AFRICA’S MINING INDUSTRY

One of the main challenges in the development of South Africa’s mining sector is intermittent power supply, which continues to disrupt mining operations. Eskom, the supplier of 95% of South Africa’s electricity, is allowed to raise prices by an average 8% in each of the next five years, which will cause substantial increases in mining costs.

South Africa has the highest cost of labour as a percentage of total costs among the major producers, averaging around 60% whereas its peers, the United States and Australia average around 30-40%. Competition for membership between the National Union of Mineworkers (NUM) and the Association of Mineworkers and Construction Union (AMCU) causes further tension as both unions attempt to outbid each other in demands for wage increases.

INFRASTRUCTURE

In 2012, the government unveiled a 15-year infrastructure development plan to upgrade roads, ports and access to utilities, as well as to exploit coal and other mineral deposits. The development of ports along Africa’s south and south-eastern coast will ensure that mined coal will be able to be efficiently exported by sea to Asia. The government plans to open up the mineral belt in the north of the country to investment, by building infrastructure and ensuring adequate water supplies for miners. While this region is most notable for its coal and platinum deposits, the area also has significant untapped gold reserves.

IMPORTANT WEBSITES

- Chamber of Mines: [www.bullion.org](http://www.bullion.org)
- Department of Mineral Resources: [www.dmr.gov.za](http://www.dmr.gov.za)
- SA Mining: [www.saming.co.za](http://www.saming.co.za)
OVERVIEW

Mining is one of the leading sectors in Tanzania, with the value of mineral exports increasing tremendously each year. Currently, the sector contributes an estimated 3.5% to Tanzania’s GDP. Tanzania wishes to make the mining industry account for 10% or more of GDP by 2025. Moreover, Business Monitor International (BMI) forecasts average annual growth in the mining sector of 7.7% between 2013 and 2015. BMI also predicts a doubling in value of the sector to around US $1.28 billion in 2015.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

- Policy perception: 62
- Best practice mineral potential: 63
- Investment attractiveness: 65
- Current practices mineral potential: 57
- Room for improvement: 10%

The Ibrahim Index for African governance ranks countries based on socio-economic development, human rights promotion, safety and rule of law. The Madagascar scored 17/52 for 2013.

In the last decade, the country has witnessed growth in mining sector with reputable mining companies e.g. African Barrick Gold, Ashanti Anglo-Gold, and Resolute investing in large-scale mines. The sector has generated business worth trillions of shillings to various suppliers of goods and services in the country over the past decade. Between 1997 and 2012, mining companies spent $2.636 billion (about 4.3 trillion shillings) on procurement of various goods and services within Tanzania.

Tanzania is the 4th largest gold producer in Africa after South Africa, Ghana and Mali and is the sole producer of the precious stone Tanzanite in the world. Gold production currently stands at roughly 40 tonnes a year, copper at 2980 tonnes, silver at 10 tonnes and diamond at 112670 carats. However, nearly all major developments have been seen in the gold sector. As it stands, minerals make up over 52% of the country's exports, of which, a large part results from gold, and it continues to see the majority of developments within the sector while other minerals also play a key role in the continued development of the mining industry in Tanzania.
Furthermore, Tanzania is set to become one of the top uranium producers in Africa. Once the uranium mining project in the country’s Mantra’s Mkuju region officially begins, Tanzania will become the third largest producer of uranium in Tanzania. The project is expected to bring direct and indirect cash flows that will exceed US$640 million in Tanzania, while it will also bring foreign direct investment that will exceed US$1 billion.

The Tanzania mining industry remains attractive to foreign investors / international businesses, given the next few years of significant diversification to the mining of nickel, uranium and coal. Moreover investments in coal would receive a boost as Tanzania looks to coal-fired power stations to offset energy shortages. Gold mining exploration and gold production, gem stones mining and trading, as well as, small and artisanal mining activities are experiencing considerable growth as well.

