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BMR

BOTSWANA MINING REVIEW



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Washington Puts US$16Mn Behind Rebuilding the Mining Classroom **29**

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Ulla Setswalo (Editor)

The country's mining story is being rewritten in real time. Diamonds built the foundation of Botswana's modern economy, but a softer market is exposing the risks of that dependence. This final edition asks how a nation turns pressure into possibility and who earns a seat at the table when it does.

Our cover story follows the Botswana Development Corporation as it sets out its capital agenda and the mining sector sits at its core. At the inaugural Botswana Investment Forum, the conclusion was that digging the resource is only the first chapter. Engineering, maintenance, logistics, processing and specialised services around each mine are where local enterprise can grow, provided capital finds bankable projects and capable citizen owned businesses to back. Confidence, the forum made clear, is something institutions and businesses must earn, and with diamonds facing a changing market, the work cannot wait.

Then, as we went to press, the story acquired a bolder backdrop. In his State of the Nation Address on 9 November, President Duma Boko told parliament that Botswana will double its stake in De Beers from 15% to 30% once the sale of Anglo American's majority interest completes, making the country the company's single largest shareholder. The government has backed the Global Diamond Consortium as preferred bidder, with Namibia and Angola expected to take part. The deal is not yet binding, yet the signal is unmistakable. Botswana intends to sit closer to the centre of decisions about its most valuable resource.

Inside, the edition moves from the boardroom to the factory floor. Readers will see how cutting, polishing and training turn rough stones into careers and why investor appetite for solar power is outpacing the grid built to carry it. We follow a new implementation plan that aims to convert national energy ambitions into connections, a fuel and pipeline project rising on Namibia's coast and the case for mineral corridors that tie mines to power and rail. Tanzania, meanwhile, is pressing licence holders to put their ground to work. Our international pages turn to industry's efforts to cut emissions, a global scramble to rebuild the mining workforce and the engineering groups merging to serve tomorrow's mines. The briefs close the edition with defence chiefs and Debswana exploring common ground, alongside financing stories from Namibia and Zimbabwe.

The coming year will favour those who can turn announcements into outcomes. Projects must move from the signing table to the ground, power lines must follow ambition and ownership must translate into influence. We will keep watching each of those threads closely.

To our readers, contributors, industry partners and advertisers, thank you for your trust and engagement throughout the year.

Enjoy the edition. In 2027, we will be here to follow the deals, discoveries and decisions that shape the industry.

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Lycopodium delivered Engineering, Procurement and Construction Management services for the Sandfire Resources 3.2 Mtpa Motheo copper concentrate treatment plant and associated non-process infrastructure, reaching practical completion in May 2023.

The company also completed the Definitive Feasibility Study and detailed engineering for the 5.2 Mtpa Motheo Expansion Project, with construction overseen by Tshukudu Metals Botswana, a Sandfire Resources subsidiary, and delivered through Lycopodium Botswana. Local teams provided construction and safety leadership, ensuring effective site management and full statutory compliance.

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Defence Chiefs Tour Debswana's Strategy as Partnership Talks Open

Senior officers from Botswana and South Africa's armed forces have visited the Debswana Corporate Centre in Gaborone to trade ideas and experiences and to explore areas where the military and the diamond miner might work together. The delegation brought together the Botswana Defence Force (BDF) and the South African National Defence Force (SANDF) and was led by Major General D.T. Mumanyi from South Africa and Colonel Losika Mogae from the BDF.

Debswana's team, led by Chief People Officer Matlhogonolo Letsopa Matty Mogapi, took the visitors through the company's operations at Jwaneng, Orapa, Letlhakane and Damtshaa. Mogapi spoke at length about Debswana's contribution to Botswana's development, particularly through employment creation, citizen empowerment and skills development.

Head of Strategy and Corporate Affairs Wanatsha Moakufi then presented the company's Ya Masa transformation strategy. He outlined the pressures facing the diamond industry, notably the difficult market conditions that have hit sales, and explained how 'Ya Masa' is meant to respond by building a stronger, more competitive and more diversified business for the future.

The BDF delegation closed the session with its own perspectives, focusing on possible areas of partnership and cooperation. Debswana has not said what those areas might be or whether a formal arrangement will follow.

Kameelburg Deal Opens Door to Staged Development Funding

Aldoro Resources has taken a step towards advancing its Kameelburg critical minerals project in Namibia after signing a memorandum of understanding (MoU) with WILLETECH International Investment, which includes an initial funding commitment of RMB100 million.

The agreement also outlines a potential development funding commitment of approximately RMB2 billion, to be deployed in stages against project milestones. However, this larger amount is non-binding under the MoU and should not be regarded as fully committed project financing.

The initial RMB100 million is intended to be deposited into a designated supervised account before being transferred to the project company, subject to the required Chinese outbound direct investment approval. The project company may also request up to an additional RMB200 million in pre-development expenditure, subject to WILLETECH's review and approval.

Under the proposed structure, Aldoro's stake in the project company would decrease from 85% to 42%, while it would retain its remaining interest until production begins. The parties are also discussing the repayment of approximately A$10 million in historical project expenses, though the final amount has yet to be determined.

The memorandum stipulates that WILLETECH will assume a majority role on the project company's board prior to a potential listing. However, decisions on significant reserved matters will require the approval of directors appointed by the existing shareholders. Definitive agreements are expected to be negotiated within 15 business days.

It is essential to note the difference between the initial funding and the broader development proposal. Aldoro has stated that it has not yet received confirmation that the full development funding has been secured or that binding agreements with financiers or other funding participants have been finalised. Further due diligence, including an assessment of WILLETECH's financial capacity, is anticipated before any definitive agreements are executed.

The proposed partnership could offer Kameelburg a pathway to a larger development programme while alleviating Aldoro's direct funding obligations. The ultimate value of this partnership will depend on the completion of definitive agreements, fulfilment of regulatory conditions, and the transformation of the proposed staged funding into committed capital.

Eight Zimbabwean Banks Back Caledonia's Bilboes Gold Project

Caledonia Mining Corporation has secured a $150 million bridge financing facility from a consortium of eight Zimbabwean banks, adding a domestic funding component to the development of its Bilboes gold project, which is expected to become the country's largest gold mine once operational.

The three-year facility, with an option to extend for a further year, is intended to support project development while Caledonia continues discussions on longer-term project financing. Initial works at Bilboes have started, with first production expected in October 2028 and an annual output forecast to reach 200,000 ounces from 2029.

Bilboes has an expected total development cost of $584 million and peak funding requirements of $484 million. The bridge facility provides additional funding flexibility, but it is one element of a broader financing plan rather than the full funding package for the project.

Caledonia raised $150 million in January 2026 through an oversubscribed seven-year convertible bond offering backed by US institutional investors. It has also hedged production from its Blanket Mine, which produces approximately 80,000 ounces of gold annually, to protect cash flows and contribute to Bilboes' development from internal resources.

The involvement of eight Zimbabwean banks adds a significant domestic financing dimension to a project of national importance. It also demonstrates the potential role of local financial institutions in supporting large-scale mining developments, although the ultimate funding structure will depend on the company's ongoing work to secure long-term project finance.

Bilboes is expected to contribute to Zimbabwe's ambition to strengthen its position as a major African gold producer. National output reached a record 46.7 tonnes in 2025, up from 36.5 tonnes in 2024. If delivered to schedule, the project's planned production profile would represent a substantial addition to the country's gold industry.

From Investor Confidence to Industrial Growth BDC Sets Out Botswana's Capital Agenda

The downturn in the diamond market is forcing Botswana to face a challenging economic reality. For the country to achieve its next phase of growth, it will need more than just mineral revenues and public investment. New industries must develop, local businesses need to become more competitive and private capital must be directed toward projects that can deliver sustainable returns. In this context, the Botswana Development Corporation (BDC) aims to enhance its role as a catalyst for investment, enterprise development and industrial growth. The inaugural Botswana Investment Forum has placed the financing of this transition firmly on the national agenda.



Held in Gaborone on November 5, 2026, under the theme "Capital. Enterprise. Growth", the forum brought together local and international investors, financial institutions, policymakers and business leaders to discuss how investment can support Botswana's economic transformation. The focus was on moving beyond mere investment promotion to develop bankable projects, strengthen enterprises and foster partnerships that can convert capital into measurable economic value. These discussions are particularly significant for the mining sector. While mining continues to be a cornerstone of Botswana's economy, the changes in the diamond market have highlighted the necessity of strengthening the industries, enterprises and value chains that can sustain growth beyond mineral exports.

