AFRICAN⁺ SPECIAL MINING REPORT 2025 A special report in support of African Mining Week, Cape Town, South Africa **Produced by** In Partnership with MOORE **African Mining** WEEK

EXECUTIVE BRIEFING

As the world accelerates toward a low-carbon, high-tech future, Africa is fast emerging as the new frontier in mineral investment – not only for its vast reserves of critical minerals, but also for its rising profile in global energy and industrial supply chains. From copper to cobalt, gold to graphite, and iron ore to lithium, the continent's resource base is capturing fresh interest from global investors, OEMs and strategic players navigating a shifting geopolitical and economic landscape.

This Special Mining Report by African Mining Week (AMW) – developed in partnership with Moore Global – unpacks the trends, challenges and opportunities shaping the continent's mining sector today. With deep sectoral expertise and on-the-ground advisory capabilities, Moore Global brings decades of experience supporting mining clients across Africa and beyond. Their insights into financing structures, regulatory shifts, ESG compliance and investment strategy have added invaluable depth to this report, making it an essential read for stakeholders across the value chain.

In Section 1, we explore Africa's redefined strategic relevance, including the copper resurgence in Zambia and the DRC, private equity's return to African mining and the logistics challenge that underpins mineral offtake reliability. Section 2 turns to the future of mining: how ESG metrics are being monetized, how climate finance is reshaping project viability, and how renewable integration is redefining operational best practices. Finally, Section 3 takes a hard look at risk, regulation, and what lies ahead - from sovereign policy shifts and beneficiation mandates to the evolving capital landscape for juniors and majors alike.

This report doesn't just offer analysis; it sets the tone for the discussions that will define African Mining Week 2025. As the premier pan-African platform for deal-making, dialogue, and high-level engagement in the mining sector, **AMW is where the continent's resource ambitions meet global capital and policy influence.** Whether you're an investor, policymaker operator, or stakeholder, AMW offers unmatched access to insights, partnerships, and the people shaping the future of African mining.



"We invite you to explore the pages ahead, join us on the ground in 2025, and be part of the conversation - and the opportunity - that Africa represents."

Rachelle B. Kasongo, Conference Director, African Mining Week.

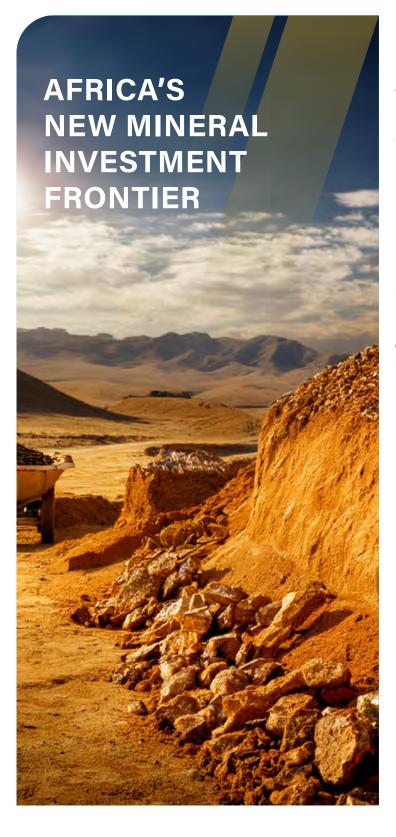


1-3 OCTOBER 2025 CAPE TOWN CTICC1

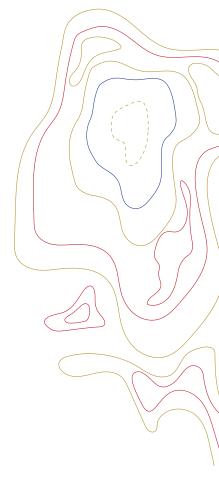








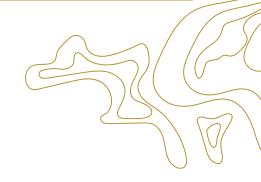
Africa is rapidly transforming from a source of raw mineral supply to a key player in global mining and mineral processing. Once primarily the target of offtake deals, the continent is now positioning itself at the forefront of battery innovation and mineral value chains, evolving from a geological powerhouse to an industrial and strategic leader.







Powering the Future: Can Africa Seize the Battery Opportunity?





Africa sits at the heart of a global inflection point. With surging demand for clean energy technologies and a race to secure critical mineral supply chains, the continent's vast reserves of cobalt, lithium, manganese, graphite and platinum group metals (PGMs) position it as a cornerstone of the energy transition. Holding approximately 30% of the world's known mineral reserves, Africa has the resources – and now, the opportunity – to move from raw material supplier to a central player in the global

battery value chain.

Country	Mineral	Global Share	4 Energy Role
DRC	Cobalt	70% of supply 50% of reserves	Lithium-ion batteries
Zimbabwe	Lithium	10% of supply	EV batteries
South Africa	Platinum	90% of reserves	Hydrogen fuel cells, catalytic converters
Gabon	Manganese	25% of supply	Steel & battery cathodes
Mozambique Mozambique	Graphite	10% of supply	Lithium-ion batteries

(\$)

\$16 Trillion Opportunity

According to the International Energy Agency, demand for lithium is expected to rise **tenfold by 2050**, with cobalt and nickel tripling. If sub-Saharan Africa builds downstream capacity, it could capture 12% of global mineral revenues and grow GDP by **12%**.