Tanzania has become one of the best choices for foreign direct investment (FDI) in East Africa, attracting over $627m annually in recent years. Tanzania provides one of the most attractive investment environments in Africa following its embrace of open-market economic policies starting in the mid 1990’s. Privatisation of state industries, investment incentives and a liberalised foreign exchange controls have all contributed to its success in attracting foreign investment in the last fifteen years.

Gemstone mining licences should only be issued to Tanzanians. However, in certain cases licenses can be issued to foreign owned mining companies but only where Tanzanians have at least 50% ownership.

Minister for Energy and Minerals announced an increase in fees for application of various licences, including annual rents, transfer charges and renewal fees. Some of the amounts have increased by over 250%.

GOLD PRODUCTION

Tanzania is said to have the largest gold reserves in Africa behind South Africa, making the country a major focus for the exploration and development of gold on the African continent. Prospecting done revealed that some 130.2 million tons of gold reserves are present in Tanzania. The discovery and exploration of gold in Tanzania offers one of the best areas for investment in the country’s mining sector.

TANZANITE PRODUCTION

Tanzania is the sole producer of this precious gemstone. Currently, there is only one major investor, Tanzanite One and other small scale miners on Tanzanite.

COAL AND IRON PRODUCTION

Identified projects in the coal and iron sub sectors can also mean business opportunities include; further development of the Kiwira and Mchuchuma-Katawake coal deposits as well as Liganga iron ore deposits. There is a potential demand for the reserves of coal and iron at both global and regional level; their prices are globally high and projected to steadily rise through 2030 and beyond.

Tanzania urgently needs to develop new energy sources to supplement the national grid and for specific industrial projects. This sector has the potential to generate more than US$60-100 million per year in coal export revenues and generate 400MW of additional power.
ZAMBIA

Capital: Lusaka  
Population: 14,638,505  
Population growth rate: 2.88%  
Area: 752,618 sq km  
GDP: $25.47 billion  
GDP - real growth rate: 6%  
GDP - per capita: $1,800  
Inflation rate: 7.1%  
Unemployment: 14%  
Language: English (official), Bemba, Tonga  
Currency: Zambian kwacha  
Exchange rate: US$1.00 = 5.3

OVERVIEW

Zambia remains one of the most politically stable countries in SADC and in Africa as a whole. There has been democracy since 1991 when a two-decade-old single party system was ended. The outlook for the Zambian economy is said to remain favourable in the medium term. The government is committed to accelerating private sector investment to increase and diversify growth, creating a good business environment. It Private Sector Development Reform Programme aims to reduce the cost of doing business and ensure a stable environment for private investment and growth.

The mining industry has been the economic social backbone of Zambia since exploitation of the Copperbelt deposits in the early 1930s. Since then, several other metalliferous and non-metalliferous resources have been discovered. The mining industry, with specific focus on copper mining, is expected to reach US$938 million by 2016. This represents an average annual growth of 4%. Despite this wealth however, the economy remains dependent on the extraction and processing of copper and, to a lesser extent, cobalt for export, which remain the country’s largest industry. Combined copper and cobalt account for approximately 10% of GDP and around 80% of export receipts.

As Zambia is landlocked, infrastructure investment and development is integrated into the government’s broader economic growth objectives under its 5-year national development plan. Under the country’s sixth national development plan (2011–15), infrastructure development will focus on roads, railways, schools, health facilities and public–private partnerships (PPP). Zambia will invest US$120 million to revamp a railway line linking the copper producer with South Africa to move transport from road to rail. The Zambian Government is implementing the Link Zambia 8000 road project, which aims to increase the capacity of the road network by undertaking 15 major road projects between 2012 and 2015 as well as upgrading existing routes.