Opening the forum, Minister of Trade and Entrepreneurship Tiroeaone Ntsima emphasised the importance of attracting productive investment, strengthening local enterprises, expanding market access and building a diversified, competitive and resilient economy. His message extended beyond attracting international businesses to Botswana, highlighting the importance of developing domestic enterprises with the capacity to compete globally. The distinction is significant. A more diversified economy requires local businesses that can participate in major investment projects, supply established industries, develop specialised capabilities and access markets beyond Botswana. This places enterprise development alongside investment attraction as a priority for economic policy.

For BDC, the task is to connect these ambitions with capital and commercially viable opportunities. BDC Managing Director Oteng Keabetswe highlighted the relationship between investor confidence, access to finance and sustainable economic transformation, emphasising that investment ambition alone cannot deliver the structural changes Botswana needs. Credible opportunities, bankable projects, capable enterprises and strategic partnerships are essential to converting capital into tangible economic value. The Corporation's message was particularly clear, stating that capital goes where confidence exists and confidence is built through credible institutions, viable projects, strong enterprises and an enabling investment environment. This places greater emphasis on the quality and readiness of investment opportunities

.

Project preparation, financial structuring, commercial feasibility and the ability to demonstrate sustainable returns are critical to attracting private capital, particularly in an environment where investors are increasingly selective about where and how they deploy funds. Botswana continues to benefit from institutional strengths, including political stability, low corruption and economic freedom, but its investment outlook is being tested by weaker natural diamond demand and declining diamond revenues. The 2026/27 edition of RMB's 'Where to Invest in Af-

> *Mining nevertheless remains central to the transition. Its contribution extends beyond mineral production and export earnings to the infrastructure, technical expertise, procurement networks and industrial capabilities that can support wider...*



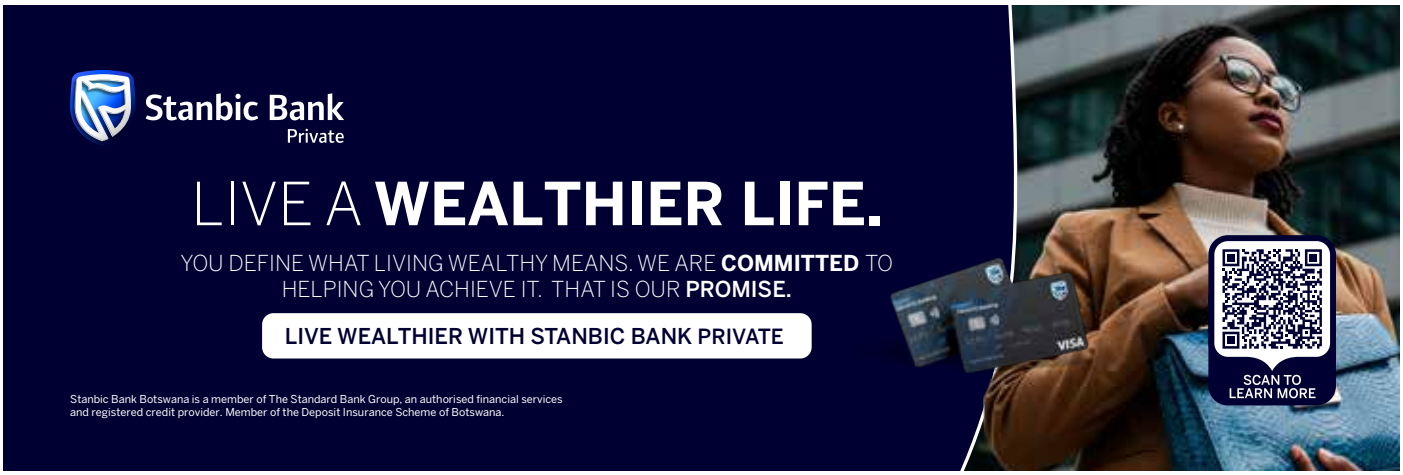
rica' report ranks Botswana 15th among the 31 African economies assessed, with disruption in the diamond industry weighing on growth and employment.

Mining nevertheless remains central to the transition. Its contribution extends beyond mineral production and export earnings to the infrastructure, technical expertise, procurement networks and industrial capabilities that can support wider economic development. Local manufacturing, engineering, maintenance, logistics, technology, mineral processing and specialised services all offer potential avenues for enterprise development and greater participation by citizen owned businesses. However, realising these opportunities requires more than local content commitments. Domestic enterprises need access to finance, technical expertise, appropriate technology, credible procurement opportunities and the capacity to meet the operational and commercial standards of major mining companies. This is where development finance and investment partnerships become particularly important, and where BDC can help connect capital with viable enterprises and strategic projects.

Delivering this transformation will require a financing model that extends beyond public resources. Vice President and Minister of Finance Ndaba Nkosinathi Gaolathe addressed this directly in his keynote address, underscoring the urgency of transitioning towards a more diversified, productive and resilient economy. He emphasised that Botswana's next phase of development cannot be financed through public resources alone. Mobilising private capital, leveraging institutional investments and forging strategic partnerships will be critical to unlocking sustainable economic growth, and he called for increased private sector participation and a shift towards export-led growth. He also challenged stakeholders to move beyond identifying opportunities and focus on developing bankable projects and commercially viable enterprises capable of competing in regional and international markets. Highlighting BDC's strategic position as the Government's principal investment arm, the Vice President called on the Corporation to deepen investment partnerships, attract partner investors and support industries that stimulate wider economic activity and create sustainable opportunities for Batswana.

The implications for BDC are considerable. Its ability to mobilise additional capital, structure investment partnerships and support commercially sustainable enterprises will be important to the country's diversification ambitions. This requires balancing national development priorities with financial discipline, ensuring that investments generate economic value while remaining attractive to private sector partners. Institutional capital, commercial finance and development funding can play complementary roles in advancing projects that may otherwise struggle to secure financing, while effective partnerships help distribute investment risk and strengthen project execution.

A panel discussion on delivery then sharpened the point. Botswana's greatest obstacle to economic transformation, the panel concluded, is rarely a shortage of ideas or strategies. It is the ability to turn them into bankable projects through effective implementation, institutional efficiency and disciplined execution. Debswana Chief Financial Officer Ian Modubule offered his company as a domestic reference point. He highlighted Debswana's diamond mining operations and its track record in delivering large-scale investments as a model from which the country can draw as it works to implement the Botswana Economic Transformation Programme (BETP). The discipline that sits behind large-scale delivery



is what new industries will need, and Botswana already has a working example at home rather than an imported template. Modubule also stressed the importance of leveraging existing strengths, building competitive enterprises and expanding into regional and international markets, a message that echoes the export-led growth urged by the Vice President and applies with equal force to diamonds, where falling revenues have made diversification urgent.

The investment debate also extends to how Botswana captures value from its most established mineral resource. As the global diamond market undergoes structural changes, the industry is being challenged to reconsider its commercial positioning, market strategy and ability to differentiate its products. Speaking during a panel discussion at the forum, Lucara Botswana Managing Director Naseem Lahri called for a shift away from treating diamonds primarily as commodities, arguing that Botswana's stones should be positioned as luxury products. "America is a cheap market, and you don't want to sell your luxury-branded diamonds to a cheap market. You want to go to a market that wants your luxury goods," said Lahri. She argued that commodity markets are largely driven by price sensitivity, whereas luxury consumers have a different relationship with brands and pricing.

"When people buy a commodity, they are price-sensitive, but when buying a luxury brand, they are indifferent to pricing," noted Lahri. Furthermore, she challenged the industry's reliance on the United States as a destination for luxury branded diamonds, calling for greater diversification of target markets. Her comments introduced an important commercial dimension to the wider investment discussion. Botswana's diamond industry must consider not only how much it produces but also how its products are positioned, marketed, and valued in international markets.Luxury positioning, however, forms part of a broader response to market disruption. Sustaining the sector's contribution to the economy will also require continued investment in competitiveness, market access, beneficiation and the development of domestic capabilities across the diamond value chain.

The inaugural Botswana Investment Forum has placed an important question before investors, policymakers and development institutions. How can Botswana convert its established investment strengths into a broader base of productive economic activity? For BDC, the answer lies in connecting capital with credible opportunities, strengthening investment partnerships and supporting enterprises capable of delivering sustainable commercial and developmental returns. For the mining industry, it means recognising its potential to support a wider industrial ecosystem through local procurement, specialised services, technology, infrastructure and value chain development.