Why Africa Matters Now: Security, Sovereignty and the Offtake Rush

As geopolitical tensions intensify, Africa has emerged as a vital alternative to dominant suppliers. China currently controls 65% of global cobalt refining and 58% of lithium processing, triggering policy shifts in the West. The EU's Critical Raw Materials Act (2023) now mandates that by 2030, at least 40% of minerals must be processed within the EU, and no more than 65% may originate from any single third country. This has accelerated demand for Africansourced minerals - and sparked a rush for long-term supply deals. Recent offtake agreements reflect the

- urgency and strategic recalibration:Glencore signed a letter of
 - intent with **Premier African Minerals** for spodumene from
 Zimbabwe's Zulu Lithium
 Project.
 - Marula Mining secured a 50,000-ton offtake deal with Fujax UK for high-grade spodumene from South Africa's Blesberg mine.
 - Black Rock Mining finalized contracts for 30,000 tons of Tanzanian graphite annually, backed by the region's lowcost electricity at \$0.087/ kWh.

These deals increasingly feature conditions for local beneficiation, infrastructure development, and value retention – marking a shift from resource extraction to shared industrial ambition.







From Extraction to Gigafactories: Rewiring the Battery Value Chain

Africa's long-term economic upside lies not in exporting ore, but in refining, assembling and innovating within its borders. According to the Faraday Institution, local processing of lithium, nickel and copper could be 40% more cost-effective than global averages by 2030, potentially generating \$6.8 billion per year and creating thousands of skilled jobs.

Challenges: Infrastructure, Governance and Inclusion

Africa's ambitions are constrained by enduring challenges. Energy reliability remains a major barrier. In South Africa, power outages cost miners up to \$1 million per day. While hybrid systems – such as Syrah Resources' Balama mine in Mozambique – help reduce cost volatility, operational expenditures remain steep at \$430-480 per ton.

On the policy front, only four African countries currently restrict raw mineral exports. Weak enforcement, coupled with widespread artisanal mining – responsible for 12% of the DRC's cobalt output – exposes the sector to ESG risks and pricing instability.

Yet efforts toward inclusion and governance are growing. South Africa's **Metair** is piloting a blockchain-based traceability framework aligned with the EU's **Battery Passport Directive (2027)**, ensuring full transparency from informal PGMs recyclers to European automakers. With **40% of South Africa's platinum recycling** driven by informal collectors, such innovations are critical for ethical, circular economies.

Strategic Pathways: Making the Transition Stick

To cement its role in the global battery economy, Africa's stakeholders must align across four key fronts:

- Regional Integration: Scale initiatives like the Lobito Corridor to harmonize logistics, export policy and infrastructure.
- 2. Green-Powered Mining:
 Leverage renewable energy
 ecosystems in Morocco and
 Tanzania to cut operating costs
 and emissions.
- 3. Technology Transfer:

 Prioritise industrial deals with local content and training requirements—such as the ReElement-Afrivolt MoU for West African gigafactories.

Industrial-Scale Projects	Developer	A Capacity
Morocco's \$6.3B gigafactory	Gotion High-Tech	100 GWh/year
Zambia's Cobalt Refinery	Kobaloni Energy	32 GWh/year
South Africa's Giga-Africa 1	Megamillion Energy	32 GWh/year

4. Digital Compliance Tools: Expand blockchain systems to trace cobalt, PGMs, and other minerals across formal and informal sectors.

Africa's Moment to Lead

Africa's mineral wealth is not merely a resource – it is a strategic lever in the global energy transition. By investing in processing, scaling up gigafactories and building inclusive, traceable supply chains, Africa can transform its role from exporter to manufacturer, from participant to leader.

With global deadlines approaching – the EU's Battery Passport in 2027 and the U.S. Inflation Reduction Act already in effect – the next two years represent a decisive window. If the continent acts boldly, it can rewire its position in the global economy and emerge not just as the **supplier of the future**, but as its architect.

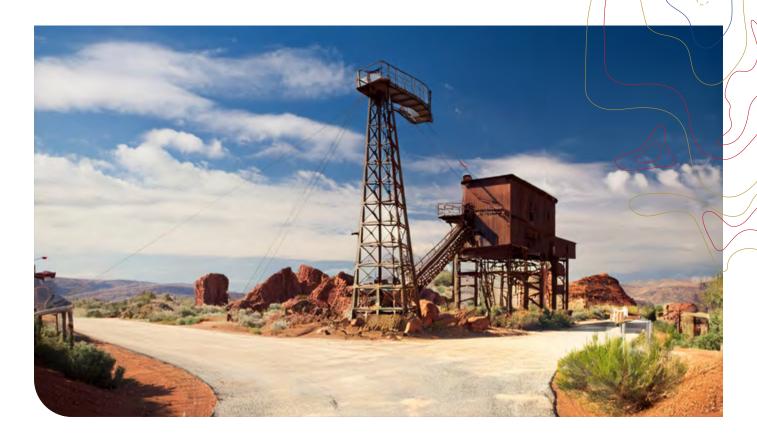








Africa at the Crossroads: Navigating Trump's 2025 Tariff Shift



In April 2025, the second Trump administration introduced a sweeping new tariff policy known as the "Liberation Day" tariffs. This initiative imposed a baseline 10% tariff on all imports to the U.S., with higher reciprocal tariffs targeting approximately 60 countries, including key trade partners like China, Mexico and Canada. These measures, effective from early April 2025, mark a significant shift in U.S. trade policy with broad implications for global mineral flows – and Africa stands at a crossroads.