Foreign investment is welcomed. There are no general restrictions applied to foreign investment. Foreign ownership of mining companies is allowed in Zambia. However, this is subject to specific restrictions imposed on certain mining rights.
The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

- Policy perception: 57
- Best practice mineral potential: 28
- Investment attractiveness: 41
- Current practices mineral potential: 36
- Room for improvement: 25%

MINING REGULATIONS

The Zambian government recently increased taxes on the mining industry and is implementing plans to ensure native Zambians hold key managerial positions in mining projects. Mining exploration and exploitation operations are subject to their own tax regime, and these are separately tabulated at each annual budget speech. A positive factor for investors and mining companies is the government's recent decision not to reintroduce a windfall tax on mining companies' profits.


Ownership: Taken the final step in privatization by putting ZCCM on the auction block as a holding company for the countries’ mining investments.

Policy and law: In the next two years, Zambia plans to implement an improved capability in the monitoring and reporting of mineral production in effort to assure tax structures are returning as planned.

Licences: the following mining licences may be granted under the Mines and Minerals Development Act:

- Prospecting: confers on the holder of the licence exclusive rights to carry on prospecting operations. It is valid for a period of two years. It may be renewed for a further two-year period. The total maximum period shall not exceed seven years.
- Large-scale mining: confers on the holder exclusive rights to carry on mining and prospecting operations in the mining area. The licence is granted for a period not exceeding 25 years. A separate large-scale gemstone licence is granted for gemstone mining for a period not exceeding 10 years.
- Small-scale mining: the holder is granted exclusive rights to carry on mining operations. The licence is granted for a period not exceeding 10 years. A separate small-scale gemstone licence is granted for gemstone mining for a period not exceeding 10 years.
- Artisan’s mining: an artisan’s mining right shall be valid for a period of two years.

Royalties: the rate is 3% for base metals, industrial minerals or energy minerals, and 5% for energy minerals, precious minerals and gemstones.

COPPER PRODUCTION

Zambia is Africa’s second largest and the world’s eighth largest copper producer. In 2013 Zambia lost its standing as Africa’s biggest copper miner (held for the past 26 years) to Democratic Republic of Congo. In 2013, copper production was 915,773 tons. It has around 6 % of the world’s known reserves. Copper accounts for over 20% of GDP.
Zambia's copper deposits yield a high grade between 2–3 percent in comparison with the global average yield of roughly 0.8 percent.

Copper mines in Zambia include Nkana mine (one of the largest in Africa and is underground as well as open pit), located 1 km south-west of Kitwe, Mufulira Mine (largest underground mine in Africa) and Mopani. Most of the new production stems out of the so-called "new copperbelt" in North-western Province.

COBALT PRODUCTION

Zambia is also the world's fourth-largest producer of cobalt. In 2013, cobalt production was 5,857 tonnes.

COAL PRODUCTION

Zambia's coal industry is viewed as a key growth sector. Zambian coal output is forecast to experience rapid growth from 281,000 tonnes in 2012 to production in excess of 2 million tonnes by 2017. The bulk of the coal has come from the Maamba coal mine, an open-cast operation in the southern part of the country near Lake Kariba.

OTHER KEY COMMODITIES

Zambian also mines other key commodities such as gemstones (amethyst, aquamarine, beryl, emerald, tourmaline, garnet, diamond) silver, tin, zinc, lead, limestone, phosphate, feldspar, barite, corundum, uranium, but on a smaller scale.

IMPORTANT WEBSITES

» Ministry of Mines and Mineral Development: www.zambiamining.co.zm
» Zambia Association of Chambers of Commerce and Industry: www.zambiachambers.org

ZIMBABWE

Capital: Harare
Population: 13,771,721
Population growth rate: 4.36%
Area: 390,757 sqm
GDP: $7,496 billion
GDP - real growth rate: 3.2%
GDP - per capita: $600
Inflation rate: 8.5%
Unemployment: 95$
Language: English, Shona, Sindebele
Currency: Zimbabwean Dollar
Exchange rate: US$1.00 = ZWD234.25
OVERVIEW

The political situation in Zimbabwe remains unstable. ZANU-PF is the ruling party with Robert Mugabe as the president for three decades. Although the state of mining industry is directly linked to the political situation in the country, market research reports indicate that a significant increase in gold production is possible. GDP has decelerated by more than 4% since 2010 but growth in the mining industry remains buoyant. It is anticipated that the mining industry will grow to US$561 million by 2016. There is a growing interest by Chinese companies to enter the industry, in spite of the threat of the indigenization policy that could be implemented that could see Western countries scale down their activities in the country or withdraw completely.