The country's institutional foundations provide an important platform, but confidence alone will not deliver economic transformation. Investors need bankable projects, businesses need access to capital and industries need the infrastructure and capabilities to compete. The effectiveness of Botswana's capital agenda will be measured by the investments that reach implementation, the enterprises that become commercially sustainable and the economic opportunities created for Batswana. The task ahead is to ensure that capital does more than finance individual projects. It must help build the productive capacity, industrial linkages and competitive businesses that will define Botswana's economy beyond its traditional dependence on diamonds.



KGK Demonstrates the Wider Economic Value of Diamond Beneficiation

The value of a diamond extends well beyond its price on the international market. In Botswana, the drive to retain more value from the country's diamond resources is increasingly being measured through jobs, specialised skills, citizen-owned businesses and the growth of downstream industries. These outcomes were in focus during a recent visit by the Okavango Diamond Company (ODC) Board of Directors to KGK Diamonds Botswana.

The visit offered the Board an opportunity to examine how diamond beneficiation is being translated into industrial activity and wider economic participation. Operating in Botswana for more than a decade, KGK has developed a vertically integrated operation spanning diamond cutting and polishing, as well as jewellery manufacturing.

With approximately 480 employees, predominantly Batswana, the company represents an important part of the country's downstream diamond industry, demonstrating how local processing can extend economic activity beyond the extraction and sale of rough stones. The operation's contribution also extends to environmental management and workforce development. KGK has incorporated environmental, social and governance (ESG) considerations into its activities through initiatives including rainwater harvesting, solar energy integration and investment in skills development.

A key focus of the Board's visit was the KGK Diamond Training Academy, which equips young people with specialised skills essential for the diamond industry. The company also provides employment opportunities for individuals who are deaf and supports working families by offering on-site daycare and nursery services. Additionally, its incubation programme aims to expand participation in the diamond value chain by supporting citizen-owned enterprises and aspiring diamantaires. These initiatives are crucial for Botswana's beneficiation efforts, which rely on building domestic capabilities and creating opportunities for local businesses in the industry.

The visit underscored the importance of collaboration among diamond producers, manufacturers and marketers in developing a more diversified domestic value chain. While cutting, polishing and jewellery manufacturing generate additional activity within the country, investments in training, entrepreneurship and inclusive employment can enhance the sector's contribution to economic development.

This engagement provided valuable insights into the role that downstream businesses can play in advancing Botswana's diamond industry and maximising the economic benefits derived from its natural resources. The company expressed gratitude to KGK's management team for hosting the delegation and sharing insights into its operations and contributions to Botswana's diamond sector.





Solar Investors Are Queuing but Botswana's Grid Cannot Yet Carry Their Power

Investor interest in more than 5 gigawatts (GW) of potential solar capacity has reached Botswana, yet the country's limited ability to move that electricity to market is holding the projects back. Vice President and Minister of Finance Ndaba Gaolathe says investors are willing and financially prepared to build solar plants, drawn by the country's high solar irradiation.

The early delays, he explained, did not stem from a shortage of investors but from limited capacity to transmit and evacuate the power generated, particularly for export into regional markets. The government must first put the transmission infrastructure in place to take on additional generation, together with legal and regulatory frameworks governing electricity wheeling, pricing, and access to the national grid. Those frameworks matter for external financing, because large-scale transmission projects need substantial capital. Gaolathe indicated that work on these enabling requirements is at an advanced stage, with the Botswana Power Corporation (BPC) and the Ministry of Minerals and Energy preparing the regulatory arrangements.

Botswana is currently working towards about 700 megawatts (MW) of solar capacity, while surplus generation could be directed to electricity exports and energy intensive industries, including data centres and artificial intelligence computing. Affordable, reliable power could therefore open doors well beyond the traditional power sector.

The challenge has shifted, in other words, from attracting renewable energy investors to building the grid and rules that turn interest into operating plants. How quickly the country mobilises financing, extends its transmission network and gives independent power producers and financiers the confidence to commit capital will decide how much of the 5GW pipeline is ever built.



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Khoemacau Lines Up a Twofold Jump in Copper Output

Somewhere beneath the Kalahari, the mine that already produces more copper than any other in Botswana is preparing to do considerably more. If the schedule holds, a new processing plant will begin processing Khoemacau's ore in the first half of 2028, marking a significant transformation for the business. The numbers behind that promise are substantial.

In December 2025, MMG's board approved an expansion valued at approximately US$900M, centred on a processing plant with the capacity to handle 4.5 million tonnes of ore annually. Annual copper production is expected to increase from approximately 60,000 tonnes in concentrate to 130,000 tonnes, while silver production is projected to exceed 4 million ounces. This growth will be supported by mining operations extending beyond Zone 5 into northern Zone 5, Mango and northeastern Zeta. MMG believes there is potential to go even further, targeting annual copper production of up to 200,000 tonnes. A pre-feasibility study for this next phase was scheduled to begin in 2026. Meanwhile, underground mining at Zone 5 is being undertaken by Beijing-based JCHX Mining Management under a five-year contract valued at US$805 million.

The mine is not waiting for the plant to prove itself. Between July and September it delivered 11,242 tonnes of copper in concentrate, 24% more than a year earlier, on higher feed grades and better recovery. That momentum has not gone unnoticed at the highest level. On 16 October 2026, President Duma Boko sat down with China Minmetals management in Beijing and said the government stands ready to facilitate work permits and visas for the technical experts the project needs. He welcomed the company's commitment to environmentally friendly mining and said the project would anchor its region towards the development of "a mining city". The meeting took place under the Comprehensive Strategic Cooperative Partnership agreed upon by Boko and President Xi Jinping.

Khoemacau belongs to MMG, the Hong Kong-listed arm of China Minmetals, which agreed to buy it in November 2023 for US$1.875Bn and completed the deal in March 2024, in what the government calls the largest single investment by a Chinese company in Botswana. For a country that has spent decades asking what a mine leaves behind, the figures that matter most are the ones that stay at home. China Minmetals spokesperson Chen Dixen said the mine paid about US$33M in local taxes and fees in 2025 and spent about US$347M on local procurement. The workforce is projected to peak above 4,000 employees and contractors during construction and settle at about 3,200 once the enlarged mine is running after 2028.

The company has also committed to establishing a Centre of Mining Excellence at Maun Technical College, in partnership with the Ministry of Higher Education. Additionally, they are involved in solar and energy storage projects. The mine's neighbours have witnessed this collaboration firsthand. On November 7, 2026, over 800 cyclists, runners and



walkers gathered at Toteng for the 2026 MMG Khoemacau Lake Ngami Classic Challenge. Participants took on various challenges, including 106 km and 64 km cycling races, a 30 km race and a 10 km walk and run. District Commissioner Thabang Waloka and District Council Chairperson Itumeleng Kelebetseng participated in the walk, alongside Sandfire's General Manager, Candy Godie, who served as Chief Walker. By the end of the day, Khoemacau General Manager Logic Sebopeng reported that the event raised P1.1 million to support education and improve access to clean water in the surrounding villages.

Candy Godie, who leads Sandfire's Motheo Copper Operations, a neighbouring venture in the Kalahari Copper Belt, emphasised the importance of this initiative. "No single organisation can address the complex development needs of communities alone. Sandfire backs the event because it recognises the difference Khoemacau is making in its zone of influence and because it wants its own contribution to outlast the life of its mines," said Godie.

Closer to the pit, the dialogue becomes more formal. Recently, North West District councillors and council executives toured the mine to observe its operations firsthand as part of an annual visit hosted under the slogan "We mine for progress." Kelebetseng expressed gratitude to the mine for its transparency, stating that a strong working relationship should lead to smoother facilitation and fewer complaints from both sides. He also mentioned that as Maun strives to become a green city, it is relying on developments driven by Khoemacau to help turn this ambition into reality.

The wider industry is taking notice. The Prospectors and Developers Association of Canada has announced that Cupric Canyon Capital, which financed and built Khoemacau before its sale, will receive the 2027 Viola R. MacMillan Award for mine development. The award presentation is scheduled for March 9, 2027, in Toronto. Around the mine, the Kalahari Copper Belt is busier than ever. MMG has reported measured and indicated resources of 94 million tonnes, with a grade of 1.8% copper. Leviathan Metals has drilled over 7,000 metres at its adjoining Central Project, and Serval Resources has renewed its priority licences at Sweet Thorn Pan, where the contact mined at Khoemacau has been documented in historical work.