For African mineral exporters, the impact of these tariffs is complex and multifaceted. On one hand, countries like South Africa, with its abundant platinum group metals, gold and chrome reserves, may benefit from increased demand as U.S. manufacturers seek to circumvent higher tariffs on Chinese imports by turning to alternative suppliers. This could create new opportunities for African mining sectors to deepen their engagement with Western markets.

However, not all African minerals escape unscathed. Exports such as iron ore and diamonds face tariffs as high as 30%, which threaten to undermine their price competitiveness in the U.S. market. This could challenge nations that rely heavily on these commodities for export revenues, prompting concerns over market access and revenue stability.

In response, African governments and mining stakeholders will need to adopt proactive strategies. Diversifying export markets by strengthening ties with China, the European Union and other partners can reduce dependency on the U.S. alone. Furthermore, investing in beneficiation and local value addition can help increase the economic value retained on the continent, making exports more resilient to tariff pressures. Finally, active engagement in trade negotiations and international forums will be essential to mitigate adverse impacts and secure more favorable terms.

As global trade dynamics evolve amid rising protectionism and geopolitical tensions, Africa's mineral sector faces both fresh opportunities and significant challenges. Navigating this shifting landscape will require strategic foresight and collaboration to ensure the continent's minerals remain a vital part of the global supply chain.





Copper's Comeback: Why Everyone's Betting on Africa's **Red Metal**

"Africa's Copperbelt is not just resurging - it's setting the pace for new infrastructure, cleaner production and regional partnerships."

Kiana Van Vuuren

Managing Partner, Director, Mining Lead, Moore Johannesburg

South Africa

The African Copperbelt is experiencing a renaissance that is reshaping global copper supply chains and drawing record investment from both East and West. With copper demand soaring due to electrification and the clean energy transition, Zambia and the Democratic Republic of Congo (DRC) have re-emerged as central players in the race to secure critical minerals, with record production figures, untapped high-grade ore and geopolitical interest catapulting the region into the spotlight.

China's First-Mover Advantage

China secured its foothold in Africa's copper sector long before the current global scramble. In 2007, the DRC signed the landmark Sicomines deal, exchanging mineral rights for infrastructure. Chinese firms acquired a 68% stake in the Sicomines joint venture, backed by China Eximbank financing. Over the years, Chinese SOEs expanded their footprint, acquiring strategic mines and building vertically integrated supply chains.

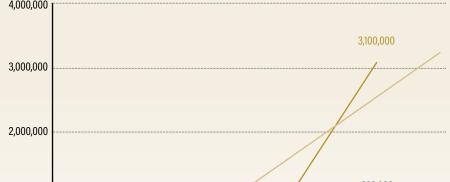
By 2024, over 60% of the DRC's refined copper exports were destined for China. The DRC now supplies more refined copper to China than any other country, and Chinese firms operate or hold stakes in most of the country's largest mining assets. This dominance stems not only from investment volume, but also from long-term offtake agreements that lock in supply.

From Decline to Dominance: A Historical Perspective

DEMOCRATIC REPUBLIC of the CONGO







820,000 700,000 1,000,000 300,000 300,000 30,000

2000s

Annual Copper Production (Metric Tons)

2020s

4,000,000

A Western Response: Competing Visions

The resurgence of Africa's copper industry has triggered a renewed Western push to secure access. The U.S., EU and Japan have launched the Minerals Security Partnership and committed financing to counterbalance Chinese influence. A centerpiece of this strategy is the Lobito Corridor - an Atlanticfacing rail route linking the Copperbelt to Angola's coast.

Originally developed in the early 20th century and revived with Chinese funding in 2015, the Lobito rail line was recently concessioned to a European-led consortium including Trafigura and Vecturis. In 2024, the corridor completed its first commercial copper shipment from Ivanhoe Mines to the U.S., cutting export transit times from 25 to



1960s





8 days. The U.S. and EU have pledged further investment to expand and modernize the corridor, branding it a transparent, competitive alternative to China's Belt and Road.

Battery Supply Chains and Value Addition

Strategic interest in Africa's copper is no longer limited to raw materials. In 2022, the DRC and Zambia signed an MoU with the U.S. to develop a regional battery value chain, building on the DRC's cobalt reserves and Zambia's copper output. The goal is to domesticate more of the value chain – from mineral extraction to battery precursor production.

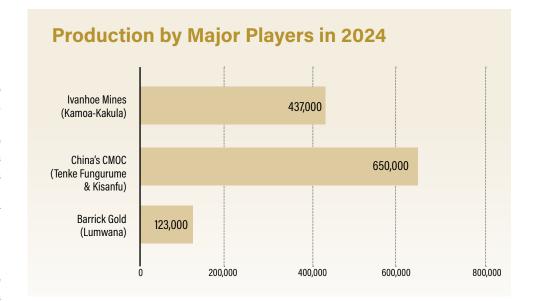
Zambia already hosts several smelters and limited cable manufacturing capacity, while the DRC has begun refining more of its copper domestically. The partnership with the U.S. aims to foster technology transfer, ensure transparent governance, and support infrastructure for a just energy transition.

