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Mining in Africa Country Investment Guide

MACIG 2025

Pre-Release Edition

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Welcome to Africa

Revisiting investability in the continent

Any foreigner who has visited Cairo has probably been greeted by a local passersby with a friendly, recurrent salute: "Welcome to Egypt." The Egyptian government can be said to bid a similar welcome to foreign investors in mining, in a more figurative way. It has joined other countries in Africa that want to either grow or start their mining sectors. How welcoming – and how investable – Africa has become today for the foreign mining investor is the subject of the following paragraphs.

The main point of attraction to the continent is obvious: Africa is the most resource-abundant continent - yet investment decisions are rarely driven by geology alone, or else, Africa would be the main beneficiary of exploration dollars. However, according to S&P's most recent 'World Exploration Trends' (2024), Africa's combined exploration budget of US$1.27 billion lags behind places like Latin America (US$3.38 billion), Canada (US$2.44 billion), Australia (US$2.2 billion), and the US (US$1.62 billion).

A decade ago, Africa took a bigger share of global exploration budgets, accounting for 14%, yet, today this has shrunk to 10%, an indication that Africa is losing out. For a company like BHP, the biggest mining group by market cap, the resources world is its oyster. However, the world narrows down to a couple of hotspots once BHP's exploration team applies a series of conventional criteria to identify the places where they can search for their next Escondida or Olympic Dam-like top-tier deposits. Africa is finally back on BHP's list, 10 years after the major exited the continent. Africa's geology and opportunity of scale were surely known to BHP all along, but the above-the-ground conditions needed to change. Recent improvements in Southern Africa have convinced BHP to return to the continent through two investments in Botswana as part of its BHP Xplor accelerator program, as well as taking a stake in Kabanga Nickel, a subsidiary of Lifezone Metals, in Tanzania.

A lot has changed over the past decade since GBR completed its first edition of MACIG (2014), but if we are to paint Africa in large brushstrokes for a generalized overview, the continent is probably riskier today than it was a decade ago. Nivaash Singh, head of International Mining Finance at Nedbank, a South African bank, agrees: "I think Africa has become riskier if we look back at the Arab Spring and the regime changes it catalyzed in North Africa, and also the devastating effects of Ebola on West Africa, and the series of coups before and after the pandemic."

Let's identify some of the major risks investors must take note of.

A rendition of current risks

-Nationalistic policies are on the rise: In a survey by AON, the top risks identified by companies in the natural resources industry were business interruption (over 51% of respondents) and regulatory/legislative changes (over 42% of respondents). More countries in the continent, including Namibia, Zimbabwe, Ghana, Nigeria and Botswana, reverted to banning the exports of unprocessed minerals in recent years, whereas many West African countries, including Mali, Burkina Faso, Niger, Chad, Sudan and Gabon, have seen military

interventions; the new regimes manifest tendencies to increase state ownership of mineral resources. The nationalistic trend is only partly a reaction to an upswing in commodity prices. "Windfall profits tend to trigger windfall profit taxes," said Kathryn Khamsi, partner for international arbitration firm Three Crowns, warning: "There is a domino risk of windfall in profit tax arbitrations."

Disputes are likely to emerge over breaches of existing agreements. According to risk consultancy Verisk Maplecroft, government interventionism in the natural resources sector has been rising post-pandemic.

The other cause of the renewed wave of nationalistic policies is rooted in Africa's troubled colonial history. Local populations and their leaders are sensitive to the idea of foreign exploitation of resources.

-Indices of governance, rule of law, economic freedom and transparency remain broadly flat in Sub-Saharan Africa and lower than the global average: The average mark for economic freedom in 2023 across 51 African countries was at 51 index points, significantly lower than the global average at 59 index points. This measures the Rule of Law; Limited Government; Regulatory Efficiency and Open Markets.

-Political instability and wars: Africa is currently the continent with the most wars (conflicts with more than 1,000 deaths per year). The number of annual violent events caused by militant Islamist groups has increased three-fold in the last decade, according to the Africa Center for Strategic Studies. The most impacted region is the Sahel. If 10 years ago, this was the region facing the fewest deaths linked to violent extremism, it is now the region with the most. For Simon Meadows Smith, managing director for SEMS Exploration, a Ghanaian company servicing the broader West African region, the security deterioration in the Sahel is the most obvious change in the past decade: "This is most noticeable in Burkina Faso, which was the busiest mineral exploration country in the region, 10-12 years ago. Sadly, Burkina is a long way from that now," he said.

In a ranking of the world's most dangerous countries by the Security Journal, Burkina Faso, the DRC, Mali, Ethiopia, Nigeria and Sudan make the unfortunate cut.

"If we think we can create meaningful impact over the next 30 years by doing the same things we have done for the past 30 years, we are only fooling ourselves. Technology can disrupt and revolutionalize exploration."

Sonia Scarselli,
Vice President, BHP
Exploration & BHP Xplor

Paul Kabuswe

Minister of Mines and Minerals Development, The Republic of Zambia

What role can Zambia play in meeting growing global copper demand?

We have a target to reach 3 million t/y of copper production by 2031. There have been some important announcements recently, including KoBold Metals' discovery at Mingomba, First Quantum's commitment to invest over US$1 billion to extend Kansanshi's LOM, Barrick's plans to deploy US$2 billion for the Lumwana copper mine expansion, and China Non-ferrous Mining Corporation (CNMC)'s pledge to invest US$1.3 billion over the next five years, including US$600 million to reopen shaft 28 at Luanshya. International Resources Holdings (IRH) from UAE is investing US$1.1 billion in Mopani copper mines. Vedanta of India is taking back ownership of Konkola copper mines, with significant investment. And finally, we also have Moxico Resources with the Mimbula Phase 1 project already in operation, and a plan for the Phase 2 expansion in motion.

How important is for Zambia to maintain a stable regime for mining investment?

We understand very well that mining projects are long-term investments, so the predictability in the economy and the rules of the game is paramount. This is what we want to offer as a country. ■

Tom Alweendo

Minister of Mines and Energy, Government of Namibia

How is mining translating into benefits for Namibians?

The Ministry serves as the custodian of Namibia's minerals and energy resources. Mining is one of the most significant sectors of the Namibian economy, contributing over 50% of our revenue and up to 15% of our GDP. In the case of critical minerals like lithium and rare earths, we are taking proactive steps to ensure that value addition occurs within our borders. This means evaluating and processing these minerals locally before export.

What are the key advantages that Namibia offers for investment in the extractive industries?

Namibia offers a great investment environment with robust infrastructure, a safe environment, political stability, and a favorable regulatory framework. Additionally, Namibia's commitment to sustainable development and good governances assures a conducive business climate and mitigates investment risks. Overall, Namibia offers a compelling value proposition for investors looking to capitalize on the country's vast potential. Finally, Namibia is simply a nice place to live and work in. ■

Francis Kamanzi

CEO, Rwanda Mines, Petroleum and Gas Board (RMB)

What is the importance of the mining industry for Rwanda's economy?

Rwanda's national growth is greatly aided by mining, which presently employs over 70,000 people.

Ever since 2019, the mining revenue sharing scheme has been operational whereby revenues accrued from mining are distributed to the districts hosting mining activities to put in place infrastructural development that benefit the communities. Mineral taxes garnered across the entire value chain make a significant contribution to our national economy. Mining accounts for 3% of Rwanda's GDP. In 2023, Rwanda's mineral exports reached over US$1.1 billion, a 43% increase from US$772 million in 2022.

What are recent developments?

In 2023, Rwanda launched a three-year mineral exploration campaign, focusing initially on gold and lithium with Rio Tinto.On February 19, 2024, Rwanda and the European Union signed a MoU to establish cooperation on sustainable value chains for critical raw materials.

Rwanda's mineral portfolio includes traditional minerals such as the 3Ts, gold, and gemstones, and emerging ones like lithium, beryllium, and rare earth elements.

Rwanda is establishing itself as a regional mineral value-addition hub. At present, we have three state-of-the-art value-addition facilities. These include a gold refinery, a tin smelter and a tantalum refinery. ■

-Availability of infrastructure, local supply and energy: In landlocked countries and remote mining sites, or in jurisdictions with a nascent mining sector, the local supply chain is undeveloped, making mining operations fully dependant on imports for everything from equipment to reagents and other consumables, as well as lacking connections to the power grid.

The poor state of roads leads to lower utilization rates and a shorter equipment lifespan, as explained by Ghassan Husseini, managing director of Crown Transport Logistics: "If an average truck does an average of 15,000 km/month in Europe, that same truck will complete about half that distance in Africa. Covering a distance of over 10,000 km would mean crossing over from Ghana to Chad – and that would take much more than a month due to road conditions, as well as border policies and regulations."

Inadequate infrastructure can delay projects, increase costs, or render projects inoperable, and the question of who should pay the infrastructure tab if often a source of acrimony.

-Greater ESG scrutiny and the rise of reporting standards: Mining has seen bigger pressures on ESG aspects, but these have so far been disparate and hard to trace. However, regulations are formalizing into global standards that everybody must implement to the same degree. The best-known example is the formalization of the Global Industry Standard on Tailings Management, which sets a precedent for the industry. Risks to unwanted exposure to illicit value chains grow bigger in countries where there is an ongoing war, such as the eastern DRC, where the trade in gold, tin and tantalum has been linked to fuelling the conflict.