When the new plant starts drawing ore in 2028, the mine beneath the Kalahari will have more than doubled its capacity. The people of Toteng, Maun and the villages around the pit will be watching a different set of numbers, among them the contracts won by local suppliers, the graduates trained at Maun, the classrooms built and the taps that run. Those numbers are already being kept. Botswana has long known what one mineral can build. Khoemacau is where the country is finding out what a second one can do.



> *Those numbers are already being kept. Botswana has long known what one mineral can build. Khoemacau is where the country is finding out what a second one can do.*

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Powering Growth: Puma Energy Supports Khoemacau's Expansion

AS MMG–KHOEMACAU COPPER MINING ADVANCES ITS EXPANSION PROJECT, PUMA ENERGY'S TAILORED FUEL AND SERVICE OFFERING SUPPORTS A SHARED AMBITION: ENABLING MINING GROWTH THROUGH RELIABLE ENERGY, SAFE OPERATIONS AND STRONG PARTNERSHIPS

For MMG–Khoemacau Copper Mining, this means having a partner that understands the demands of the mining environment and takes responsibility for supporting its hydrocarbon requirements. Puma Energy has tailored its offering around a clear principle: allowing Khoemacau to focus on its core business of mining, supported by a dedicated energy partner. As the mine enters its next phase of growth, this partnership provides an important foundation for meeting the energy needs of an expanding operation.

Reliable fuel availability is essential to mining productivity. To strengthen this foundation, Puma Energy has made a significant investment in on-site fuel storage facilities at Khoemacau, demonstrating it's commitment to supporting the mine's operations and expansion ambitions.

This infrastructure provides a critical buffer between fuel deliveries and daily operational demand, helping to reduce exposure to transport delays and supply disruptions. Keeping fuel close to the point of use supports operational continuity and gives the mine greater confidence in planning its activities.

Combined with dedicated site-based teams and coordinated fuel replenishment, the storage facilities form an important part of Puma Energy's integrated supply offering.

As Khoemacau expands, this investment reinforces a shared focus on preparedness, resilience and long-term growth—ensuring that dependable energy remains central to the mine's next chapter.

Supporting Expansion, Creating Shared Value: The Khoemacau expansion places renewed emphasis on the partnerships that support mining development. Reliable supply, capable on-site teams and a shared commitment to safety will remain central to Puma Energy's contribution.

By aligning its services with Khoemacau's operational needs and growth ambitions, Puma Energy aims to create value both at the mine and within surrounding communities.

The purpose is clear: to provide the energy support that enables Khoemacau to focus on mining—and its next chapter of growth.

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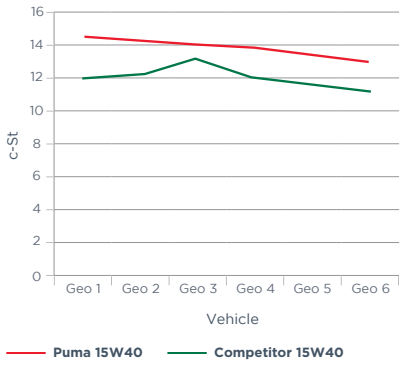
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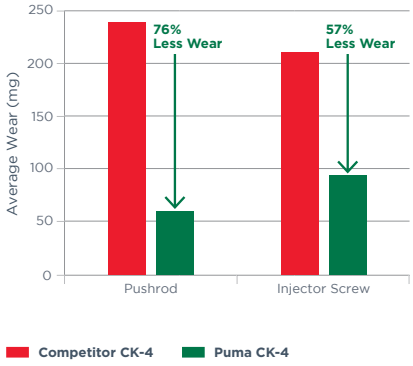
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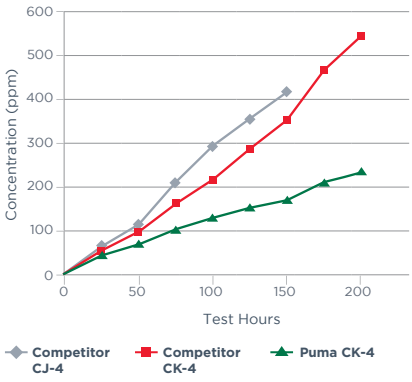
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Is Mining Safer or Simply More Compliant?

Mining is now investing more in managing risk than ever before. And yet many operations have never been harder to run safely.

The systems this industry has built over decades have saved lives and the caution behind them is earned. But across mining and other high-risk environments, the same pattern keeps appearing. Organisations become increasingly sophisticated about risk while still struggling with the fundamentals.

A risk is identified, so a control is introduced. A weakness emerges, so another control follows, then another procedure or sign-off. Each step may be justified but the effect compounds. Eventually the system becomes so complicated that the people it was designed to protect struggle to understand and apply it. Work becomes more complicated and, as a consequence, harder. Yet the extra layers do not necessarily make the operation safer.

There is also a difference between having a control and having one that works. Globally, the International Council on Mining and Metals (ICMM) found that failures to implement effective critical controls were associated with 83% of fatalities reported by its member companies in 2024. Identifying a risk and documenting a control are not the same as knowing that control will work.

On one site, critical controls are tested routinely and pass every time. But the key question is not being asked. Is the test valid? Does it actually measure whether the controls can prevent the events they are designed for? Nobody was negligent. Everyone was doing what had always been done. The result was confidence in protection that was not there.

This gets harder as operations change. All change brings risk, whether through new ground, technology, people or increased production. If the risk profile keeps moving and the controls do not, the operation risks a false sense of protection. The answer is rarely more controls. It is asking whether the existing ones still fit.

This is where risk stops being a compliance conversation and becomes a growth one. When controls fail, lives, equipment and production are on the line, and recovery can take months. Expansions can stall when operations outgrow the way they manage risk.

Anyone who has spent time on a building site knows you do not keep adding floors to a foundation poured for fewer. As mining in Botswana and across the region expands, the question is whether existing foundations suit the operations being built on them. Bigger, more complex operations do not necessarily need bigger, more complex solutions. They need simpler ones. Not fewer safeguards or lower standards, but controls built around how people work, with human factors alongside engineering.

The frustrating part is that the industry already says the right things. Safety is our priority. Safety is our value. Then you walk the site. Workers cannot explain the controls they depend on. Leaders cannot explain how risks are identified. So much energy goes into saying it. Far less goes into ensuring teams can do the work properly. Ultimately, people fix teams.

The fixes are often simple. An overlooked control. A test rewritten to measure what it claimed to. Upgraded change rooms where workers start every shift. Sometimes the strongest demonstration of a commitment to safety is what leadership does, not what it says.

So here is the question for mining leaders. Picture one bad week. A colleague who does not go home, major equipment lost, seven days of interrupted production. Think about the human cost first. Then consider what that week means for everyone who depends on the operation. Have the critical risks been identified and the controls tested for effectiveness, not just existence? Are the people responsible competent, capable and adequately resourced? Above all, are they truly empowered to act?

If the honest answer is “probably”, that is where the work starts. These questions are worth answering now, while there is time to change the outcome.

Desigan Pather
Director of Operations, AFRISHE



Government Sets a 12 Month Clock on Its National Energy Compact



> *Progress is already emerging, although significant work remains. Presenting the first-year implementation results, Deputy Permanent Secretary for Energy and Compact Delivery and Monitoring Unit lead Thuso Cyril Matshameko reported that household electricity access had increased from 76.6% to 80.8% since 2024.*

The government, development partners, the private sector and civil society have set their sights on accelerating delivery of Botswana's National Energy Compact, following a two-day implementation support workshop in Gaborone that concluded on 30 October 2026. Discussions focused on the country's 2030 energy targets, investment opportunities, priority projects, technical assistance requirements and financing arrangements, with particular attention to translating policy commitments into measurable outcomes.

Convened by the Ministry of Minerals and Energy, the Botswana Energy Compact Implementation Support Workshop brought together stakeholders to review progress against agreed reforms, clarify institutional responsibilities and identify bottlenecks that could delay implementation. Its outcomes will inform a Compact Implementation Support Document (CISD) and a 12 month work plan intended to provide a more structured framework for coordinating projects, mobilising resources and monitoring delivery.

The urgency reflects the scale of Botswana's energy ambitions. Under its National Energy Compact, developed through the World Bank and African Development Bank-supported Mission 300 initiative, the country aims to connect approximately 220,000 additional households to electricity by 2030, increase access to clean cooking to 90% and raise the share of renewable energy in its power mix from around 8% to 50%.