Agriculture is an important component of the economy and the country is working towards regaining its position as a net exporter of food. It has good transport infrastructure domestically, and there are services operating to neighbouring countries. The adoption of the use of multiple currencies (mostly United States Dollar and South African Rand) has further increased foreign investment. Telecommunications infrastructure is modern and expanding rapidly.

Zimbabwe is a mineral rich country with great potential for future discoveries. All minerals are vested in the president and rights to work mineral deposits are acquired through applications to the mining commissioner. Minerals produced include gold, platinum group metals, iron, nickel, chrome and coal. Other minerals found in Zimbabwe include diamonds, asbestos, cobalt, graphite, lithium, and palladium. All known platinum group metal resources in Zimbabwe are found along the Great Dyke of Zimbabwe. Gold is mined in various areas including Kadoma, Matebeleland Province and Mashonaland West Province. Copper is found in Mashonaland West Province. Diamonds have been found in the eastern part of the country.

Although Zimbabwe’s mining industry’s opportunities looks promising, credible investors remain hesitant because of the country’s glaring political risks. There are also other challenges to Zimbabwe’s mining industry, like erratic power supply, inefficient rail transportation, the rising cost of production and the constraints in the supply of services etc.

The Fraser Institute conducts an annual survey of mining companies. 2013 rankings out of 112:

- Policy perception: 106
- Best practice mineral potential: 85
- Investment attractiveness: 96
- Current practices mineral potential: 103
- Room for improvement: 30%


MINING REGULATIONS

Government published a new regulation under the National Indigenisation and Economic Empowerment Act (IEEA), which requires that 51% of the shares of mining companies operating in Zimbabwe that have a net asset value above $1 be conceded to indigenous Zimbabweans. The government threatens to seize assets without compensation if miners do not comply with indigenisation policy. Policy and law: Zimbabwe is planning to introduce a new mining law, that amongst a number of changes includes a ‘use it or lose it’ policy on exploration licenses as well as rules that will ensure some level of mineral beneficiation before export. Ownership: Any mineral asset in development or production to be 51% owned by indigenous Zimbabweans.
PLATINUM PRODUCTION

Zimbabwe has the second largest known deposits of platinum in the world. There are three mines currently, namely Zimplats, Mimosa and Unki Platinum. In terms of global incremental output, South Africa is expected to be overshadowed by Zimbabwe over the next five years and thus South Africa’s share of global platinum production to decline. Should Zimbabwe achieve political stability, South Africa could lose out on essential investment to its northern neighbour. In January 2013 Zimplats ceded 51% of its operations to indigenous Zimbabweans as part of the government’s indigenisation programme. The company is the largest platinum producer in Zimbabwe with output in 2012 of around 187koz platinum.

DIAMOND PRODUCTION

Zimbabwe has the potential to revolutionise the diamond mining sector, as it could become one of the world’s largest diamond producers now that it has been given the go ahead by the Kimberley Process to export diamonds.

The country has two diamond mines: Murowa Diamond (Rio Tinto) and River Ranch Mines, which mine Kimberlite diamonds. There are vast deposits of alluvial diamonds in the Chiyadzwa area and currently there are two main mines involved. These include Marange Resources (formerly Canadile Mine) and Mbada. The Marange resource is however still to be scientifically assessed to determine its full potential. The aeromagnetic survey of the area revealed exciting anomalies that indicate huge potential in greenfield diamond exploration.