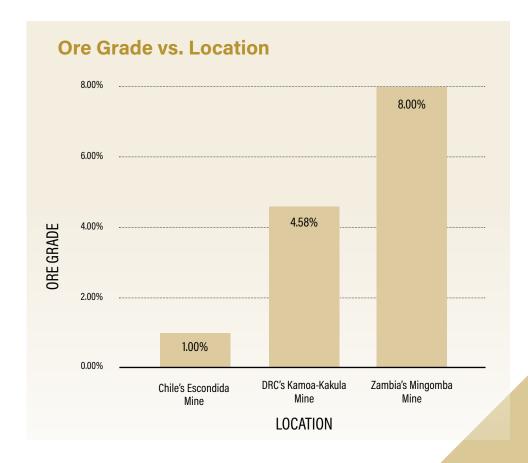
Outlook: Copper's Strategic Future

Copper demand is expected to rise more than 40% by 2040, driven by electric vehicles, grid upgrades and digital infrastructure. Yet supply is tightening. S&P Global projects a 3.7% rise in global copper demand in 2025, while production remains constrained by permitting delays and declining ore grades elsewhere.

Africa's Copperbelt is poised to fill this gap. With high-grade deposits, active mine expansions, and growing international interest, Zambia and the DRC are redefining their role in the global copper ecosystem. The challenge now lies in managing resource wealth effectively – ensuring that revenues support long-term development, infrastructure and industrialisation.

Geological Strength and Strategic Assets











The Logistics Gap: Africa Has the Minerals, **But Can It Move Them?**

Africa's mineral wealth is vast, but moving resources to market remains a critical bottleneck. Fragmented, underfunded and maintained transport corridors add time and cost to mineral offtake, undermining competitiveness. As global buyers place growing emphasis on reliability and ESG standards, logistics can make or break mining investment decisions. To unlock the full value of its resources, Africa must build key mineral corridors that are not only efficient but also secure, climate-resilient, and governed transparently. For investors, these routes are more than infrastructure - they're the arteries of Africa's mining future.

Lobito Corridor

Angola-DRC-Zambia







Type: Rehabilitation of existing rail and port infrastructure through a publicprivate partnership.

Status: Active and expanding

Significance: Backed by the U.S., EU, and AfDB, this corridor could reduce copper transport times to the Atlantic port by over 60% and is positioned as a model "green corridor."

Central Corridor

Tanzania-Burundi-Rwanda-DRC









Type: A multimodal route combining road, rail, and lake transport infrastructure.

Status: Operational, under modernization

Significance: Key export channel for the DRC via the port of Dar es Salaam, though plagued by congestion and inefficiencies that hinder reliability.

North-South Corridor

South Africa-Zimbabwe-Zambia-DRC









Type: Integrated road and rail corridor supporting north-south trade flows.

Status: Fully operational but in need of upgrades

Significance: This is the backbone of Southern and Central Africa's mining exports, especially for copper, platinum, and gold, but aging rail systems and customs delays are major barriers.

Beira and Nacala Corridors

Mozambique-Zambia/Malawi







Type: Export routes anchored by Mozambican ports, with supporting road and rail links inland.

Status: Active with ongoing upgrades

Significance: These corridors offer eastern access to global markets for landlocked neighbors and are drawing renewed interest from development partners, particularly Japan.

Trans-Sahelian Corridor

Senegal-Mali-Burkina Faso-Niger-Chad











Type: Overland road corridor crossing the Sahel region.

Status: Partially paved and underfunded

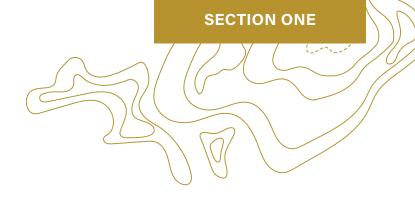
Significance: A potentially strategic route for West Africa's gold and phosphate exports, though insecurity and poor infrastructure remain critical challenges.







Private Equity's Return to African Mining





"Private capital is returning to African mining – but with sharper focus, more structure and a new appetite for strategic value creation."

Candice Czeremuszkin

Managing Partner, Moore in the Cayman Islands, Moore Global, Private Equity Sector Lead



Private equity (PE) is making a notable return to African mining, signalling a shift not only in investor appetite, but also in the **alignment of capital with sustainable and responsible business practices.** As ESG-aligned projects become a key priority, Africa's mineral-rich landscape offers both a challenge and an opportunity for private capital seeking high-impact, future-oriented sectors.

ESG as a Core Investment Imperative

ESG is no longer an optional consideration – it is a central pillar in the decision-making processes of modern private equity firms. According to EY's 2024 Global Mining and

Metals report, **ESG ranks as the number one business risk in the industry**, surpassing even traditional concerns such as license to operate, supply chain disruption and commodity price volatility (EY, 2024). Investors increasingly view strong ESG performance not only as a mechanism for risk mitigation but also as a route to value creation, enhanced stakeholder trust, and long-term viability.

African governments and mining ministries have taken note. Countries like Ghana, South Africa and Namibia have developed and implemented ESG-related regulatory frameworks that seek to balance mining activities with environmental protection, fair labour practices and community engagement. These efforts are supported by global development finance institutions (DFIs), which often require ESG compliance as a condition for funding. For example, Namibia's Minerals (Prospecting and Mining) Act is being updated to integrate clearer ESG requirements that align with both global standards and national development goals (KPMG, 2024).

Beyond regulatory pressure, ESG principles also support operational improvements. Mining companies with robust ESG programs are increasingly able to attract lower-cost financing, retain skilled workers, and secure long-term access to resources and communities.

Sectors Attracting Private Equity Interest

The focus of private equity in African mining has shifted toward minerals critical to the green economy. Commodities such as lithium, cobalt, nickel, manganese, graphite and rare earth elements are in high demand for the production of electric vehicle batteries, wind turbines and solar panels. These "green minerals" are seen

as future-proof investments, providing the dual benefits of growth potential and ESG alignment.