Progress is already emerging, although significant work remains. Presenting the first-year implementation results, Deputy Permanent Secretary for Energy and Compact Delivery and Monitoring Unit lead Thuso Cyril Matshameko reported that household electricity access had increased from 76.6% to 80.8% since 2024. Meanwhile, the contribution of renewable sources to domestic electricity generation had doubled from 8.2% to 16.6%. Half of the Compact's 14 Priority Reform Actions, which cover the policy and regulatory changes required to support delivery, were also reported to be on track.

Infrastructure expansion remains central to closing the access gap. The P5.1 billion National Electrification Action Plan, finalised in August 2026, provides a framework for extending electricity connections to the remaining 94 villages. Its implementation will require coordinated investment in generation, transmission and distribution infrastructure, alongside financing models capable of reaching communities where conventional grid connections may be costly or technically challenging.

Renewable energy development presents another significant investment opportunity. Botswana's target of sourcing half of its electricity from renewables by 2030 will require a substantial expansion of generation capacity, supported by grid infrastructure, storage solutions and appropriate regulatory arrangements. Solar power offers considerable potential, while emerging opportunities in wind generation could further diversify the country's electricity supply.

Private sector participation will be important in mobilising the capital and technical expertise required to advance this pipeline. Independent power producers, infrastructure investors and technology providers have a potential role across generation, transmission, storage and distributed energy solutions. However, converting investor interest into projects will depend on credible procurement processes, clear regulatory frameworks, bankable power purchase arrangements and greater certainty around project implementation.

Financing and technical assistance therefore featured prominently in the workshop discussions. Participants examined the resources required to advance priority projects, strengthen institutional capacity and address technical constraints. Development partners can support project preparation, financial structuring and knowledge transfer, while government institutions will need to ensure that proposed investments align with national priorities and deliver sustainable economic benefits.

The workshop received support through the African Development Bank's Africa Energy Sector Technical Assistance Program, delivered through the Africa Energy Market Place, with Sustainable Energy for All (SEforALL) serving as the implementing partner. The collaboration is intended to strengthen the technical and institutional foundations required to move the Compact from commitments towards implementation.

Institutional coordination will be equally important. The Compact Delivery and Monitoring Unit brings together the Ministry of Minerals and Energy, Botswana Power Corporation, the Botswana Energy Regulatory Authority, the Ministry of Finance and other relevant institutions. Its role includes coordinating implementation, tracking progress and ensuring that participating institutions remain accountable for their respective commitments.

Beyond infrastructure and investment, the Compact also has implications for economic diversification, industrial development and household welfare. Reliable and affordable electricity is essential for attracting investment into energy-intensive industries, strengthening local businesses and improving the competitiveness of productive sectors. Expanding access to clean cooking and electricity can also reduce household energy costs, improve living conditions and create opportunities for local enterprises across the energy value chain.

The next 12 months will therefore be an important test of implementation capacity. The forthcoming Compact Implementation Support Document and accompanying work plan are expected to establish clearer delivery responsibilities, identify immediate priorities and align technical and financial support with the projects most critical to achieving the 2030 targets.



Malawi Makes the Case for a Commonwealth Mineral Corridor

At the summit in St John's, Antigua and Barbuda, Commonwealth leaders met with investors, bankers and the heads of international financial institutions to discuss a common pipeline of projects, marking a first for a Commonwealth summit. The Commonwealth Investment Platform lists 115 projects across 28 developing countries, with a combined value of US$52.9 billion. The communiqué also calls on the Secretary-General to report on measurable results in investment mobilisation, while leaders consider a plan to carry the agenda forward into 2027.

Former senior Malawian Diplomat and Founder of advisory firm GQI, James Woods, argued in a commentary that the project list has a conspicuous gap. It includes dozens of power and transport projects, ranging from Mozambique's Mphanda Nkuwa dam to Botswana's North-South rail corridor, but no mining projects or initiatives linking mines to the electricity and rail infrastructure they need. Woods argued that such an integrated package is essential to turning mineral wealth into exports and said Malawi has one in the making. He attributed the gap to the way platforms such as this are developed. Ministries tend to nominate projects that fall within their own portfolios and can be described on a single project sheet. Examples include the resorts at Cape Maclear, Salima and Mount Mulanje, which feature among Malawi's own entries.

A mineral corridor belongs to no single ministry, because the mines are privately financed, the power is built with development finance partners and the railway crosses a border. That, he says, is a design question for the Commonwealth. Malawi's mines, Woods wrote, are moving from promise to production. The Kayelekera uranium mine produced its first yellowcake in 2025, and the Kangankunde rare earths project is on track for first production in the final quarter of 2026. One of the trading houses buying for Washington's US$12 billion Project Vault stockpile has signed a memorandum for graphite from Kasiya, described as the world's largest natural rutile deposit, and the European Union has named Songwe Hill a strategic project under its Critical Raw Materials Act.

The World Bank's roadmap, From Potential to Prosperity, estimates the sector could export more than US$30Bn between 2026 and 2040, and in October Malawi became one of the first eight countries to launch a Metals and Minerals Country Compact with the Bank. Woods stresses that the US$30 billion is gross export value, not state income. The Bank projects government revenue of roughly US$400 million to US$600 million a year by 2040, depending on reform, and even the lower figure approaches US$542 million earned by tobacco, Malawi's leading export, in 2025. The roadmap says unlocking it needs US$2.3 billion of power and transport infrastructure, of which US$530 million is secured and a dedicat-

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ed strategy for promoting mining investment abroad.

The government, he noted, has moved to establish the necessary terms ahead of the anticipated mining boom rather than responding after it has begun. In February, the President ordered an audit of the licensing registry and a review of raw mineral exports, with the aim of ensuring that more processing takes place domestically. The 2026/27 budget also allocates K17 billion towards establishing a state mining company. Malawi's national energy compact commits to exempting mining companies from the foreign exchange surrender rule and allowing dollar-denominated contracts on a case-by-case basis. These measures signal the kind of policy predictability that long-term investors look for.

Macroeconomic conditions are also improving. Inflation fell to 19.4% in September, its first reading below 20% since May 2022. The World Bank also reports that the fiscal deficit narrowed to 8.8% of GDP in 2025/26, supported by stronger revenue collection and spending restraint. An IMF staff visit in October reported progress towards a new Extended Credit Facility. Meanwhile, the same budget limits each embassy to five officials. With public debt close to 90% of GDP, Woods argued that the right strategy is to attract investment and build partnerships rather than take on additional borrowing.

Power is following. On 8 August a 400kV line from Mozambique was energised, linking Malawi to the regional grid. The 358MW Mpatamanga hydropower scheme, backed by a US$350 million World Bank grant and co-developed with the International Finance Corporation, will dedicate a third of its output to mining, and the energy compact aims to lift electricity access from 25.9% of the population to 70% by 2030. Foreign Minister George Chaponda told the UN General Assembly in September that the multilateral system must become an "engine of delivery", and in Antigua he urged Commonwealth foreign ministers to make development finance fairer and deepen trade and investment among members. Woods noted the summit communiqué now calls for processing critical minerals at the source, which is Malawi's own policy.

Why the Commonwealth? Woods concedes it has no common trade policy and little money of its own but says its advantage is its plumbing. Trade between members costs about 21% less than trade with outsiders.The developers of Kasiya and Songwe Hill raise capital in Sydney, London and Toronto. Every country on Malawi's routes to the sea, including Mozambique, Tanzania, Zambia, South Africa and Namibia, is a member, and three of the ten largest importers of critical minerals are Commonwealth members. India's new partnership with the World Bank aims to mobilise US$5 billion for mineral processing by 2031.

His proposal is a Commonwealth Anchor Corridors Facility, a small preparation and negotiation unit that would package cross-border projects around anchor mining customers rather than waiting for national project lists. The problem it seeks to solve is that mines will not commit without reliable power and rail infrastructure, while utilities and railway operators will not invest without committed mining customers. Meanwhile, smaller states often find themselves negotiating against well-resourced investors. The facility would bring together mine offtake commitments, a power purchase agreement and a corridor freight commitment into a single bankable package, while providing host governments with independent financial modelling. It would not be a new bank. Instead, the Commonwealth Secretariat would convene the facility and maintain standard documentation, building on its model mining feasibility guidelines and its Critical Minerals Alliance, which has 17 mineral-rich members. The African Legal Support Facility, hosted by the African Development Bank, would serve as its legal arm. Preparation funding would come from development finance institutions in Britain, Canada, Australia and India, with the costs recovered through success fees at financial close. The World Bank compact would provide the scorecard.