"In areas like battery metals and rare earths, junior companies are doing much of the heavy lifting. These companies tend to be innovative and more open to exploring different approaches."

Greg Hayes, Senior Vice President Project Development, Minerals & Metals, Wood

Offsetting risks: geology and geopolitics

Less than 1% of exploration projects end up becoming a mine, a depressing statistic. If exploration is an inherently risky business, why add to the risks by doing it in Africa?

There are over 600 mining projects in Africa's pipeline, according to SRK Consulting. Based on TNM Marco Polo's global database, a total of 385 exploration projects (from prospects to advanced) are in just seven African countries: Tanzania (65), Namibia (61), Burkina Faso (61), Mali (57), South Africa (53), Côte d'Ivoire (45), and Botswana (43). These numbers are a far cry behind places like Canada (4,169) or Australia (2,458). However, counting the world's resource endowment tells a different story, and that is that Africa holds 30% of the earth's valuable minerals. That makes the continent a top contender for securing the world's growing mineral supply.

"Regulations are evolving rapidly across Africa, driven by increasing awareness of ESG issues and the need for greater transparency and accountability in business practices."

Vis Reddy, Chairman, South Africa & Regional Coordinator Africa, SRK Global

It is said mining is a patient industry. Current demand projections are not. Demand for minerals deemed 'critical' is set to increase almost fourfold by 2030, according to the UN. Demand for nickel, cobalt, and lithium is predicted to double, triple and rise ten-fold, respectively, between 2022 and 2050. Researchers at the University of Michigan and Cornell University have found that the world will need to mine more copper between 2018 and 2050 than it has mined throughout history.

2050 is also the deadline to curb emissions before reaching a point of "no turning back." Like mining, climate change is also cyclical, the globe has gone through various climate changes before humans could either contribute or intervene in these phenomena, unlike today. The IEA estimates we need US$800 billion of investment in mining for critical minerals by 2040 to limit global warming to 1.5°C. The pace of mineral demand and the consequences of not meeting demand force the industry to act fast and take more risks. Mining cannot afford to be a patient industry anymore. The scramble for supply drives miners back to geological credentials, and therefore to places like the African Central Copperbelt.

There is no doubt mining is economically crucial for many places in the continent, accounting for as much as a third of GDP in countries like Zambia and the DRC. Single projects, like Ivanhoe Mines' Kamoa Kakula complex in the DRC, alone contributed to 6% of the country's GDP in 2023. But today, Africa has become crucial for the global mining industry: According to the IMF, Sub-Saharan Africa could produce US$2 trillion of metals required for the energy transition by 2050. African countries are therefore better placed to dictate their own terms.

"The entire continent boasts enormous mineral wealth at very high grades that will compensate for its riskiness. Take copper: If you are looking for a high-grade copper deposit, you have to be in Zambia or the DRC, but you have a risk premium that offsets the grade. Vice-versa, South America is less risky but grades have been declining. Investors must ask themselves: Do they want a dividend yield at a discount and, if so, will that put them in a net better position than being in a less risky jurisdiction with lower grades? Only they can answer this," said Nivaash Singh, head of international mining finance at Nedbank, a South African bank.

Africa boasts some of the world's biggest mines across the mineral spectrum. These include the well-known Barrick's Kibali gold mine and Ivanhoe's Kamoa Kakula copper project in the DRC, De Beers' Orapa diamonds mine in Botswana, Kumba Iron Ore's Sishen mine in South Africa, Kenmare Resources' Moma titanium minerals mine in Mozambique, and the upcoming Simandou iron ore project in Guinea.

Crucially important for the world's demand for lithium, graphite, manganese, uranium and REE are other projects that have received less global attention. For instance, Trinity Metals operates some of the largest tin and tungsten mines in Rwanda, while Deep Yellow's Tumas' uranium project is among the few predicted to come into production before 2030. Peak Rare Earth's Ngualla REE project in Tanzania is also one of the most advanced in the rare earths space.

Who will finance these projects is the big question. Peak Rare Earths has a term-sheet agreement with China's Shenghe Resources which will cover the development costs of the project. As mineral supply becomes a weapon in the contest for power between East and West, we anticipate a greater risk appetite from Western countries as they try to get there first. As the holder of many of the coveted resources, Africa turns into the theatre in this battle: "China has been highly tolerant of risk, and that is forcing America and Europe to also take higher risks to secure supply and counterbalance China, which already controls a disproportionate amount of supply. This dynamic has resulted in many transactions going through at high premiums," said Vusi Mpofu, sector lead for mining and chemicals at Nedbank.

On the African mining scene, Canadians, Australians and Brits are the leading actors, with 29% of annual exploration budgets spent by Canadian-owned companies, 26% by Australians and 18% by UK-based companies, based on data from the Deloitte Technical Mining Advisory. Chinese and African exploration companies contributed a much smaller 3% and 7%, respectively. However, China plays a bigger role in infrastructure developments in the continent, having partnerships with 44 of Africa's 54 states, according to the Atlantic Council. Following a lull in investment after the pandemic, China has revitalized its efforts in Africa, investment growing 114% in 2023 versus the previous year, noted Griffith University. A big chunk of that capital is going into the critical mineral sector, which China controls in proportion of 60% of production and 85% of processing capacity. Last year, US$7.8 billion out of the US$11 billion invested in the continent went to mining projects.

"The main challenge for mines in Africa is the lack of local sourcing. Lacking or inadequate infrastructure at ports and limited shipping capacity pose serious challenges in securing consistent and reliable supply to remote sites."

Gavin Erasmus, VP, Global Sector Head – Mining, DHL Global Forwarding

China's continued inroads into Africa is a defiance to the US and other countries efforts to counterbalance the Eastern monopoly of supply. A higher appetite for risk, traditionally expressed by China and now gradually matched by the West, could bode very well for Africa's interests. ■

Snap Interviews with Financial Institutions

What is a key focus for your organization in 2024-2025?

Sam Mokorosi

Head: Origination & Deals, Johannesburg Stock Exchange (JSE)

A key priority is to slow down net de-listings. In this sense, we have made regulatory amendments to make it easier for companies to both list and remain listed without compromising investor protections. Another priority is working with governments to raise capital for SOEs (state-owned enterprises), which may include funding through the JSE Private Listings or through listing some of the high-quality SOEs.

Anass Joundy

Associate Director, Lead Banker Natural Resources, South & East Mediterranean Region, EBRD

The European Bank for Reconstruction and Development (EBRD)'s shareholders approved the expansion to six countries in the region, namely Benin, Côte d'Ivoire, Ghana, Nigeria, Kenya and Senegal. Within this next expansion phase, the mining industry will be an important share of our investment portfolio. Our value-added is three-fold: act as a one-stop shop for all types of financial instruments, deploy technical assistance to promote green and inclusive investments, and our AAA rating.

Franklin Edochie

Senior Vice President, Africa Finance Corporation (AFC)

AFC continues to broaden its investor base as we look to scale our portfolio over the next four to five years across Africa's infrastructure space. In the critical minerals space, AFC invested US$150 million in the form of senior debt for the phase 3 expansion of the Kamoa-Kakula copper complex. In the precious metals space, AFC acted as an anchor investor in FG Gold's Baomahun gold mine, which, upon reaching production, will be the largest commercial gold mine in Sierra Leone. Both of these projects are flagships in their respective countries and will have a significant impact on their economies— precisely the kind of transformative projects that AFC targets.

Nivaash Singh

Head: International Mining Finance, Nedbank

Our mining portfolio spans precious metals, base metals (many of which are now re-categorized under the buzzword of 'critical minerals'), and industrial metals. One recent trend in our business is the focus on uranium, which we recognize as the cleanest available source of baseload power. We are proud to be associated with companies such as Paladin Energy and Deep Yellow, both a uranium focussed mining company and a uranium project respectively in Namibia. Every year, we conclude between 15 to 20 structured debt financings, of which at least two to three will be for the financing of greenfield projects.


Image courtesy of Trinity Metals

Mining Investment

Pricing for risks

10 years ago, a small junior with a market cap of around CAD10 million was looking for the same amount (CAD10 million) to finance a silver asset. This kind of proposition is rarely appealing to a debt provider, nor suitable for equity placements, yet the junior managed to secure a US$6 million loan with royalty on the production and raised the rest in equity. This junior is Aya Gold & Silver, now a CAD2 billion market cap company.

The initial loan was provided by the European Bank of Reconstruction and Development (EBRD). We spoke to Anass Joundy, associate director and lead banker for Natural Resources, South & East Mediterranean Region, at the EBRD about what went into the decision: "The hybrid structure of financing and streaming is something that not many financial institutions would bother with for a ticket lower than US$10 million. Still, we went ahead and the project was a success."

The past few years have been difficult for financing greenfield exploration. According to S&P Global, the global junior and intermediate sectors raised a total of US$11.62 billion in 2023 – almost half compared to the US$21.65 billion raised in 2021, which is reflected in lower drilling activity and exploration budgets. Mining companies are also less willing to spend on greenfield exploration, preferring instead to spend on acquisitions of existing assets. According to S&P Global (2024), greenfield exploration has been declining sharply over the past decade, while M&A activity has picked up in compensation. Despite a rise in metal prices this year, S&P expects exploration budgets to decrease by 5% in 2024.