PE firms like Equitane – formerly the Africa Transformation and Industrialization Fund – have taken significant positions in projects aligned with these themes. Equitane's investments in the Belinga iron ore project in Gabon and the Zanaga iron ore project in the Republic of Congo are notable not only for their scale, but for their commitment to sustainable development models. These investments emphasise local beneficiation, job creation, and carbon-conscious development strategies.

Further, the development of off-grid renewable energy projects to power mining operations is becoming increasingly common. Solar hybrid systems, hydropower integration and battery storage installations are being incorporated into mine designs to reduce reliance on diesel generators and lower Scope 1 and 2 emissions. According to Alchemy Law Africa (2024), sustainability-linked financing is gaining traction in the sector, with performance-based metrics tied to ESG targets such as water usage efficiency, tailings management and carbon emission intensity.

Investment Structures and Emerging Trends

Traditional PE structures are evolving to meet the demands of ESG-compliant mining. Impact funds, green bonds and blended finance vehicles are being used to structure investments in ways that support both commercial and developmental goals. These instruments allow PE firms to tap into concessional capital and development financing while aligning with ESG mandates.

According to Private Equity International









(2024), while interest in mining is growing, it remains concentrated in specialized funds with deep sectoral expertise. Generalist funds may still be reluctant to enter the sector due to historical volatility, environmental risks and political uncertainty. However, specialist managers are leveraging their technical acumen to assess project feasibility, manage risks and ensure that ESG metrics are not just box-ticking exercises, but embedded into core business models.

Challenges on the Path Forward

Despite the momentum, challenges remain. ESG reporting across Africa's mining jurisdictions is often fragmented and lacks standardization. This presents a barrier for global investors seeking comparable, auditable metrics across portfolios. The threat of greenwashing also looms large, prompting calls for greater transparency and third-party verification of ESG performance.

Moreover, many mining projects operate in regions with weak infrastructure, limited governance capacity, or social unrest – factors that can complicate both ESG compliance and investment security. PE firms must therefore partner closely with local stakeholders, communities and governments to navigate these complexities and build trust.

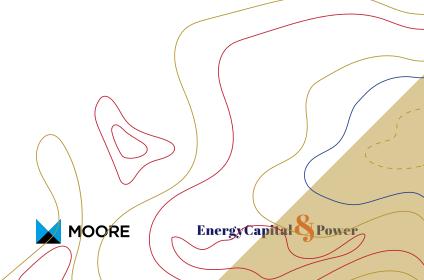
Nevertheless, these obstacles also present opportunities for innovation. ESG-focused investment offers a unique chance to reshape mining operations in Africa to be more inclusive, sustainable, and efficient. Whether through community development agreements, renewable-powered mining, or responsible sourcing certifications, mining projects that integrate ESG can position themselves as leaders in the global transition economy.

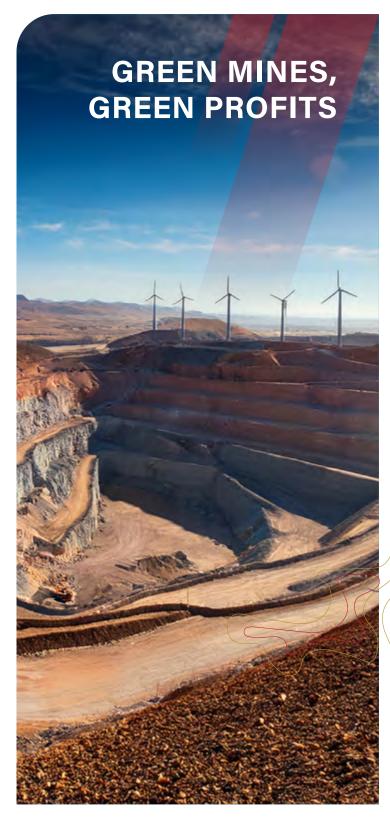
The Road Ahead

Private equity's return to African mining is more than a capital deployment story – it reflects a **strategic realignment of values, risk perceptions, and long-term investment horizons.** By targeting ESG-aligned projects, PE firms are positioning themselves at the forefront of the energy transition and sustainable development.

African mining stands to benefit significantly if this capital is deployed wisely. With appropriate governance, transparency and alignment of stakeholder interests, ESG-driven PE investment could become a cornerstone of the continent's economic and environmental resilience. In this new era, returns will no longer be measured solely by financial performance, but by the legacy mining companies leave on the communities, ecosystems and economies they touch.







Africa's mining sector is undergoing a green transformation - one that's not only about cleaner operations, but also unlocking new value streams. From ESG-driven investment to renewablepowered mine sites and the monetization of carbon credits, mining companies are rethinking what sustainability means for profit and what it means to mine responsibly on the continent.







Africa's Green Mining Future: How ESG Is Powering a Sustainable Resource Revolution



4 Pillars of Africa's Green Minerals Strategy

ACCELERATING MINERAL DEVELOPMENT BUILDING HUMAN AND TECHNOLOGICAL CAPACITY



ENSURING RESPONSIBLE MINERAL STEWARDSHIP

6 Competitive Advantages of African Mining

- 1 RES
 - RESOURCE WEALTH
- RENEWABLE ENERGY POTENTIAL
- 5 YOUNG WORKFORCE

- 2 MINING-INPUTS MARKET
- 4 ELECTRIFICATION DEMAND
- 6 INDUSTRIALIZATION OPPORTUNITY

"Strategic minerals demand more than investment – they require clarity, speed and the right long-term partnerships to succeed."