Woods suggests piloting the facility along a Malawi-Mozambique corridor, linking Mpatamanga's power project, the rail line to the port of Nacala and at least two anchor mines, with the aim of reaching financial close within three to five years. This would be accompanied by a standard Commonwealth term sheet for mining agreements, adopted by three member states. He acknowledged that there are real but manageable obstacles, including development finance institutions' preference for their own project pipelines and the need for neighbouring governments to agree on sequencing and share the credit. He concluded by recalling a private meeting in September 2022 with Antigua's Prime Minister, Gaston Browne, arranged within hours during the national mourning period following Queen Elizabeth II's death. He cited the meeting as proof that the Commonwealth network gives smaller countries access to influential decision-makers. What turns that access into investment, he argued, is having a bankable proposition ready when the door opens – and Malawi can bring one.



Woods suggests a pilot on a Malawi and Mozambique corridor, linking Mpatamanga's power, the rail line

First Quantum's EBITDA Doubles but Zambia's Grid Will Decide How Far It

Zambia now accounts for about 93% of First Quantum Minerals' (FQM) group copper output in 2025, following the suspension of Cobre Panamá in 2023. The third quarter of 2026 demonstrated what that concentration can deliver when copper prices are high. Copper production reached 108,959 tonnes, up 8% from the second quarter. Sales revenue climbed 38% to US$2,086 million, gross profit increased to US$678 million from US$297 million, and EBITDA reached US$844 million, compared with US$400 million in the previous quarter.

A realised copper price of US$6.37 a pound, up from US$5.34 a quarter earlier, did much of the lifting. With the hedging programme completed on 30 June, the company now has full exposure to market prices. Net debt fell by US$98 million to US$5,309 million, while liquidity stood at US$2.13 billion. Chief Executive Tristan Pascall said the quarter demonstrated the "underlying earnings potential of our business". The engine of that performance is Kansanshi in Solwezi. The US$1.2 billion S3 expansion, which was declared to have reached commercial production on 1 December 2025, is now contributing to output. The company says it is on track to process about 27 million tonnes of ore in 2026, 8% above design capacity. Kansanshi produced 45,843 tonnes of copper during the quarter, while FQM also benefited from a second revenue stream in sulphuric acid. The smelter produced about 316,000 tonnes of acid, of which approximately 70,000 tonnes of surplus production were sold at an average price of US$462 a tonne. This generated US$33 million in revenue and reduced the copper cash cost by US$0.14 to US$2.02 a pound.

FQM is open about the costs associated with its strategy. The acid initiative will continue until 2027, and because it supports low acid-consuming ore, it will impact copper output next year. The primary challenge lies in ore grades. The company has revised its full-year copper guidance to between 405,000 and 435,000 tonnes, down from a previous range that reached 475,000 tonnes, citing lower grades at both Kansanshi and Sentinel. The S3 operation is relying on lower-grade surface stockpiles, and delayed stripping at the South East Dome will keep grades down into next year. The Sentinel mine produced 48,816 tonnes, which is 1,519 tonnes less than the previous quarter, partly due to a mid-life overhaul of a rope shovel that delayed access to richer deposits. Costs are also rising. The guidance for copper C1 cash costs is now set at US$2.50 to US$2.65 per pound, reflecting higher fuel prices, a strong kwacha and increased deferred stripping expenditures.

To address these challenges, FQM is combining engineering and technology solutions. A sulphide cleaner recovery strategy is being validated through test work and plant trials, and an optimisation programme is focused on improving gold recovery. At Sentinel, In-Pit Crusher 4 was completed in October, with upgrades for flotation automation scheduled for early 2027, while stage four stripping is underway to prepare for ore extraction starting in 2027. FQM has also secured a UK patent and trademark for Quantum Electra-Haul, a trolley assist system that enables equipped trucks to operate on electricity on designated haul road ramps, reducing diesel consumption by up to 90% on those segments. Additionally, the Kansanshi smelter has achieved compliance under the Responsible Minerals Initiative's assurance process, which is an important credential for buyers looking for responsibly sourced copper. On another note, nickel guidance at the Enterprise operation has been increased to between 40,000 and 45,000 tonnes, and Guelb Moghrein in Mauritania transitioned to producing a gold-copper concentrate in August, raising its gold production guidance.

Panama is a wild card in the copper mining landscape. Processing of stockpiled ore at Cobre Panamá resumed in the second quarter, and all three processing trains were operational by the end of the third quarter. They produced a total of 13,229 tonnes of copper and loaded concentrate cargoes of 33,000 and 38,611 wet tonnes. The stockpile contains approximately 38 million tonnes of ore, translating to around 70,000 tonnes of recoverable copper, which is sufficient to sustain operations until mid-2027. In addition to the mining developments, there is movement on the political front. On September 30, the Interministerial Commission presented 17 recommendations, including an assessment of a new agreement that could resolve ongoing arbitrations and facilitate a project restart designed to finance its own closure. The President is currently reviewing the report, and FQM has expressed its readiness to engage constructively in discussions.

However, none of these developments can succeed without a reliable power supply. Country Director Anthony Mukutuma highlighted this critical issue in an exclusive interview with the Energy News Network (ENN), published on October 20, 2026. He pointed out that over 90% of Zambia's power generation and its connection to the Southern African Power Pool are located in the southern region, while many of the large mines are situated in the north. Mukutuma clearly identified the primary constraint, stating, "The transmission and distribution infrastructure requires expansion and strengthening." He stressed that the grid must be extended now, as many areas in Zambia with significant mining potential currently lack access to it. Mukutuma further noted that exploration decisions should not depend on proximity to the grid, yet in practice, the costs and time associated with developing a project often make them a determining factor.

FQM is not standing still. About 80% of its Zambian power supply now comes from imports and independent power producers, and Mukutuma said three of those producers are working with the company on solar, wind and hydro projects. Kansanshi's STATCOM project, which is designed to stabilise the grid, has completed procurement and factory testing, with site installation scheduled to begin in early 2027. Solarcentury Africa has also announced a 112 MWp solar park at Kusoka, to be built by Turkish contractor YEO, to supply Sentinel and Enterprise, with FQM's Trident complex serving as the anchor offtaker. The power offtake agreement is still being finalised. Lake Kariba ended the quarter with about 39% usable storage, compared with 15% a year earlier. However, the force majeure declared by state utility ZESCO remains in effect, while a strong El Niño forecast raises further concerns about the coming rainy season.

The stakes extend beyond a single company. Zambia aims to increase copper production to 3 million tonnes a year by 2031, up from 890,346 tonnes last year, with FQM's mines playing a central role in achieving that target. The company's project pipeline also extends beyond Africa, with Taca Taca in Argentina awaiting environmental approval following public consultation in November, while La Granja in Peru continues to advance through the permitting process. Meanwhile, Midnight Sun Mining says drilling at its Dumbwa deposit, south of Kansanshi in the Copperbelt region spanning Zambia and the DRC, has identified near-surface copper mineralisation extending more than 2,400 metres from east to west in its northern block. This is more than double the average width of the corridor drilled so far. The wider mineralised corridor now extends for more than 12 kilometres.

Dangote's Industrial Blueprint Takes Centre Stage at Mining Indaba



The ability to develop world-scale industrial projects depends on more than access to natural resources. It requires experienced businesses, patient capital, capable institutions and the infrastructure to turn investment into lasting productive capacity. That challenge will take centre stage at Investing in African Mining Indaba 2027, where Aliko Dangote, President and CEO of Dangote Group, will headline discussions on building Africa's next generation of industrial institutions.

Dangote's participation brings the perspective of an industrialist whose business interests have expanded across African markets and into increasingly complex industrial operations. His group's latest ambitions include a US$16 billion, 700-barrel-per-day petroleum refinery in Lame, Kenya, and a US$20 billion Dangote Petroleum Refinery in Lagos, currently the world's largest single-train refinery, with a planned expansion to approximately 1.4 million barrels per day by 2029. The scale of these investments raises a broader question for Africa's industrial ambitions: What does it take to build businesses capable of undertaking projects of this magnitude, and what institutional and financial foundations are needed to sustain them?

The continent's mineral resources provide a platform for industries spanning energy, infrastructure, manufacturing and agriculture. However, the economic value generated from those resources depends increasingly on the capabilities developed around extraction. Businesses must be able to execute complex projects, capital providers must support long investment horizons, and infrastructure must connect production to markets.