In the international financial markets, Africa is also disfavored. A higher risk perception premium translates to higher borrowing costs, both in the form of a higher coupon at issuance as well as higher refinancing costs in the secondary market. The IMF has looked into these claims and found that structural challenges, such as the development of the financial sector, the size of the informal sector, or the quality of the regulatory system, are key factors impacting the premium paid, emphasizing thus the importance of structural reforms.

Meanwhile, on the equity markets, listed firms with operations in Africa are familiar with the "discount" their share price suffers due to the perceived risks, which makes their projects difficult to valuate. This is highest for early-stage exploration companies, said Sam Mokorosi, head of Origination & Deals, at the Johannesburg Stock Exchange (JSE): "Investors continue to be concerned about operational risk, especially in the junior sector. Buying shares of a mining company exposes investors to operational leverage that gives them both a steeper upside and a steeper downside; that operational risk is the highest with early-stage miners."

Mokorosi also spoke about the net delisting trend (higher number of delisting as opposed to IPOs on a given year) that has impacted major stock exchanges. According to him, this is caused by a higher concentration in the value chain, with asset managers and stockbrokers becoming larger and fewer, attaining a size at which they end up paying less attention to the small-cap firms. These small companies eventually decide it is too difficult to raise money on the exchange and choose to delist.

GBR interviewed a few private companies planning to IPO in the upcoming years, including Rwandan diversified miner Trinity Metals, tin producing, smelting and trading company Woodcross in Uganda, project generator Antler Gold with assets in Namibia and Zambia, early-stage gold junior Red Sea Resources with licenses in Egypt, and Zambian copper explorer Zamare Minerals. Roger Murphy, the managing director of Zamare, looks at the TSX, ASX and AIM as the main exchanges most relevant to a junior explorer: "Currently, the most liquid market is likely in Australia. While we know that we will eventually go public, the timing will depend on when market conditions permit, as the last few years have been challenging for junior explorers."

All of these are joggling the old chicken-or-egg decision of consolidating first to be able to get good investment traction, but needing investment to be able to consolidate and advance their projects. Other private companies are more inclined to look for a financing partner in the form of a debt, offtake, or JV format. Akobo Minerals, a gold junior in Ethiopia, is seeking a partner to help it unlock the broader potential of the region beyond its current asset.

While investor confidence continues to improve, especially for high-performing commodities like gold, we note a growing importance of multi-lateral financial institutions, development banks, streaming and royalty firms, as well as private equity and venture capital firms starting to fill in the financing gaps in the junior and intermediate sector. Trinity Metals approached the US International Development Finance Corporation and was granted US$3.86 million in technical assistance focused primarily on ESG initiatives at its portfolio of projects in Rwanda. Orion Minerals has the backing of the Industrial Development Corporation (IDC) and Triple Flag Streaming Finance for the financing of its Prieska copper project in South Africa, whereas another South African junior, West Wits Mining, secured a pathway for a loan of US$15.9 million from a South African Development Finance Institution (DFI) for its Qala Shallows gold project.

"On the debt side, the appetite remains robust from institutions like AFC and other MDBs, especially in sectors where commodity prices have remained stable and where hedging solutions are available. However, political risk remains a key consideration when evaluating these opportunities. This growing interest signals positive momentum, but the need for strategic partnerships and careful risk assessment is essential to unlocking larger-scale projects," commented Franklin Edochie, senior vice president at the Africa Finance Corporation (AFC).

The AFC has announced its largest syndicated loan to date, at approximately US$1.16 billion, and is supported by mandated lead arrangers and bookrunners from across the world, including First Abu Dhabi Bank, Emirates NBD Bank, the Commercial Bank of China and Standard Chartered. Among its most recent investments, AFC put US$150 million into the development of the Kamoa-Kakula copper complex in the DRC, as well as providing greenfield exploration support to FG Gold's Baomahun gold mine, the first and largest commercial mine in Sierra Leone. The International Finance Corporation (IFC), African Development Bank Group (AFDB) and the EBRD are also participating more in Africa's resources sector, whether directly in extractive projects or indirectly through infrastructure support. This year, the EBRD has announced expanding for the first time in Sub-Saharan Africa. Annually, the EBRD provides between US$300 and US$500 million across 10-12 projects in the mining industry across its traditional jurisdictions in Europe, Central Asia, North Africa, and the Middle East. The next expansion phase will include six new countries in Sub-Saharan Africa (Benin, Côte d'Ivoire, Ghana, Nigeria, Kenya and Senegal) and a bigger share of mining projects within the bank's portfolio.

Vusi Mpofu, sector lead for mining and chemicals at Nedbank, offers a final word from the perspective of a financier: "We are not a seasonal business. In the capital allocation framework, you cannot make decisions based on current macro conditions, but a longer timeframe that spans the life of project must be considered. The mining sector is endowed with a vast history of prudent capital allocation; it survives thanks to this history and culture of being able to make the appropriate capital allocation decisions in anticipation of a future that not everybody sees." ■

Realities of Different Jurisdictions

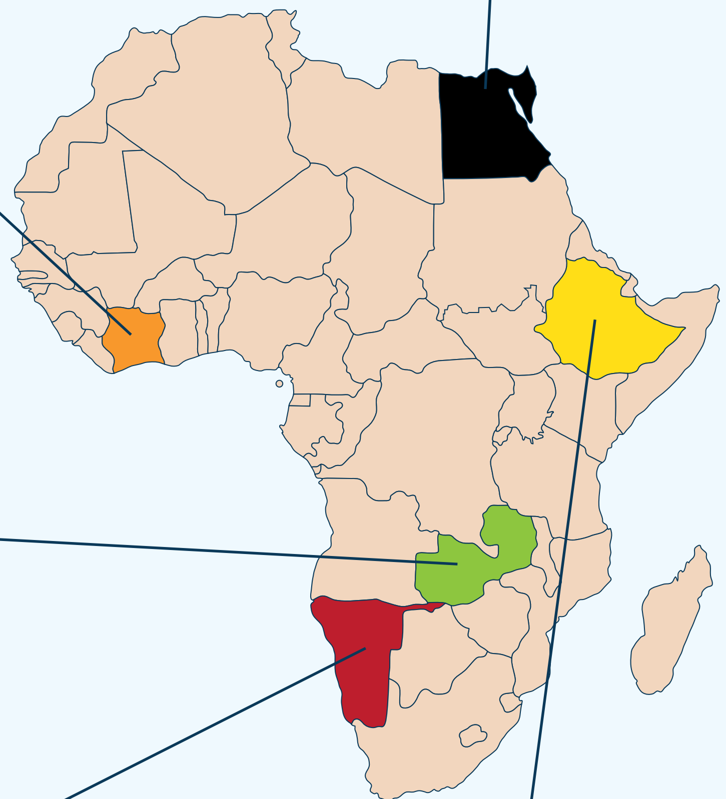
Executive insights from existing operators

"The geology in Egypt is untested, yet highly prospective, with significant gold occurrences throughout the belt. Only a few companies have been lucky enough to secure licenses, and of those, we have some of the most prospective in the country."

Al Fabbro, CEO,
Midnight Sun Mining

"Côte d'Ivoire is a safe and easy place to work, which I say with first-hand experience from over 15 works of working in the country. West Africa is a top region for discoveries globally, with low capital intensity and a very mining-supportive government."

Martino De Ciccio,
CEO, Montage Gold



"Zambia is probably one of the best places to operate today. The country has a functioning legal system, an abundance of specialist skills, and experienced geologists, drilling companies and service providers."

Roger Murphy,
Managing Director, Zamare Minerals

"Namibia has ready water, power, road, and port solutions that have been exporting uranium for the past 45 years. The government has been putting great efforts into continuously improving their systems."

Gavin Chamberlain,
CEO, Bannerman Energy

"The foreign exchange reform is a major step towards opening the Ethiopian economy. Compared to other African states that lack the institutional framework to essentially liberalize the economy, Ethiopia is able to do this and it has done the right thing."

Jørgen Evjen, CEO, Akobo Minerals

Image courtesy of West Wits Mining

Geographies: South Africa

Turning the page on history

South Africa is believed to be the world's wealthiest mining jurisdiction, with minerals worth upwards of US$2.4 trillion, according to the World Bank. As Africa's biggest economy and most industrialized nation, home to the continent's largest stock exchange (the Johannesburg Stock Exchange), with a sophisticated mining ecosystem led by majors like Gold Fields and AngloGold, South Africa should fit in a league of leading mining jurisdictions along with the likes of Canada or Australia. Nevertheless, South Africa comes behind many of its African peers like Ghana, Tanzania, Côte d'Ivoire, Namibia, Botswana, and DRC in the latest Fraser Institute Annual Survey of Mining Companies (2023).

This result is puzzling considering South Africa compares favorably to other countries in the continent in terms of ease of doing business, ranking in the top five in Sub-Saharan Africa. Though these surveys and indices are surely not all-telling, they do point to the unpalatableness of South Africa in the eyes of foreign investors, despite the country's otherwise superior qualities.

To understand South Africa's positioning today, we must take a look at its mining past and how this continues to inscribe itself into its present. The discovery of the first diamond on the banks of Orange River in 1867, as well as the following Witwatersrand Gold Rush of 1886, sparked the beginning of a "Mineral Revolution," turning South Africa into one of the world's top mining countries. A century after the start of industrial mining, the industry's contribution to GDP peaked at 21% in 1980. But these were not years of glory, despite the industry's momentous performance. Mining was part of the systematic racial segregation whereby the wealth of Europeans grew excessively, while black mineworkers were exploited for minimum pay, at a fraction of their white peers' wages, a structure institutionalized under the apartheid regime.