David Tomasi

Sustainability Lead, Moore Infinity South Africa

ESG as a Strategic Value Driver



SUKARI GOLD MINE, EGYPT



36 MW solar + 7.5 MW battery \$20 million saved annually 22 million liters diesel offset



PAN AFRICAN RESOURCES SOLAR PLANT,

SOUTH AFRICA

30% of power from solar \$1.7 million annual savings

7% of global greenhouse-gas emissions come from the mining sector.



Africa stands at a pivotal moment in global mineral development. Home to 30% of the world's mineral reserves and 19% of metals vital for clean-energy technologies, the continent is uniquely positioned to lead sustainable mining practices. Environmental, Social, and Governance (ESG) principles have evolved from mere compliance requirements into powerful levers for value creation and equitable development – just as global demand for green minerals accelerates on the path to net-zero.

In addition to emissions reduction and cost savings, ESG frameworks help rebalance power among governments, companies and communities by ensuring local employment, infrastructure and skills transfer. As African regulators tighten ESG-reporting requirements, governments gain leverage to secure fairer partnerships – and greater share of the value chain. During the build-out of JUWI's solar plant for PAN African Resources in South Africa, for instance, the project created 100 local jobs and cut 26,000 tons of CO2-equivalent emissions per year – demonstrating how

well-designed ESG initiatives can deliver social, environmental and economic benefits in parallel.

In short, Africa's true mineral wealth lies not just in what's extracted, but in how resources are developed. By embedding transparent, comprehensive ESG practices at every stage, the continent can transform its mining sector from a legacy of exploitation into a catalyst for inclusive, sustainable prosperity – fueling global energy transitions while uplifting communities and safeguarding environments.







SECTION TWO

What Africa Can Learn from Australia's Critical Mineral Strategy



"Africa's mines are no longer mere extractive sites – they are fast becoming hubs of carbon innovation. If verified rigorously and governed equitably, carbon credits could add \$9 billion per year."

Danie Dorfling

Sustainability Lead, Moore Infinity South Africa



Renewable energy technologies rely heavily on a suite of minerals, many of which are labelled "critical", like lithium, cobalt and rare earths. Others, such as copper, iron ore and silica, while not always designated as critical, are just as essential. Without a secure and sustainable supply of these materials, the global energy transition cannot occur.

Currently, the mining sector alone, driven by market forces and private investment, cannot meet the rapidly growing demand for these minerals. Despite long-term demand forecasts, commodity prices and investment levels fluctuate, creating barriers to consistent project development. This mismatch poses a significant risk to the global push for net zero.

Governments are starting to intervene, recognizing that market mechanisms alone won't secure the critical mineral supply chains needed. Australia's recent \$1.2 billion commitment to create a strategic reserve of critical minerals is one such initiative, echoing similar efforts in the US and EU. However, these measures must be carefully designed to avoid unintended economic distortions and should be complemented by investments in downstream processing and fast-tracked project approvals.

The road to renewable energy must begin with mining. To meet climate goals, we need more critical mineral projects brought online faster, in ways that align with both environmental standards and long-term market viability. Government policy must support – not replace – market investment, reduce project timeframes and enable a mining sector capable of powering the clean energy transition.

A key component to be able to transition to a clean energy future is green steel. Green steel is produced using iron ore and hydrogen from renewable energy sources rather than coal. It is a critical goal in decarbonizing steel production. It represents a major opportunity for Australia, which holds strong reserves of iron ore and a growing capacity in renewable energy.

This transition to green steel is not a straightforward one. It demands large-scale access to reliable, affordable renewable energy, advanced hydrogen production and storage technology, and significant investment in new infrastructure. The capital intensity and long lead times of these projects, along with uncertain market demand for green steel, create material challenges.

Australia is at the forefront of this transition. It has an abundance of all the key and critical minerals required, a developed mining sector and well maintained, fit for purpose infrastructure to support ongoing and future requirements. The steps it takes from here are critical to ensure it maintains this unique positioning in the global clean energy transition economy.

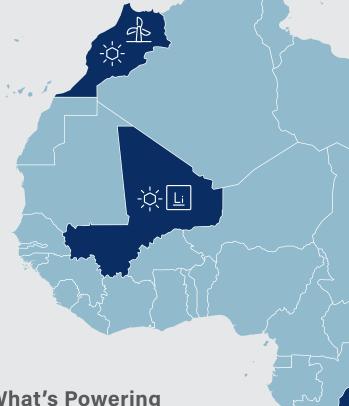
Policy support, including coordinated government investment, streamlined approvals and partnerships with industry, will be essential. Equally important is a broader recognition that decarbonizing the steel supply chain is not just about end products. It begins with mining and energy systems that must adapt together.





Inside Africa's Renewable Mining Projects

Across Africa, mining companies are adopting solar, wind and hydro power to cut costs, reduce carbon footprints and meet investor ESG mandates. From remote off-grid solar farms to full hybrid energy systems, these renewable-powered mines are reshaping what sustainable mining looks like. The projects below represent a growing trend across the continent – where green energy isn't just an add-on, but a strategic advantage.



What's Powering the Shift?

Investor Pressure:

Project financiers are increasingly tying funding to clear, measurable emissions reductions, pushing mines to integrate green energy from the outset.