As African companies accumulate technical expertise, capital and operational experience, they can pursue more ambitious opportunities across sectors and national borders. Stronger businesses and financial institutions also expand the continent's capacity to influence investment decisions, develop industries and retain more value from its natural resources. Dangote Group's operations offer a perspective on these connections. Its businesses are significant consumers of mined and extracted resources, from limestone used in cement production to oil and gas feedstocks for refining, petrochemicals and fertiliser manufacturing.

Mining Indaba 2027 will take place under the theme 'Stronger Together: Partnerships in Practice', reflecting the growing importance of collaboration between mining, infrastructure, finance and wider industrial development. Mining remains a foundational supplier to much of the economy. Its outputs provide materials for cities, transport networks, energy systems, manufacturing and food production. The extent to which resource wealth translates into broader economic development therefore depends on the capacity to build competitive industries around the mining value chain.

Dangote is expected to contribute to discussions on nation-building through institution-building, including how businesses develop the resilience and scale to undertake increasingly ambitious projects, how African capital can support industrial expansion, and how cross-sector partnerships can accelerate development. Commenting on his participation, Dangote said, "No nation has achieved last-

ing prosperity by exporting raw materials and importing finished goods. Africa must process what it extracts and build the industries that turn its mineral wealth into jobs, infrastructure, and manufacturing at home. That requires businesses with the scale to execute and long-term African capital prepared to stay the course. We look forward to deepening our partnership with leading African institutions that are fully aligned on Africa's industrialisation. When African industry and African capital build together, projects that once appeared beyond reach become achievable. That is the conversation I look forward to leading at Mining Indaba."

Zeinab El-Sayed, Director of Government & Institutional Partnerships, said the discussion would shift attention towards the institutional capabilities needed to deliver Africa's major development projects. El-Sayed explained, "We spend a lot of time talking about the projects Africa needs. We spend less time talking about the institutions capable of delivering them. Aliko Dangote has spent decades building one of those institutions. His experience gives us an opportunity to look at what sits behind projects of enormous scale: the capability built over time, the capital required to take long-term decisions, and the confidence to pursue opportunities that can initially appear beyond reach. That is a particularly important conversation for mining. If Africa wants its resources to support broader industrial development, we need businesses and institutions with the capacity to build around them."

The discussions will take place against a backdrop of growing pressure on African economies to move beyond resource extraction towards greater domestic processing, manufacturing and industrial value creation. For the mining sector, this means considering how investment in mineral production can support downstream industries, strengthen local supply chains and attract capital into related infrastructure. Investing in African Mining Indaba 2027 will bring together government representatives, mining companies, investors, financial institutions and industry leaders in Cape Town from 8 to 11 February 2027.





Mining Money Is Moving From the Pit to the Plant



Zimbabwe's mining sector is discovering that the real money is made after the rock leaves the ground. From a lithium salt plant outside Harare to a pilot gold circuit in Matabeleland and a gold project heading for feasibility, the country's most important projects are increasingly defined by what happens in processing, not extraction.

The theme was fitting for the Association of Mine Managers of Zimbabwe (AMMZ), which closed its 54th Annual Conference and AGM with a technical visit to the Zimbabwe Consolidated Diamond Company. Mine managers spent the final day looking at an operation, while outside the conference hall the beneficiation debate was moving from policy to production.

Lithium is the clearest case. Zhejiang Huayou Cobalt's Prospect Lithium Zimbabwe operation at Arcadia has established what is described as Africa's first lithium salt plant. The US$400 million facility has an annual production capacity of 50 000 tonnes and began exporting lithium sulphate in April. By the end of September, approximately 33,000 tonnes had been shipped, generating roughly US$190 million in revenue, according to the Minerals Marketing Corporation of Zimbabwe. The plant demonstrates how investment in specialised processing infrastructure can move a producer further along the value chain.

Lithium export sales reached approximately US$2.16 billion in the nine months to 30 September, nearly four times the total recorded for the whole of the previous year. However, most of this revenue came from spodumene concentrate, which accounted for approximately 1.8 billion, while petalite contributed US$155 million. Lithium sulphate therefore represents only a small share of a much larger raw material trade. Chinese companies, including Huayou, Sinomine, Sichuan Yahua, Chengxin Lithium and Tsingshan, have invested approximately US$2 billion in Zimbabwe's lithium sector since 2021, with most of the output destined for China.

Policy intervention is now intended to shift that balance. The government suspended lithium concentrate exports in February, partly restored them in April through a company quota system, and has scheduled a full ban for January 2027. Whether local sulphate processing capacity can absorb concentrated output by then remains uncertain, as other planned projects including at Bikita are still under construction and have faced delays.

The comparison with platinum group metals is instructive. PGMs earned about US$1.73Bn in the same nine months, and Zimbabwe has working concentrators and smelters, yet full local refining remains an ambition. As beneficiation gathers pace, the question is no longer how much is extracted but how much value the country keeps through local processing.

Kavango Resources has commissioned a 50-tonne-a-day gold plant at its Hillside Gold Project in Matabeleland South, and the Ministry of Mines and Mining Development declared the plant and its tailings storage facility commissioned on 30 October. The facility is a concept-phase plant built to test processing methods, tune performance and establish the orebody's metallurgy. Kavango is targeting recoveries of between 90% and 93%, and the project is anchored by the Bill's Luck Underground deposit, which holds a resource of 33,900 ounces at 2.68 grams a tonne. At that scale, the plant's value lies in the data it produces ahead of expansion, not in the ounces.

The bigger gold prize is Ariana Resources' Dokwe Gold Project, located about 110 kilometres west-northwest of Bulawayo. A revised pre feasibility study lifted the resource by 13% to 1.6 million ounces, with an ore reserve of 1.13 million ounces at Dokwe North and expected production of about 1.06 million ounces over the life of the project. Metallurgical testing, mine design, water supply and infrastructure assessments are now advancing ahead of feasibility, with Chinese strategic partner Xinhai providing technical work and funding. The company is aiming for a definitive feasibility study in the first quarter of 2027.

Not all progress comes from large investors. President of the Association of Mine Surveyors of Zimbabwe, Stewart Gumbi, noted efforts to formalise artisanal and small scale mining need a structured framework built on secure mining tenure, geological exploration, reliable production records and access to finance. Without those foundations, he ar-



gues, formalisation will struggle to take hold.

The pattern across these stories is consistent. Zimbabwe is trying to turn mineral wealth into industrial capacity and the projects making headway are those that pair resources with processing, funding and clear rules. The test over the next year is whether lithium sulphate, gold plants and refining ambitions move from pilot scale to commercial scale before the export deadlines and investor patience run out.



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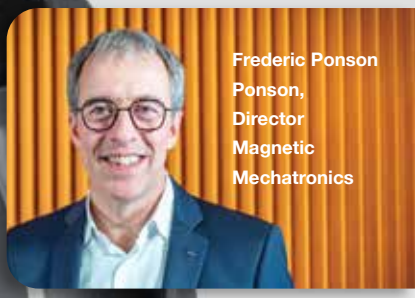
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SKF Makes the Business Case for Industrial Decarbonisation

The economics of industrial decarbonisation increasingly depend on how efficiently companies use energy, maintain equipment and manage resources across their operations. As industries face mounting pressure to reduce emissions without compromising competitiveness, technologies that improve asset performance and extend equipment life are becoming important levers for both environmental and commercial value.

At COP31, SKF is bringing this proposition into focus, showcasing solutions spanning energy-efficient magnetic bearings, condition monitoring, oil regeneration, remanufacturing and circularity. The offering reflects a broader industrial opportunity: reducing environmental impact while strengthening operational reliability, resilience and productivity. “With more than 20% of global energy lost overcoming friction, our role in the transition is clear. We already have solutions that improve energy efficiency, resilience, circularity and uptime. The opportunity now is to bring these solutions to more customers and scale their impact,” said Susanne Larsson, CFO and CSO.

One of the most pressing applications is the rapid expansion of artificial intelligence and the infrastructure required to support it. Data centres consume substantial amounts of electricity, not only to power computing capacity but also to manage the heat generated by increasingly intensive workloads. Cooling efficiency is therefore becoming a material consideration in the sector’s energy footprint. SKF’s magnetic bearings offer an alternative to conventional systems by operating without physical contact, reducing friction and mechanical wear while supporting more energy-efficient and reliable cooling systems.