2024 marks 30 years since the end of apartheid in South Africa. Following the regime change, South Africa's mineral policy has been in a contentious stride to undo the wrongs of the past while still supporting the industry, which has been an important part of the country's post-apartheid industrial growth. South Africa introduced Broad-Based Black Economic Empowerment (B-BBEE) policies to ensure the incorporation of Historically Disadvantaged Persons (HDPs) into the mining and minerals industry. The immediate effects of the legislative overhaul in 1994 also had lasting impacts on investment, as it created uncertainty.

Mining contributed US$23 billion to South Africa's GDP in 2023 (6%), while in provinces like North West, Limpopo, Mpumalanga and the Northern Cape the industry makes up 20-30% of local GDP. Mining is also a crucial sector for the country's trade balance, representing about 58% of total exports, according to the South African Revenue Service. The majority of these revenues come from PGMs, followed by coal, as well as chrome, gold, manganese, iron ore and diamonds.

Mining remains deeply embedded in the country's economic and political fabric, something that surfaced quite prominently this year during BHP's failed bid for Anglo American. If there is one clear message we can take away from BHP's rejected US$39 billion takeover offer, later sweetened up to US$49 billion, is that South Africa does not want to lose Anglo, and Anglo does not want to hurt South Africa. Even if Anglo American has moved its headquarters from Johannesburg to London, it has not forgotten its South African roots, where it was founded over 100 years ago. The country is also home to its biggest operations and employs 40,000 South Africans, which BHP had made commitments to protect.

The proposal was primarily rebuffed because BHP asked Anglo to exit its South African platinum (Anglo Platinum/Amplats) and iron ore (Kumba Iron Ore) companies, the Australian miner being interested primarily in Anglo's copper projects in Peru and Chile, which would have made it the top producer of copper in the world. Anglo feared that leaving Amplats and Kumba independently listed would have penalized South African investors, which hold 20% of Anglo's shares. The repercussions of the Anglo demerger on South Africa would have indeed been deep. JP Morgan estimated the takeover could have led to outflows of US$4.3 billion from South Africa and weaken the rand.

"Entry barriers in South Africa are higher than other parts of Africa, but South Africa is a sophisticated global mining jurisdiction with a mature mining system, strong environmental laws, and a thorough legislation that aligns with the UN sustainability goals."

Bill Guy,
Executive Chairman,
Theta Gold Mines

Unions pledged with Anglo American's shareholders to reject the takeover. Mineral Resources Minister Gwede Mantashe also said he would not support the deal, which came right before South Africa was going to the polls. Anglo obliged.

Interestingly, Anglo also later announced a restructuring that would see its Amplats and Kumba businesses demerged. The demerger of Anglo's less-performing assets is symptomatic of a broader issue in the country's mineral industry; an over-reliance on PGMs, as well as coal and iron ore.

Unfortunately, South African PGM mining company profits suffered tremendous blows in 2023 due to lower commodity prices as well as structural domestic issues like power cuts, logistics constraints and inflation. To save money and keep businesses afloat, the country's top four producers - Sibanye Stillwater, Anglo American Platinum, Impala Platinum (Implats), and Northam Platinum – announced job cuts in the thousands, as well as drastic restructuring and investment postponements. For instance, Anglo closed a metal processing plant. Northam Platinum's CEO called the situation "the worst crisis in three decades."

Coal also came face to face not only with softening prices but also with the low capacity of the rail network, operated by state-owned Transnet. According to Reuters, 2023 coal exports hit the lowest in almost three decades, at 47 million t/y.

Lower iron ore prices and sales volumes have also impacted South African companies. Kumba Iron Ore's profits fell by 26% in the first half of this year; the company has 8.2 million t of iron ore stockpiled, as reported by CNBC Africa.

"Mining has been a significant growth driver in recent years and that has helped us offset the impact of a drop in construction work in South Africa. Today, the construction industry is bouncing back, albeit from a low base. The other growth area is the energy sector, especially in South Africa."

Brett Kimber,
CEO, Eazi Access

Stillness

The echoes of South Africa's past are felt strongly in today's industry. The basket of core commodities mined remains mostly unchanged, only gold production has dramatically decreased. Coal and PGMs are both threatened by the energy transition; coal for environmental reasons, while PGMs because platinum, palladium and rhodium are used in cars, but they have not managed to penetrate the growing EV market, as explained in a report by Metals Focus. The country's mining industry also remains dominated by large mining companies, some over 100 years old, while its few junior explorers focus on brownfield developments from historical sites. Even the country's struggles with power availability speak of a stuckness in time, for South Africa confronts severe power outages, reminiscent of a time before the 1860s when electricity was first brought to South Africa and the mining industry was born.

"South Africa has a competitive electricity price. This contributes to the country's investment attractiveness. On top of that, South Africa has the human capital, infrastructure, and the rule of law as well as freedom of speech that characterize a top-tier jurisdiction."

Vuslat Bayoglu,
Managing Director,
Menar

South Africa is missing on opportunities for more future-facing commodities like copper and battery minerals, as well as gold. The country's only copper mine is Palabora, but a handful of junior miners are reviving other deposits: Orion Minerals is advancing two brownfield projects, its flagship 30 million t high-grade Prieska Copper Zinc Mine (PCZM), which is fully permitted, as well as Okiep Copper, formerly operated by Newmont and Gold Fields. Orion is upgrading the historic drilling of Okiep to put together a BFS for a small-scale production while continuing to drill the rest of the mineral resource. The Okiep district used to produce 30,000-50,000 t/y of copper for 50 years. Meanwhile, Copper 360 is rebooting Rietberg, which had also been mined by Newmont and Gold Fields and is also in the Okiep district in the Northern Cape. Copper 360 is looking at a current resource estimate of nearly 4.8 million t (measured and indicated).

In the gold space, South Africa continues to hold the biggest reserves in the continent, according to S&P Global, amounting to 10% of global gold reserves. The largest mine is Gold Fields' South Deep gold mine in Gauteng, with a LOM up to 2096. The gold exploration space is also characterized by brownfield developments. ASX-listed Theta Gold Mines controls 43 historical gold mines in the Eastern Transvaal Gold Fields region, home to South Africa's first gold rush, dating back 130 years. Theta's Transvaal Gold Mining Este (TGME) project contains 6 million oz of gold resources, but the company will start by mining four out of the 43 mines in the first phase, targeting production of 1.2 million oz (from 6.46 million t @ 5.95 g/t Au) for 12 years. Some of its mines, like Beta, boasted cut-off grades at 21g/t Au in the past.

Another company digging up South Africa's historical mines is West Wits Mining, whose Witwatersrand Basin Project (WBP) produced over 1.5 billion oz of gold (or 22% of all the gold ever mined) according to the company. West Wits sees a revenue potential of US$2.6 billion from its 4.28 million oz gold resource at a grade of 4.58 g/t Au. In the same basin, South African gold mining company Aurous Resources is looking at opportunities in tailings from the Gauta tailings retreatment project.

Sam Mokorosi, head of origination & deals at the Johannesburg Stock Exchange (JSE), told GBR the exchange is working on originating more listings in vanadium, lithium, copper and rare earths, acknowledging that there are not enough listed battery metal opportunities in the country.

A US$1 billion deal from Abu Dhabi's F9 Capital Management into Q Global Commodities, owned by South African coal investor Quinton Van der Burgh, could propel more strides in green metals like lithium, copper and nickel across the Southern and Eastern African region.

Some new mining projects on the country's horizon are worth noting. The South African business of Rio Tinto (Richards Bay Minerals) plans to resume a US$463 million expansion at its Zulti South mineral sands project, which was halted in 2019, mostly due to insecurity issues threatening its workers.

A new project is Menar's recent acquisition of a ferromanganese smelting complex from Samancor. This used to be the world's largest ferromanganese smelter, processing 2 million t/y of manganese, but it was put on care and maintenance in 2020 due mostly to the lack of and price of power. Menar wants to both use coal from a project it owns next to the smelter and explore cleaner energy options like solar and waste-to-energy projects. "Once the acquisition process is finalized, the complex will be rebranded from Metalloys to Khwelamet. Our vision is to target US and European steelmakers, turning the asset into a critical step towards South Africa's re-industrialization and wealth generation," said Vuslat Bayoglu, Menar's managing director.

A new era for South African politics

Ever since 1994, when the ANC (African National Congress) came to power, the party has won every election by a landslide, taking 62.5% of the vote in 1994 and 66.36% in 1999. For the first time in 30 years, the ANC only garnered 40.18% of the vote in the recent 2024 election, being forced to form a coalition government with the opposition parties, primarily the Democratic Alliance (DA), which came second with 21.81% of the vote. The ANC also lost its majority in mining-focused provinces, including Northern Cape, Gauteng and KwaZulu-Natal, as well as in Pretoria, the country's administrative capital.

The business community has welcomed the coalition government (Government of National Unity or GNU), hoping it can provide balance, though challenges may arise as the two sides will need to find common ground over sensitive topics, including black ownership rights, which is seen by some as a failed policy.