Operational Savings:

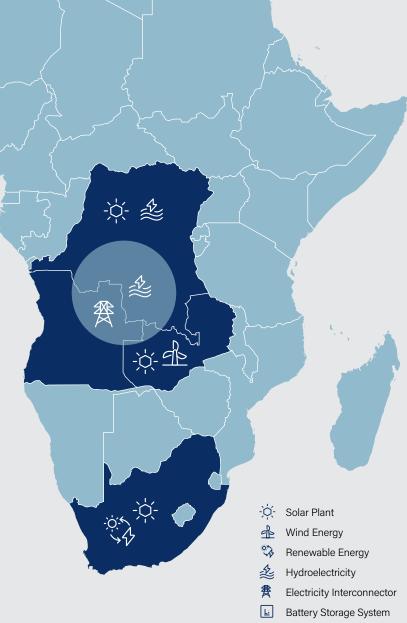
In remote or off-grid areas, solar and wind energy often offer a more stable and cost-effective alternative to diesel or heavy fuel oil.

Government Support:

Several African governments are scaling up national renewable energy programs, creating better access to green power for large-scale industrial users.

Carbon Credit Potential:

By switching to renewables, some mines may also generate carbon offsets, adding a new potential revenue stream for compliant operations.







53 MW Fekola Solar Plant Mali

B2Gold's Fekola gold mine operates one of Africa's largest off-grid hybrid energy systems. A 52 MW solar plant, combined with a battery storage system, is helping the mine cut heavy fuel oil consumption



Global commodities trader Trafigura has partnered with ProMarks and the Angolan government to develop a 2 GW high-voltage electricity interconnector that will transport renewable energy primarily from hydropower projects in northern Angola - to meet the growing electricity demand from mining operations in Zambia and the DRC.

400 MW Renewable Mines and Smelters

South Africa

Tronox has secured over 400 MW of renewable energy for its mining and smelting operations in South Africa. Once commissioned from 2027, the projects will provide 70% of the company's energy needs, reducing its carbon footprint by 25%.

200 MW Hydropower and Floating Solar Project

Chinese mining firm CMOC is accelerated development of the 200 MW Nzilo II hydropower and floating solar project in the DRC, which will provide the company with base load and peak power, supporting its target to produce one million tons of copper annually by 2028.

430 MW Renewable Energy **Project**

Zambia

Canadian mining firm First Quantum Minerals is investing \$500 million in a 430 MW renewable energy project to power its Kansanshi and Sentinel mines in Zambia. The project includes a 230 MW solar PV plant and a 200 MW wind farm, set to reduce the company's carbon footprint by 30%.

Green Phosphate Operations Morocco

OCP - responsible for the world's largest phosphate reserves - is progressively powering its phosphate mining and processing activities with wind and solar energy. The company aims to cover 100% of its electricity needs from renewable sources by 2027.

Kamoa-Kakula Hydroelectric Power

DRC

Kamoa-Kakula, one of the world's highest-grade copper mines, is powered by hydroelectricity from the Mwadingusha and Nzilo plants. Recent upgrades have positioned the mine as a regional benchmark for low-emissions copper production, with an additional 50 MW of hydroelectric power expected by Q4 2025.

180 MW Solar Farm

South Africa

Northam Platinum Group Metals has signed a PPA for a 180 MW solar farm to power its Zondereinde mine in South Africa. The solar plant will generate 220 GWh annually, meeting 15% of the mine's energy needs.

















The Carbon Credit Rush: Are African Mines Unlocking a Hidden Asset?



Africa's mining sector - long scrutinized for its environmental impact - is fast becoming a critical player in the global climate economy. As carbon credit markets surge toward a projected value of \$1 trillion by 2038, African mines are well-positioned to monetize emission reductions through methane capture, renewable energy deployment and ecosystem restoration. If leveraged effectively, the continent's mining industry could generate up to \$6 billion in annual revenue from carbon credits alone. Far from being a niche opportunity, carbon markets are beginning to reshape how mining projects are financed, evaluated and developed across Africa's mineral-rich landscape.

Carbon credits are rapidly emerging as a new pillar of mine economics, transforming emissions from a liability into a revenue-generating asset. Methane – a greenhouse gas with **84 times the warming potential of CO2 over a 20-year period**

 has traditionally posed safety and environmental challenges for underground mines. But when captured and destroyed, methane can yield tradable credits valued between \$10 and \$50 per ton of CO₂equivalent (CO₂e).

Beyond environmental benefits, carbon credits are playing a growing role in enhancing project bankability. Mines with verified credit-generating capacity are securing more favorable debt terms, with interest rates reduced by as much as 10-15% by development finance institutions. On the equity side, ESG-focused investment firms such as Lion's Head Global Partners are actively prioritizing projects with carbon-neutral roadmaps and credible transition plans. Several African governments, including South Africa, Gabon and Kenya, now allow carbon credits to offset up to 10% of corporate tax liabilities, further incentivizing participation.

Africa is also emerging as a regional-hotspot for carbon credit generation, with opportunities concentrated around methane abatement, renewable energy integration and biodiversity restoration. In South Africa's Waterberg coal basin, methane capture technologies could yield up to 5 million credits annually, worth \$250 million at current market prices. In the

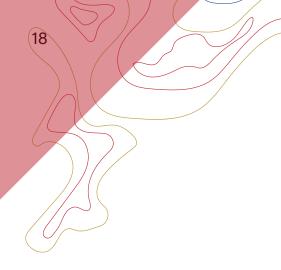
Carbon Credit Impact at Mine Level

Mine	Project	Impact	്റ്റ് Credit (ട്ര) Revenue
Beatrix Mine, SA	Methane flaring	396,000 tons CO ₂ eliminated	9,600 credits
Balama, MZ	11.25 MW solar hybrid plant	80% diesel reduction	50,000 RECs/year
Bou Azzer, MA	60 MW solar plant	RECs sold to Renault	
Mahenge, TZ	20% site reforestation	150,000 credits/year	\$30/ton
COMILOG, GA	400,000 ha protected	REDD+ Program	\$35M since 2022









DRC, artisanal cobalt mining operations are responsible for an estimated **12% of national methane emissions**, prompting the government to mandate industrial capture systems by 2027.