“Meeting the growing demand for AI requires innovation not only in computing but also in the infrastructure that supports it. More efficient cooling can play an important role in reducing the energy footprint of data centres as demand continues to grow,” explained Frederic Ponson, Director Magnetic Mechatronics. The potential impact extends beyond individual facilities. SKF estimates that magnetic bearing-equipped chillers commissioned in 2030 could help avoid 3.4 million tonnes of CO_2e emissions over their lifetime through lower electricity consumption and higher availability compared with traditional oil-lubricated bearing systems. Asset longevity presents another opportunity to improve industrial resource efficiency. Replacing equipment before the end of its useful life carries material, energy and cost implications, while poor maintenance can undermine reliability and increase operational expenditure. SKF is addressing these pressures through solutions designed to improve equipment performance, recover value from existing assets and reduce demand for new materials.

Among the technologies being highlighted are SKF Insight bearings, which support condition monitoring and equipment reliability; RecondOil, which helps keep industrial oil in use for longer; and remanufacturing services that restore bearings rather than requiring replacement with new units. SKF Infinium adds an additive manufacturing dimension, enabling large bearings to be renewed rather than replaced. These technologies position circularity as an operational and commercial consideration, with the potential to reduce waste, extend asset life and improve the productivity of industrial resources.

However, scaling industrial decarbonisation will require more than technology deployment. Collaboration across companies, sectors and value chains will be essential to accelerate adoption, share expertise and translate efficiency gains into wider industrial impact. SKF is therefore joining the Energy Efficiency Movement, a global network focused on raising awareness and increasing the adoption of energy-efficiency solutions across industry. The collaboration forms part of the company’s wider COP31 engagement, bringing together technology, industrial knowledge and partnerships to advance practical solutions. As businesses assess their investment priorities, the ability to extract greater performance from existing assets while using less energy and fewer resources will carry growing strategic and financial significance.



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Walvis Bay Set to Become Southern Africa's Fuel Gateway Through US$2.5bn Dangote Project

A fuel storage and pipeline project worth about US$2.5Bn has been launched at Farm 58 in Walvis Bay, with President Netumbo Nandi-Ndaitwah declaring that it will stay under her direct oversight until it is finished. The Dangote Namibia Tank Farm and Regional Pipeline Project is intended to strengthen the country's energy security, expand regional trade and accelerate industrial development.

The plan includes a petroleum storage facility with a capacity of 600 million litres, made up of 360 million litres of diesel and 240 million litres of petrol, and a regional pipeline network of about 1,700 kilometres. The pipeline would link Walvis Bay to inland markets, with a distribution network serving Botswana, Zambia, Zimbabwe, Malawi and the Democratic Republic of Congo, according to Nigerian industrialist and Dangote Group Chairman and Chief Executive Aliko Dangote. The infrastructure is expected to improve fuel supply and distribution, cut transport and shipping costs for landlocked countries and position Namibia as a gateway to Southern Africa.

Nandi-Ndaitwah said the launch was the culmination of engagements that began with her first meeting with Dangote in June 2025. She placed the project under the Office of the President to prevent administrative delays and urged government institutions to act with urgency and accountability. "This project will remain a presidential project until it is completed," affirmed Nandi-Ndaitwah.

The President stressed that the value of an investment should be measured by the opportunities it creates for ordinary Namibians. She called for meaningful participation by local businesses, alongside skills development, job creation and opportunities for young people. She linked the project to value addition and industrialisation under the Sixth National Development Plan (NDP6) and described it as proof that Africans are gaining confidence in their own capacity. "As Africans, we are beginning to believe in ourselves," observed Nandi-Ndaitwah.

Dangote said he has confidence in Namibia's investment potential and that the project is about lasting opportunity as much as profit, including local skills and reinvestment in the countries where the group operates. "Africa must industrialise Africa. Whenever we enter another African country, we are coming home," said Dangote. He added that the US$2.5Bn project is only the beginning and that the group is willing to expand into other sectors of the Namibian economy. "We will not disappoint you. We will deliver as promised," assured Dangote.

Erongo Regional Governor Natalia Goagoses welcomed the investment and highlighted the region's position as a gateway for trade, logistics and industrial development. The project supports NDP6 and the African Union's Agenda 2063. As work moves towards implementation, the President urged all parties to turn commitments into results. "Today we have spoken and now we must act," declared Natalia Goagoses.





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Washington Puts US$16Mn Behind Rebuilding the Mining Classroom

The United States has concluded that it does not have enough people to mine its own minerals, and it is paying universities to fix that. The US Department of Energy (DOE) has awarded US$16 million to 16 universities to expand the country's mining and critical minerals workforce, with each institution receiving US$1Mn through the Providing Opportunities for Specialized Education in Critical Technologies (PROSPECT) Planning Prize.

The DOE estimates the country will need about 6,000 new mining engineers over the next decade. The wider US$100 million PROSPECT initiative aims to double the number of graduates with mining, minerals and related supply chain credentials.

The University of Texas at El Paso plans to use its award to relaunch an undergraduate mining engineering programme in late 2027. It will be the only mining engineering degree offered in Texas and the university's first since its previous programme ended in the 1960s. UTEP expects to produce as many as 100 mining engineers a year at full capacity, with industry partners providing nearly US$3 million in scholarships annually at that stage.

Other recipients have set out plans spanning mineral processing, recruitment, scholarships and vocational pathways. Colorado School of Mines will increase enrollment and introduce a programme in mineral processing, extractive metallurgy and recycling, and its mining engineering enrolment has doubled over three years. The University of Arizona will support recruitment, scholarships, industry workshops and partnerships with community colleges and technical schools. Montana Tech plans mining certificates, interdisciplinary minors, scholarships, graduate fellowships and upgraded field and laboratory equipment.

The awards form part of a wider push to strengthen domestic capacity. In September, the DOE committed US$73 million to four mining technology projects under its Mine of the Future initiative, covering areas such as automation, electrification, sensing and underground technology testing.



TAKRAF Builds Greater Filtration Capability for Mining and Tailings Applications

The growing demands of mineral processing and tailings management are placing greater emphasis on efficient liquid/solid separation technologies. TAKRAF Group is strengthening its capabilities in this area through the acquisition of Spanish engineering specialist FSI FILTRACIÓN S.L., adding more than 35 years of filtration experience and over 300 filter press references to its DELKOR portfolio.

Completed on 3 November 2026, the acquisition brings FSI into the TAKRAF Group, where it will continue serving its established customer base while contributing its technical expertise, technologies and market knowledge to DELKOR's liquid/solid separation business. Founded in Spain in 1989, FSI specialises in liquid/solid separation, with a particular focus on filtration. Its experience spans several industrial sectors, supported by more than 300 chamber and membrane filter press references. The company's capabilities cover the full project lifecycle, from process engineering and equipment sizing to manufacturing, installation, testing, commissioning and technical support.

The acquisition combines FSI's established position in Spain and Europe with DELKOR's international footprint and existing filtration capabilities. This creates opportunities to extend the combined offering into additional markets while strengthening TAKRAF's ability to address a broader range of customer requirements.

"The acquisition of FSI FILTRACIÓN is an important step in strengthening our capabilities in filtration technology. FSI brings extensive technical expertise, an established portfolio and strong customer relationships. Together, we can address a broader range of customer requirements while building on the experience and strengths of both organisations," said Thomas Jabs, Chief Executive Officer of TAKRAF Group.

FSI's portfolio includes filter presses with plate sizes of up to 1.8 × 1.8 m. These solutions complement DELKOR's existing capabilities, which include equipment for larger-scale applications in mining and tailings management. Bringing the two portfolios together broadens the range of filtration requirements that TAKRAF can address across the mining value chain. For FSI, joining the Group provides access to a wider international network and additional technical capabilities while allowing the company to maintain continuity for existing customers.

"Joining TAKRAF Group gives us the opportunity to continue building on what FSI has established over more than three decades. Our customers will continue to work with the people and expertise they know, while our team gains access to DELKOR's international network and broader technical capabilities. We see significant potential to develop our offering together and support customers across a wider range of applications," said Eduardo Moretón, Member of the Board of Directors of FSI FILTRACIÓN.

FSI's existing management team will remain in place. Luca Romanengo, currently Director of Strategic Projects at TAKRAF Group, will assume the role of Managing Director of FSI. Together, the leadership team will oversee the integration and encourage collaboration between FSI, DELKOR and the wider Group. The integration will prioritise continuity for existing customers, with FSI clients retaining their established contacts and teams.

Alongside this, the companies will work to combine their technical knowledge, market experience and engineering capabilities to develop the expanded filtration offering. The acquisition strengthens TAKRAF's position in liquid/solid separation while adding specialist expertise that can support a wider range of industrial and mining applications. For DELKOR, it represents an opportunity to build on its existing filtration portfolio and extend its reach across international markets.



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