The issues at the core of deciding the outcome of the election are pertinent to the mining industry. Unemployment, which is one of the highest in the world at 32.9%, and 45.5% for youth (15-34 years old), has been called a "ticking time bomb" by the UN and was one of the main issues that weakened the ANC. The other sore issue is energy security, South Africa dealing with serious load-shedding, causing many businesses to shut down while leaving households stranded in the dark. Economic stagnation, perceived corruption, and distressed infrastructure were other aspects South Africans were angry about. FDI has fallen by a third according to the IMF and capital does not easily find its way to the country. Currently, 24.5 million people (39% of the population) are on some sort of financial support from the government, which puts great pressure on the country's debt.

South African miners have voiced repeated concerns over unreliable power supply due to frequent load curtailment (or load shedding as known in South Africa) from the state-owned utility Eskom, as well as issues related to the country's rail infrastructure managed by Transnet, onerous BBBEEE requirements, and the haunting risks of political government interference and nationalization. Improvements are noted, however. For the first time since 2020, Eskom reported over five months without load-shedding – a success of its new Generation Operational Recovery Plan started in 2023. This is a huge change compared to last year, when the country saw record blackouts. Eskom plans to keep the energy availability factor (EAF) at 70% while adding more capacity to respond to demand. However, its request to the electricity regulator for a 36% electricity tariff hike has faced strong opposition. On its side, Eskom says cost savings will not be enough to keep its operations sustainable and that it needs to come closer to cost reflectivity.

Johan Helberg, head of mining for Africa, Middle East, and Asia at Aggreko, was involved in his past career in molding some of the existing power stations in South Africa, like Majuba and Kendal: "As gas becomes more available and the cost of solar panels continues to drop (it has halved in the last 18 months), self-generation becomes the more feasible and preferred option. For now, Eskom remains relevant price-wise, but they must resolve their challenges to maintain the current streak of uninterrupted power. Personally, I do not believe we are out of the woods yet and the 2025 South African winter will probably tell."

"Peaceful transitions of power may not have been possible in many African countries 20 years ago, but today we see a much greater level of stability that reassures investors."

Stephen Smithyman, CEO, Kanu Equipment

The South African energy sector is indeed changing rapidly. Recently, South Africa received US$1 billion from the World Bank towards its energy reform and the restructuring of its power sector, including the opening of the power market and investments in transmission to private capital and maintenance of existing power plants managed by Eskom. This year, South Africa also launched its largest wheeling project, adding 256 MW of renewable energy to the national grid which will go to power Tronox Mineral Sands' operations in KwaZulu-Natal and the Western Cape.

Reforms in infrastructure are a positive sign for investors. Transnet saw a new board appointed in 2023 that introduced a Recovery Plan to stabilize the SOE's operational and financial performance. An important reform is what the company calls the "vertical separation of Transnet Freight Rail (TFR) into a Rail Operating Company and an Infrastructure Manager". For the financial year ending in March 2024, Transnet reported improvements in total rail volumes and revenues, though still below target.

The greater liberalization of both the power and rail sectors, together with the country's new openness to public-private partnerships, are in line with what investors would expect of a leading country like South Africa. ■

Image courtesy of Newcore

Geographies: Ghana

Land of kings

"Ghana" is what the Sonike people of the Ghana Empire would call their king, meaning "warrior king." Another address was "kaya maghan," or "king of gold," the region being famous for its role in the trade of gold, found mostly in alluvial deposits or dug from few-meter deep shallows. Over a thousand years later, the Republic of Ghana has turned, in mining terms, into another kind of kingdom – a kingdom of gold majors. Ghana's gold mines are operated by the world's leading producers. The number of mines can be counted on one's fingers, yet they are enough to crown Ghana as the leading gold producer in the continent. In 2023, Ghana produced just over 4 million oz of gold, according to the Chamber of Mines, and is expected to increase its output to up to 4.5 million oz in 2024.

Gold Fields alone accounts for half a million oz/y of gold from its Tarkwa mine, while its Damang mine is in its last two years of life, processing stockpiles. AngloGold Ashanti contributes another half a million oz/y from its two mines, the 268,000 oz/y open-pit Iduapriem mine close to Tarkwa and the 224,000 oz/y from the underground Obuasi mine, close to the city of Kumasi. Newmont brings a huge contribution of 643,000 oz/y from the Ahafo surface mine, as well as its Akyem 422,000 oz/y surface gold mine. Perseus is the only mid-tier producer among these leading majors, its Edikan mine pouring over 250,000 oz in the last year, about half of what the Australian miner makes a year from its three producing mines, two of which are in Côte d'Ivoire. Added up, these six mines together account for about 3 million oz/y of gold produced in Ghana. The remaining of 1 million oz/y comes from small-scale production, which has increased significantly in recent years.

Between these very large players and the very small artisanal and cooperative operations there are few explorers and developers to count. The development projects feeding Ghana's growing future outputs come again from the majors. The most significant one is Newmont's Ahafo North development, an investment estimated at around US$1 billion that will add between 275,000 and 325,000 oz/y once it is complete in the second half of 2025. The Ahafo North deposit contains 3.8 million oz of reserves and 1.4 million oz of resources, with a current LOM of 13 years and potential for expansion. Asante Gold is the main newcomer that has emerged from a small junior into a serious developer and producer by acquiring several of Ghana's historical mines, namely the Bibiani gold mine from mid-tier Resolute Mining and the Chirano gold mine from Kinross. This year, Asante has also shown interest in the Akyem mine, which Newmont is selling as part of its larger plan to raise US$2 billion for the acquisition of Newcrest Mining. Other bidders with experience in the region have shown interest in Akyem, including Perseus Mining and Chinese companies Zijin Mining, Chifeng Jilong Gold Mining, and Shandong Gold. Shandong is also behind Ghana's only greenfield gold project coming into production – Namdini, which it acquired from Cardinal Resources. Namdini is preparing to start production this year, expected to pour 350,000 oz/y and become one of Ghana's largest mines.

The last time Ghana saw a greenfield gold project commissioned into a mine was a decade ago, with Newmont's Akyem project. One active exploration project is Enchi, developed by Canadian company Newcore Gold. Newcore recently published a PEA that outlines a case for a smaller production compared to the scale of other mines in the country – at 122,000 oz/y for 10 years, with a short payback and an NPV of US$371 million. But looking at the geology of the Bibiani belt, Newcore executives believe Enchi has a much greater upside, both from additional undrilled targets and from the mostly untested underground: "Our current deposits all remain open along strike and at depth. Enchi is still underexplored for sulfide potential with the vertical depth of all the pits containing our resource within the PEA only defined down to an approximate vertical depth of 75 meters. The mines sitting along trend with Enchi – including Asante Gold's Chirano and Bibiani mines, as well as Newmont's Ahafo mine – are defined down to a depth in excess of one km below the surface, which is telling of the geological characteristics and potential of the area," said president and CEO Luke Alexander.

"Africa used to represent a small portion of our revenue, but over the past three years, we have nearly tripled our business here. We see Africa as a key growth region with great potential in the global mining industry."

Víctor Morales Baeza,
VP EMEA Mining, Orica

There are various explanations for Ghana's lack of a more diverse junior exploration sector. A high tax burden, fewer available licenses, as well as the geological structure of deposits growing in size and grade underground, create higher entry barriers. Jeff Quartermaine, the managing director and CEO of Perseus Mining, offered his thoughts: "In a mature mining jurisdiction like Ghana, the government has perhaps been less accommodating compared to other countries like Côte d'Ivoire. For example, we do not have a fiscal stability agreement or similar arrangement with the Ghanaian government, even though we have been in the country since 2011. Without clarity on the rules, the level of risk increases, making it difficult to plan. That said, popularity ebbs and flows, and leadership changes. Ghana may not be the most popular destination right now, but the country's geological potential is undeniable. Sooner or later, people will find a reason to return."

GalamState

Quartermaine also highlighted other indirect obstacles, such as the competition for farmland. It is said that what cannot be grown, must be mined, and Ghana has distinguished itself as both the top producer of gold in Africa as well as the second largest producer of cocoa, both industries being central to its economy. The high cocoa prices in the last few years hiked up compensation prices for exploration licenses. However, another even stronger deterrant to exploration might be the spread of illegal mining, which is a common enemy for both the mining and the agriculture sectors, destroying precious land for both.

Officially, Ghana's mining sector directly hires 11,284 people, according to the Ghana Chamber of Mines, but it is estimated that there are over a million people working in small-scale mining. While production from the large-scale sector increased by almost 1 million oz in the last 10 years, output from small-scale mining jumped from 100,000 oz to 650,000 oz in that same period, a six-fold increase. More than 300 registered small-scale mining groups operate in the country, but there are also unregistered, illegal miners known locally as "galamsay" that seem to spread out of control. These are not only locals but also Chinese and West African foreigners, noted ISS Africa.

The impact of galamsay has been devastating for Ghana's environment. Officials suggest 34 of the country's 288 forest reserves have been impacted. Water sources have also been severely polluted by illegal mining activities.

The situation is reaching a boiling point, with intense protests against galamsay leading to a nationwide lockdown in September. The operations launched by authorities against illegal mining sites ever since the issuance of the 1989 Small-Scale Mining Act do not seem to solve the problem. Government after government has tried to combat the problem, trying both force and friendliness. Violent clashes between official mining companies and illegal small-scale miners in nearby communities have become more common.