GOLD PRODUCTION

Zimbabwe’s Achaean terrain contributes to its gold yielding. Gold production reached its peak in 1999, which is 27 tonnes. After few years of dropping due to political and social unrest, there is a rise from 2008 (3.5 tonnes) to 2010 (9.5 tonnes). In 2013, the gold production hit 17 tonnes. There are few projects linked to Gold mining in Zimbabwe, such as: Camperdown mine gold project, Chakari, Gadzema Belt, Marange etc.

COAL PRODUCTION

Coal has been the dominant energy mineral for Zimbabwe. The country boasts of vast reserves of coal particularly in the north-west and southern parts of the country.

Hwange Colliery Company in the north-western corner of Zimbabwe explore, processes and markets coal. It is the leading coal producing mine, has adequate capacity to meet the country’s needs in terms of energy requirements for domestic heating, agricultural heating, industrial energy as well as power stations. However, the quality of Hwange coal in terms of sulphur and phosphorous content is not suitable for metallurgical purposes and therefore such coal is imported mainly from South Africa.

According to the 2013 BP Statistical Energy Survey, Zimbabwe had end 2012 coal reserves of 502 million tonnes, 0.1% of the world total. Zimbabwe had 2012 coal production of 1.7 million tonnes, having a change of -0.03% over 2011. Coal-bed methane is an alternative energy to coal, which has been found on the northwest of the country.

Lontoh Coal owns a 51% stake in Liberation Mining’s Lubimbi Project and a 51% interest in coking and thermal coal deposits within the Entuba/Lubimbi coalfields. The Lubimbi Project has an indicated resource of 1.245 billion tonnes of open-cast, high-quality thermal and coking coal deposits in the Lubimbi coalfields, approximately 245km north of Bulawayo.
IMPORTANT WEBSITES

- Chamber of mines of Zimbabwe: chamberofminesofzimbabwe.com
- Mining Directory: www.miningdirectory.co.za

DOING BUSINESS IN SOUTHERN AFRICA

Southern Africa is not a traditional trading location for most American companies. It is, though, one of the best intermediate sized markets for American firms to investigate. South Africa's GDP is ~$430 billion, in Purchasing Power Parity measurements about double that. South Africa has a stable democracy, well managed economy, an educated workforce, and a highly developed infrastructure. English is the language of business and popular entertainment. South Africa and most neighbouring countries have a good transparency rating, and legal and administrative environments similar to the USA. These factors allow businesspeople to transact deals with a minimum of cultural and administrative hurdles. Similar situations exist in Botswana, Namibia, Swaziland, Mauritius and other fast developing countries in the region. Below are some of the things that American business people must be aware of in terms of meeting their counterparts in Africa. While there are many African business cultures, and each country has its own nuances, some generalizations can be made in relation to American business culture.

TIME AND SCHEDULES

In the USA, time is scheduled and compartmentalised so people can concentrate on one thing at a time. This is not always the case in Africa, where people invest time in getting to know and trust their counterpart, rather than a focus entirely on the transactions. Punctuality is generally important in South Africa, but not as important as in the USA. Being a few minutes late requires an advance call and small apology, but they will have the coffee on when you arrive.

Both cultures are results oriented. Decisions are made relatively quickly once the relationship has been secured. This often creates problems with Americans as Americans typically consider the information done once all the technical facts have been communicated. Again, it is how time and relationships interact.

PHYSICAL COMMUNICATION STYLES

Americans tend to avoid close physical contact – two yards distance is common. Men require more distance than women. In African cultures, body space is considered closer. Most “westernized” business people will keep to norms Americans use, but it is important to note the difference.

Africans may avoid eye contact. To an American this can mean duplicity or extreme shyness. However, in many African cultures this can be a sign of respect. Moderate hand gestures and animated facial expressions are welcome. Africans tend toward being a little more “stoic” in initial meetings, but usually understand the animation that American business people often use.