For the state, the galamsay problem costs Ghana about US$2 billion each year in lost tax revenue. Security analyst Emmanuel Kwesi Aning was quoted speaking at a Civil Society Organization (CSO) meeting as calling Ghana a "GalamState." The problem is much bigger than fighting an abstract enemy. These are people who are supporting communities and in return have the support of their communities. Sometimes they also have so-called investors, who can be high-ranking connections, which speaks of a deeper corruption issue. Since GBR started covering the issue, we cannot report of any major change in the situation – it looks like Ghana is indeed trapped in a GalamState.

"Disputes tend to arise when things change: Markets change, prices evolve, and regulators then tend to respond."

Kathryn Khamsi,
Partner, Three Crowns

Localization

As the most mature mining jurisdiction in West Africa, Ghana was a pioneer of local content laws and other localization mechanisms. In 2020, it introduced the Legislative Instrument 2431 (2020) on Minerals and Mining (Local Content and Local Participation), requiring license holders to have a program for training and recruitment for Ghanaians. Simon Meadows Smith, the managing director of SEMS Exploration, a Ghanaian company, sees such policies as positive contributors to fairer competition in the services sector: "These requirements have given SEMS the opportunity to work with larger mining groups such as Newmont that would previously have engaged expatriate service providers. Local content policies are demonstrating that SEMS can provide a world-class technical service in West Africa that is comparable or better to those offered by companies based elsewhere in the world."

In the same Local Content law, Ghana introduced requirements that license holders list at least 20% of their equity on the Ghana Stock Exchange. Both Asante Gold and Atlantic Lithium have been listed locally in recent years, receiving support from Ghana's sovereign minerals fund. The Ghana's Minerals Income Investment Fund supported Asante's acquisition of Chirano in 2022, and most recently poured US$33 million in Atlantic Lithium.

The next step in the country's attempt to reap more benefits from its extractive industries is local processing. Ghana wants to integrate its gold, as well as manganese, bauxite, iron ore, and, most recently, lithium, deeper into the local economy. This year, the country inaugurated its first commercial gold refinery, Royal Ghana Gold Refinery, as a partnership between the Ghanaian Government and India's Rosy Royal Minerals. The 400 kg of gold/day refinery currently processes gold from artisanal operations while it awaits the license to process from large gold miners.

Ghana has similar plans for its other main resources. As the world's fourth largest producer of manganese ore, Ghana exports 4 million t/y, most of which goes unprocessed directly to China. The largest manganese mining sites in the country are owned by the China Manganese Company. This year, the government announced plans of a JV with two Chinese mining companies to build a manganese refinery in the country. For bauxite, Ghana's ambition to build a smelter and produce aluminum in the country is 60 years old and continues to face challenges, especially in terms of clean energy to power the energy-intensive smelter.

The industrialization of the iron ore industry would face similar hurdles. Lastly, Ghana is keen to see its first lithium mine come into production – Ewoyaa, developed by Atlantic Lithium. ■


Image courtesy of Perseus Mining

Gold

Playing catch-up with the gold price

Gold prices hit a new record this September, reaching a dazzling US$2,670/oz. Supporting the gold rally are an easing monetary cycle, with the Fed cutting rates by 50 basis points this year, and expectations of further central policy cuts next year; record high demand for bullion from central banks, reaching 483 t in the first half of the year; and positive ETF flows in both American and European markets. At 27% higher since the start of the year, 2024 could be the best year for gold since 2010, when gold closed on a 30% year-on-year high. Gold may be one of the best-performing asset classes this year, more than the S&P 500 or Nasdaq 100, but mining stocks have yet to catch up to the gold price.

There are several reasons behind this seemingly perplexing disconnect between mining stocks and gold prices. Investors may have felt a price over the US$2,000 mark reached in 2020 is unsustainable. This has been disproved: Four years later, and speculations of a US$3,000 gold price can be conceivably entertained. Other investors are seduced by the AI bubble, FTSE top stocks, or the so-called "magnificent seven" stocks. Those who have followed gold stocks may have also been disappointed in their performance: According to Sprott, gold mining equities have underperformed the metal's price ever since 2011's peak. Another disincentive is dilution through repeat share issuance and poor allocation, which can be difficult for investors to track.

But perhaps one of the biggest off-putting factors has been the impact of higher inflation on margins. A recent study by Bain & Company found major mining projects run between 15% to 20% over budget globally. Average all-in sustaining costs (AISC) for gold production have grown by 13.6% in the last decade, or from US$1,100/oz to US$1,250/oz, according to Sprott. The timeline between discovery and production – and therefore cash generation – has also increased from six to 10 years in the last decade, according to the same source. Higher risks, whether jurisdictional or emerging from climate change and the ESG paradigm, also contributed to an apathetic sentiment.

However, with gold reaching tipping points, the sentiment is likely to change and gold-stock gains could see an upturn very quickly. American investor Stanley Druckenmiller turned heads when he dumped stocks in Amazon and Alphabet (Google) for Barrick and Newmont. More generalist investors could be drawn in, believes Luke Alexander, president and CEO of Ghanaian gold junior Newcore Gold: "Producing gold companies are seeing a significant amount of free cash flow generation, with every move in the gold price going directly to their bottom lines. This is inevitably going to pull in generalist investors who may not have a consistent focus on the sector but are enticed by the return opportunity."

M&A cycle begins

Gold producers are sitting on a lot of cash, and while they pledge prudence in capital allocation to avoid unfortunate transactions such as those seen in the last cycle, the chronic underinvestment in the gold exploration sector leaves them without alternatives but to hunt for new assets. Bert Monro, the CEO of Mali gold explorer Cora Gold, believes an uptick in M&A has been delayed but will come:

"The valuation gap between producers and developers should create more opportunities for acquisitions. However, social issues can complicate deals, or companies may overvalue themselves, making it difficult to execute business combinations based purely on industrial logic."

Jeff Quartermaine, Managing Director and CEO, Perseus Mining

"Initially, companies take time to adjust to the price shift and they tend to focus on deleveraging and capitalizing on the higher gold price before committing to new exploration investments. While the gold mining sector is currently very strong and is expected to remain so, we anticipate a few more months of lag in exploration spending. However, I believe we will soon witness an uptick in deal-making and M&A activity as market conditions continue to improve."

A few large transactions have already broken news recently. The biggest gold miners were first to react: Newmont acquired Newcrest for US$19 billion in 2022, and this year Gold Fields purchased Osisko Mining for US$1.6 billion. Both Newmont and Gold Fields have operations in Africa and are diversifying their portfolios across Canada and Australia. AngloGold followed suit quickly, but unlike its two leading peers, it went for an African top-tier producer, Centamin, Egypt's sole gold producer. The US$2.5 billion transaction brings Anglo in possession of the 400,000 oz/y Sukari gold mine in Egypt and the Doropo gold project in Côte d'Ivoire.

One of the most acquisitive gold miners in Africa has been Australian company Perseus Mining, which has three producing mines (one in Ghana and two in Côte d'Ivoire), as well as a development currently on hold in Sudan and a freshly acquired project in Tanzania, the Nyanzaga gold project, where it expects to make a final investment decision on construction by the end of this year. Perseus has been said to also ponder entering a bid for Newmont's Akyem mine in Ghana.

In the quest for yield

In the quest for the biggest returns, Africa, and particularly West Africa, offers the highest upside promise in terms of undervalued stocks that are not reflective of the gold price and of promising greenfield targets turning into major mines.

West Africa has delivered more ounces, at higher grades, in shorter times, than anywhere else in the world. Permitting times are also shorter, African governments being intent on seeing more mines being developed. 3L Capital noted that West Africa has had the shortest construction timeline since 2010, averaging at 1.7 years. For instance, construction at Tietto's Abujar project started in early 2022 with first gold poured a year later. EPCM firms like Lycopodium boast a consistent track record of on-time and on-budget projects delivered in the region.

Both discovery and operating costs have been reportedly lower compared to other jurisdictions. Endeavour boasts a discovery cost of US$12/oz for its newest mine in Côte d'Ivoire, Lafigué, which poured first gold this year. Lafigué will also produce at an AISC below US$1,000/oz, which is not uncommon in West Africa. In fact, four out of the top 10 lowest-cost gold producers operate in the continent: Perseus Mining and Endeavour Mining, both with operations exclusively in West Africa, are in the third and fourth place, respectively, whereas Barrick and Kinross have major mines in West Africa and came eighth and tenth place, according to a report by Kitco News.

But the biggest returns are probably in the junior sector, many of which are currently undervalued and can see rapid appreciation in their share price as projects advance. For instance, Perseus came into the possession of 9.9% shares in Montage Gold through its acquisition of Orca Gold (previous shareholder in Montage) in 2022. At that time, Montage's shares were trading at around 60 cents/share. Today, the share appreciated to almost CAD2, providing Perseus with a profitable exit. Perseus swapped its 9.9% shareholding in Montage's Koné gold project in Côte d'Ivoire for a 19.9% stake in Predictive Discovery's Bankan gold project in Guinea. Persues bought the Predictive shares from Capital Drilling. For Capital Drilling, Predictive was also a good vehicle for returns, Predictive's share price appreciating by 2,600% in the last five years.

"This kind of return is not easy to achieve in more advanced, supposedly de-risked assets. It is puzzling why there isn't more funding flowing into the early-stage sector, but I believe it will eventually happen. The mining sector is relatively small compared to other industries, so even a modest increase in capital could significantly lift the industry," said Martin Pawlitschek, the CEO of Sanu Gold, commenting on the recent Capital Drilling pull from Predictive.

Large projects with a high probability of being turned into mines are the market's favorites. West Africa has plenty of project opportunities in the 4 million oz plus resource range. Predictive Discovery's Bankan has an inferred resource of over 4 million oz – bigger than most in the region – and could become Guinea's biggest gold mine. Sierra Leone also surprised the market with a top-tier discovery, the impressive 5.81 million oz Baomahun project, developed by FG Gold. This would be the country's first commercial scale mine. Montage Gold, whose main shareholders include the Lundin Group and, more recently, Zijin Mining, is looking at 4 million oz in reserves from its Koné project in Côte d'Ivoire. The company is launching a 60,000 m drill program to continue expanding the resource base. Technical studies of many of these mines under development in West Africa estimate AISCs under US$1,000/oz.

For those advanced explorers with smaller assets in the ground, increases in the gold price improve project economics and ultimately their valuations. For instance, Newcore used a reference price of US$1,850/oz gold for its 2024 PEA at the Enchi gold project, but with every US$100 increase in gold price, its after-tax NPV increases by US$50 million, while its payback time is also reduced. Enchi currently has 743,500 oz (indicated) and another 972,000 (inferred).

West Africa, a big gold playground of changing rules

As per the latest figures published by the World Gold Council, the biggest 10 gold-producing countries in Africa are Ghana (135.1 t/y), Mali (105 t/y), South Africa (104.3 t/y), Burkina Faso (98.6 t/y), Sudan (72.5 t/y), Guinea (64.9 t/y), Tanzania (52 t/y), Côte d'Ivoire (51.5 t/y), Zimbabwe (46.6 t/y), and the DRC (45.4 t/y). This ranking has evolved considerably over the past years. The most dramatic change has probably occurred in South Africa, whose gold output declined from 170 t/y in 2012 to 104 t/y today; at the opposite end of the spectrum sits Côte d'Ivoire, whose gold output increased from a negligible 12 t/y to 51 t/y over the same period. While South Africa's gold mines are mostly brownfield and can go to a depth of 4 km (Harmony's Mponeng gold mine at 8.43g/t grade, holds the Guinness world record for the deepest mine), Côte d'Ivoire boasts close-to-surface deposits, typically at a medium-grade quality.

"Côte d'Ivoire is a place where big elephants are hiding. One of the beauties of working in the region is that you can be

"Addressing jurisdictional risk really comes down to living up to the promises you make and treating all stakeholders within the host jurisdiction with fairness and respect."

Clive Johnson,
President and CEO,
B2Gold

"Our strong performance is largely driven by our two mines in West Africa—Séguéla in Côte d'Ivoire and Yaramoko in Burkina Faso. Moreover, our West African mines deliver the highest margins."

Jorge Ganoza,
CEO,
Fortuna Mining

in production within five to six years from the first discovery hole, something you will not find anywhere else. Also difficult to stumble upon in other jurisdictions are open-pitable deposits. Even in places like Kalgoorlie, Val-d'Or, and Timmins, most discoveries are underground. In West Africa, exploration costs are lower, and if my audience was a room full of brokers, I would invite them to look at this African discount," said Peter Ledwidge, founder and managing director of Mako Gold, a junior explorer advancing the Napié gold project in the country.

In a more stagnant yet fragile position are Mali and Burkina Faso, the winners of the last gold cycle, yet whose new political mandates and recent drift from ECOWAS, the region's economic and political union, is concerning. Burkina Faso remains marred in violence, terrorist attacks escalating. This renders the country almost inoperable for juniors, while miners remain prudent: "The business environment in Burkina Faso has been deteriorating, with both security and political stability declining. While Fortuna Mining continues to operate within the boundaries of our existing property and maintain engagement with the government, we have no plans to expand our presence in the country at this time. The overall environment is very different from what it was five years ago," said Jorge Ganoza, CEO of Fortuna Mining, operating the Yaramoko mine in the country.

In Mali, the government's moratorium on current licenses has stalled progress for existing juniors and poses a threat even for its largest miners. Under the new mining code adopted in 2023, just four years since the last change, the military-led government has increased its ownership of gold concessions to up to 30%, but this would only apply to new licenses. Companies like Barrick Gold, which operates the huge 683,000 oz/y Loulo-Gounkoto complex, will continue to adhere to the 1991 mining code. Starting companies, however, must comply with the new rules. We spoke to Bert Monro, the CEO of Cora Gold, a London-listed junior developing the Sanankoro gold project in Mali, who said that while the new mining code certainly marks a shift from previous conditions, its fiscal terms are consistent with other countries in the region. The company was rather encumbered by the moratorium which remains in place; Cora published a DFS for Sanankoro, highlighting a high-grade, low-strip open-pit operation, based on a circa 1 million oz resource with an additional 1.5 million oz in exploration targets, and the company secured conditional debt and equity finance.

There are fears Côte d'Ivoire could follow in the steps of its neighbors in terms of tightening the fiscal burden. This year, officials said the country will review its mining code to increase state profits. Peter Ledwidge, the CEO of Mako Gold, believes the country will not repeat the mistakes of its neighbors and risk chasing investors away. A shifting political wind is also felt in Senegal, whose newly elected president announced this year an audit of the oil & gas and mining sectors.

Other parts of Africa are also luring in gold explorers. Often, it is the same companies spreading their risks through assets across multiple countries, something that the majors and mid-tiers have successfully been doing as well. Egypt, Sudan, Eritrea, Ethiopia, and crossing over to the Arabian peninsula to Saudi, are believed to be the last large piece of underexplored gold geology, but companies in this part of Africa remain scattered. ■

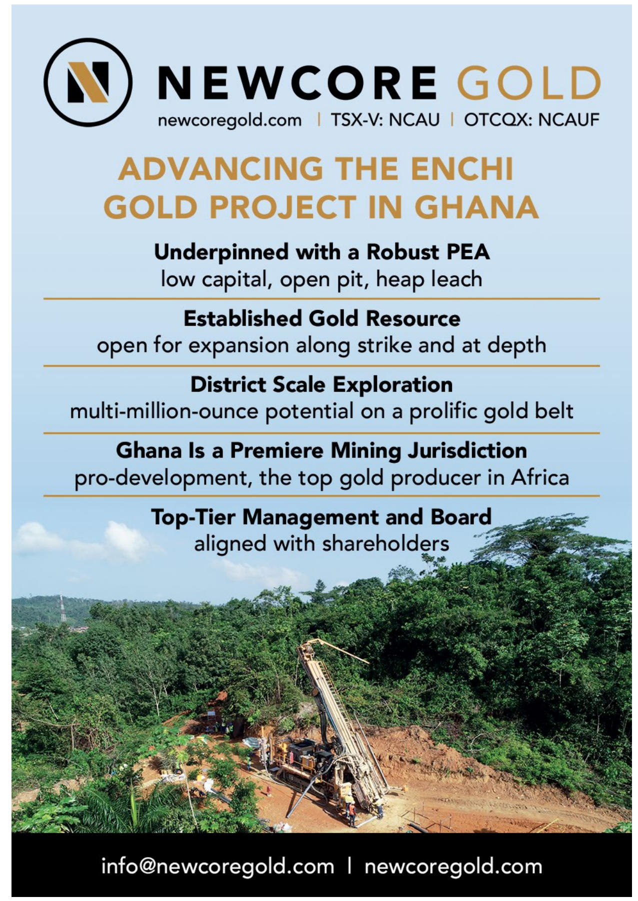



Image courtesy of Peak Rare Earths

Project Showcase

Selected projects across the African commodity spectrum

Gold

Thor Explorations' Douta and Douta West gold projects in Senegal

"With the acquisition of the Douta West license in Senegal, we have a contiguous landholding where we have defined a 1.78 Moz resource - a significantly larger prospect compared to our Segilola deposit in Nigeria."

Segun Lawson,
CEO,
Thor Explorations

Newcore Gold's Enchi gold project in Ghana

"We have identified 25 exploration targets to date, of which only five of them are currently included in the PEA and MRE, leaving 20 additional targets for future growth. (...) Our current deposits also all remain open along strike and at depth."

Luke Alexander,
President and CEO,
Newcore Gold

Copper

Orion Minerals' Prieska copper project in South Africa

"We introduced the concept of early production, which will bring us into production up to three years earlier than originally anticipated. The finance secured from the Industrial Development Corporation and Triple Flag Streaming Finance allowed us to establish the site with all the services required to run a startup mining operation."

Errol Smart,
CEO, Orion Minerals

Koryx Copper's Haib copper project in Namibia

"Our initial 43-101 mineral resource estimate reported an average grade of 0.31% copper, and we anticipate a 10-15% increase in the upcoming estimate. We plan to resume drilling shortly, focusing to increase the average grade to over 0.40%."

Pierre Léveillé,
President & CEO,
Koryx Copper

3Ts

Trinity's tin, tantalum and tungsten mines in Rwanda

"Trinity Metals was established in 2022, bringing together three historic Rwandan mines. Rutongo is now Africa's second-largest tin producer, while Nyakabingo is the continent's top tungsten producer, contributing 8% of the world's tungsten supply."