Strong handshakes are welcome. There are styles of shaking hands that Americans should become aware of when visiting. African cultures often hold hands longer in shaking than Americans.
VERBAL COMMUNICATION STYLES

Africans can be very indirect in their verbal discussions, and many cultures have a hard time saying “No” directly. Americans are very direct in their conversation, but usually are direct as Germans or Afrikaners. It is important to listen to verbal clues and pay attention to body nuances such as facial expressions.

Humour is often used and admired on both sides, but it must be appropriate, and not focused on any individual. American conversations in social contexts are “light” and people from the US must be aware that Africans will broach topics that may be considered impolite at a first meeting – discussing religion, or family for example. This is an effort to get to know the American counterpart and should not be contrived as an effort to locate information to attack them.

CLOSING A DEAL

Americans can do business without meeting the other party. Southern Africans most often prefer to meet the people first. Both sides have a culture which values the perspectives of the other party.

Open positions are usually taken in negotiations, and parties come to agreement openly – if you make the agreement and make issues afterward with arguments that existed before or during the negotiation, this is seen as duplicitous. Negotiate until there is a meeting of the minds.

While Americans are practical, sticking to the point of the negotiation, in Africa hospitality is generally offered throughout the negotiation stage. Americans tend to offer hospitality after this stage is completed, if at all. “Business First” is the axiom of some Americans in their business relationships, and this is true in Africa, but it must be understood in the context of creating a long term business relationship, with aspects of friendship woven together.

CONCLUSION

The opportunities for mining equipment and services firms are impressive, however there are also obstacles as with any emerging market region. Governments, as part of the quest to diversify and capitalise upon their mineral rich countries, are realising the need for modern, open and transparent regulatory frameworks. Regulatory walls may include national safety marques such as the South African Bureau of Standard (SABS) stamp on equipment used in mining. The market is huge and growing. Over 30% of the world’s global mineral reserves are found in Africa, yet less than 5% of the total global mineral exploration and extraction budget is invested in the continent. There is significant investment flowing into Africa to boost the necessary infrastructure development and as infrastructure continues to show growth, so too will the mining equipment and services sector. Looking at the development horizon, however, the window for most new power and transport infrastructure to come on line is 2 to 5 years with some of the developments not fully funded. This introduces yet another element of variability into the mining investment system.

The continent’s regional distribution of key minerals focusses precious metals in Southern, West and East Africa, iron ore in Central and West Africa, as well as phosphates in North Africa. Chinese demand for African commodities and investments from the world’s second-largest economy continues to grow largely due to the Chinese attitude of limited political interference as well as value-added investments (e.g. the building of hospitals) associated with mining projects. Resource nationalism – a drive to obtain more benefit from resources for local communities and governments – has also become more critical issue and is seen as a primary concern for potential mining investors. However, the fact remains that the largest buyers of Africa’s exported minerals have a positive economic growth outlook towards 2020, with China being a particularly bright prospect. The operational environment and political risk assessments included
in this report identify Botswana, Ghana, Mozambique, Namibia, Tanzania and Zambia as very attractive destinations for mining investment. Other countries that also warrant consideration include Angola, Cameroon, the DRC, Kenya, Liberia, Mali, Rwanda and Sierra Leone.

Two key factors to consider are the general operating environment within the country as well as political risk factors, as one seeks to locate export markets. The most important thing is the character of the persons and company with which the US exporter is dealing. A good partner can ameliorate many of the outside issues for products or services entering that market.

There is broad agreement that the future of Africa’s commodity boom will in part be dependent on demand from China – who has been the continent’s largest buyer of mineral exports and also the fastest-growing amongst Africa’s largest trading partners. However, there is a worrying slow-down of the Chinese economy which could influence production in the industry. India also is an important purchaser. The demands of local growth are one small factor, but in the end the demand for mining resources will be dependent on global growth, wherever that is originating.

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