Peter Geleta, CEO,
Trinity Metals

Lithium

Kuvimba's Sandawana lithium project in Zimbabwe

"We defined a spodumene resource of 40 MT of ore at 1.4 lithium oxide, with the potential to double its size by adding between 15 to 20 MT through further exploration at a second phase, and an additional 20 MT at a third phase."

Trevor Barnard,
Acting CEO,
Kuvimba Mining House

Graphite

Syrah's Balama graphite mine in Mozambique

"With a capacity of 350,000 t/y concentrate and over 100 million t ore reserves averaging around 16% graphitic carbon grade, the Balama mine has a life of mine of 50+ years. Since commencing production at the end of 2017, approximately 80% of shipments have been to the battery anode industry, predominantly to China."

Shaun Verner,
CEO,
Syrah Resources

REE

Peak Rare Earth's Ngualla project in Tanzania

"The Ngualla project has been substantially de-risked over the past two years. We have signed a binding framework agreement with the Government of Tanzania, received a Special Mining License, completed a FEED study, and have a binding, seven-year take-or-pay offtake agreement in place with Shenghe Resources."

Bardin Davis,
CEO,
Peak Rare Earths

Image courtesy of BHP

Copper

Conductivity to Africa

No other metal can be said to enjoy such universal appeal as copper does today. Copper is used in everything from traditional fossil-fuel power plants to solar panels, windmill turbines and nuclear plants; from conventional internal combustion cars to components of the electric vehicle; and from the oldest applications in construction to the most high-tech uses in AI infrastructure. Copper fits in the future as steadily as it has fit in throughout its 6,000 years being used by humans, turning gradually into the third most used metal today. Now, copper is evolving past its relevance as a barometer of economic activity, securing a position as potentially the biggest winner of the energy transition as it has become indispensable for both an old and a new economy, an economy that is electrified and digitized. This universality makes demand less elastic to global cycles.

Analysts read copper's recent record performance, with copper futures hitting US$5.20/lb, as a harbinger of a supercycle. While speculators betting on higher values do influence the metal's price, copper is underpinned by matter-of-fact structural market conditions. The International Energy Agency (IEA) projects copper demand to rise by 50% by 2040 in a net-zero emissions scenario, with a market value of US$330 billion, the highest among energy transition minerals. According to IEA, the world will require 40.7 million t/y of copper in 2040, outstripping the available supply of raw copper by 25.9 million t/y. The AI boom alone could amplify copper demand by 1 million t/y by 2030, according to an analysis from commodities trading group Trafigura.

What differentiates copper from other minerals linked to the energy transition is the size and nature of the market. Unlike lithium, which has a small volumetric demand and narrow supply base, triggering huge reactions in price (boom and bust), copper is one of the most mined metals by volume and has a diversified supplier base, defined by large, multi-generational assets managed by the leading miners. The capital-intensive nature of the business as well as the long lead times make it a slower, heavier industry with higher-entry barriers. When a deficit is in sight, it tends to be large and difficult to fill, which is why analysts speak of a supercycle rather than using more fleeting terms like 'bubble' or 'boom'. The IEA estimates the supply risk at 31% (medium). Recent closures, like First Quantum's abrupt mine close in Panama, or the ban on Russian copper deliveries on the London Metals Exchange and Chicago Mercantile Exchange heightened that risk. While the current refined market remains balanced, a squeeze seems imminent, at least in the longer term.

The mining industry is eagerly turning to copper. BHP's offer for Anglo American's copper assets in Peru and Chile put the spotlight on the red metal. Anglo has since announced a massive restructuring, prioritizing its copper and iron ore assets while selling its coal and demerging its platinum and diamonds operations. Teck Resources has also sold its coal steelmaking business to Glencore for US$9 billion last year while doubling down on copper projects. Gold miners are also fixating on copper. The second-largest gold producer in the world, Barrick, announced it wants to double its copper output in the coming years.

Africa's copper pitch

Globally, copper supply comes mainly from Latin America (Chile, 23% and Peru, 10%), and Africa, the DRC taking the lion's share of the market at 14%, followed by Zambia at 4%.

Africa offers two key zones for copper mining. One is the Central African Copperbelt, which stretches from the Katanga Province of the Democratic Republic of Congo through to the Northwestern Province of Zambia. This Copperbelt is recognized by geologists as the largest mineralized sediment-hosted copper province. The second, less explored belt, is the Kalahari Copper Belt, trending across northern Botswana in a northwest direction into Namibia.

Within the Central African Copperbelt, the DRC has distinguished itself the most in recent years, with 65% of newly announced copper reserves identified worldwide in 2023 coming from DRC's Katanga Basin, according to S&P. The biggest discovery was Ivanhoe's Kamoa-Kakula, expected to produce this year between 440,000 and 490,000 t at a C1 cost between US$1.50 and US$1.70/lb. The addition of a third concentrator will catapult Kamoa-Kakula to more than 600,000 t/y – making it the third largest copper mining operation globally. Other major operations in the country include Glencore's Mutanda Mining (MUMI) and Kamoto Copper (KCC); CMOC's Tenke Fungurume; ERG's Comide and Frontier mines, and MMG's Kinsevere mine.

Zambia has trodden behind the DRC, an uncomfortable change after once being the top copper producer in the continent. The government wants Zambia to regain that spot, with plans to grow the copper output to 1 million t/y by 2027, and to 3 million t/y by 2031. This may sound overly optimistic considering Zambia only produced 699,000 t/y in 2023, its lowest in 14 years. However, several multi-billion investments underway provide reason for hope. Barrick's current US$2 billion expansion at Lumwana will see the asset grow from 118,000 t/y to 240,000 t/y in 2028. In 2022, First Quantum also announced a US$1.25 billion expansion at Kansanshi, which would expand the life of mine until 2040. Vedanta also wants to restart the Konkola underground mine, where operations had halted through a long legal battle with the previous government.

New actors are also entering the market. One development that made headlines is the recent discovery made by KoBold Metals, an AI-driven Californian startup backed by Bill Gates and Jeff Bezos, at the Mingomba copper project in Zambia.

Abu Dhabi-based International Resources Holding (IRH) also entered the Zambian copper scene after buying 51% of Mopani Copper Mines for US$1.1 billion last year.

The second region of copper exploration is the Kalahari belt, covering Botswana and Namibia. This is a region of mostly juniors, with only two mines: Khoemacau and Motheo. The bidding for Botswana's Khoemacau copper mine last year drew in diverse interest from coal companies (Exxaro) and platinum companies (Implats, Sibanye Stillwater). Copper producer MMG eventually sealed the US$1.9 billion deal. Khoemacau produces about 60,000 t/y of copper and 2 million oz/y of silver, and the new owners believe they could more than double copper output. The second mine, Motheo, is owned by a subsidiary of ASX-listed Sandfire Resources, which is looking at an expansion. Botswana has primarily attracted attention for early-stage opportunities: BHP shook hands with copper explorer Cobre, a successful participant in the BHP Xplor program, to look for copper-silver deposits in the country. Other explorers looking for opportunities in the country include Kavango Resources and Aterian, both at an early stage.

On the other side of the belt, Namibia is also seeing increased copper activity. The country, primarily known for its uranium riches, saw the restart of the Kombat mine after 14 years of closure under Trigon Metals, a Canadian explorer. Another TSX-V listed player, Koryx Copper, is also progressing with its flagship Haib copper project, previously owned by Rio Tinto and Teck Resources (the latter remaining an important shareholder). Koryx is focused on drilling to improve grades, currently at between 0.47% and 0.49% copper. Omico Mining Group is also working towards a BFS at the Omitiomire copper project in the country.

Outside of these two major belts, South Africa is also home to copper prospects. Previously operated by Rio Tinto, Palabora is the country's only copper mine. Meanwhile, Angola enters the conversation on African copper after Ivanhoe announced last year taking greenfield prospecting rights over 22,195 km2 in the Moxico and Cuando Cubango provinces, which present Kalahari and Karoo volcanics similar to what they see at Kamoa-Kakula.

Within this plethora of opportunities, the most promising copper jurisdiction is probably the DRC, which boasts not only the most recent and sizeable discoveries but also very high grades, with Kamoa flaunting a 6% grade in the first five years, which is highly attractive in a market tormented with decreasing grades. The DRC also offers something that no other major mining jurisdiction does: the shortest lead times. According to S&P Global, the DRC's average interval between discovery to production is the second-shortest in the world (15 years), after Laos. By contrast, Zambia has the longest lead times to production, at 34 years, followed by the US and Canada.

"Our commitment to sustainable and responsible mining practices in the DRC enhances our reputation and operational stability in the region. In 2023 alone, Kamoa-Kakula contributed a significant 6% towards the DRC's GDP."

Marna Cloete,
President,
Ivanhoe Mines

On the other hand, atrophied infrastructure and fiscal uncertainty make the Central African region something of a wildcard for investors. Africa only accounts for 8% of the world's total railway length, and the majority (80%) of freight is transported by road, according to African Global Logistics. Energy is another big issue for copper projects. Both the DRC and Zambia draw most of their power from hydro plants, but climate change and weather patterns are threatening water – and therefore energy - supply. 1,000 MW out of Zambia 3,800 MW hydropower generation is taken down due to severe droughts and evaporation at Lake Kariba.

GBR

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