Yet despite the opportunity, challenges remain. Only 12% of carbon projects in Africa currently meet the integrity standards set by the Integrity Council for the Voluntary Carbon Market. The DRC's TGB reforestation project, for example, came under scrutiny after audits revealed discrepancies between reported and actual tree survival rates. Price volatility also casts a shadow over market stability: credits eligible under CORSIA, the global aviation offset scheme, have plummeted from \$8.50 to \$2.30 per ton in just two years. Nature-based credits saw a similar dip, falling from \$45 to \$28 per ton between 2023 and 2024. In response, some mines are locking in value through fixed-price forward contracts -Beatrix, for example, secured \$25 per ton on 60% of its projected credits.

Community equity remains a pressing concern. While frameworks like the African Carbon Markets Initiative are designed to ensure fair distribution, legacy practices persist. Uganda's ECOTRUST, for instance, was accused of compensating coffee farmers just \$0.50 per ton for carbon sequestration while selling those

credits for **\$15** – an imbalance that risks undermining trust in carbon markets altogether.

To navigate these opportunities and pitfalls, mining companies must adopt a forward-looking strategy. Blending carbon finance with green bonds, as demonstrated by Nigeria's Segilola gold mine (which raised \$75 million), can unlock more flexible capital. Blockchain technologies, such as those used by South Africa's Metair, offer traceability for credits - especially important for European battery passport compliance. Most importantly, community co-investment should move from aspiration to policy: Zambia's Kansanshi Mine, for instance, allocates 20% of its carbon revenues to a local trust that funds solar microgrids, helping to ensure that carbon markets deliver shared, enduring value.

Africa's mines are no longer mere extractive sites – they are fast becoming hubs of carbon innovation. If verified rigorously and governed equitably, carbon credits could add **\$9 billion per year** to the continent's GDP while significantly cutting emissions. The question, then, is not whether African mines have a role in the global carbon economy – it's whether they will simply participate or take the lead in shaping its rules and reaping its rewards.

African Carbon Market Initiative

Launched at COP27

300M credits/year by 2030

Mining to contribute 45%

35% of revenue to go to Local communities

Harmonizing platforms – such as Kenya's Carbon Credit Trading Platform and Zimbabwe's Victoria Falls Exchange





Energy Capital Power

From Coal to Clean: South Africa's Energy Transition and Its Mining Implications



by 2030 as plants like Komati are repurposed as solar-hybrid hubs. At the same time, thermal **coal exports declined by 12%** in 2023, driven largely by the European Union's carbon border adjustment and shifting procurement patterns in Asia.

On the other hand, the transition offers a unique opportunity for reinvention. South Africa holds 80% of the world's platinum group metals – key inputs for hydrogen fuel cells – and 85% of global manganese reserves, vital for battery production. In a move that highlights this pivot, Anglo American has begun extracting 5,000 tons of vanadium per year from slag at its Rhovan Mine, feeding the global demand for flow battery technologies. If supported by strategic policy and investment, domestic mineral refining could reduce battery manufacturing costs by up to 30% while generating thousands of skilled

jobs in processing and value addition.

But while the economic rationale for transition is clear, its execution remains fraught. The Just Energy Transition Implementation Plan, launched in 2023, pledged ZAR1.5 trillion in investments across renewables, community projects, and workforce reskilling. Yet **less than 15%** of the **\$11.6 billion pledged** by international partners such as the U.S. and EU has been disbursed. Structural challenges persist. In Mpumalanga, **only 12% of coal workers** have skills deemed transferable to the renewable energy sector.

The case of Komati Power Station serves as both a warning and a glimpse of potential. Decommissioned in 2022 as a symbolic first step in the transition, the project initially left 600 workers without reskilling programs or economic alternatives. The

•

South Africa's energy transition, from a coal-dominated power system to a diversified renewable energy mix, is among the most complex socio-economic shifts in its post-apartheid history. With more than **85% of electricity** historically sourced from coal and over **91,000 coal mining jobs** concentrated in Mpumalanga, the pivot toward cleaner energy sources carries enormous consequences for the mining industry, regional economies and the country's climate ambitions.

The mining sector sits squarely in the middle of this tension. On one hand, coal's contraction is already underway. Eskom's coal procurement is expected to fall by **40%**

Mpumalanga: A Region at a Crossroads



72% of South Africa's coal produced in Mpumalanga



24 coal mines



12 coal-fired power stations



2,200 premature deaths per year due to Highveld air pollution



13% of land in Mpumalanga under mining or prospecting rights



15 coal mines closing by 2030



5 coal power stations shutting down



ZAR3.2 billion in annual wages at risk



21 municipal budgets vulnerable







proposed 150 MW solar plant remains delayed until at least 2025. Still, there are signs of recovery. Portions of the land are now being repurposed for agrivoltaic systems that combine food and energy production, and a hybrid training center is being developed in partnership with Siemens to provide green skills to a new generation of workers.

To avoid further dislocation, South Africa must pursue targeted strategies that bridge policy ambition with practical outcomes. One priority is the repurposing of existing coal infrastructure. Seriti's 155 MW Ummbila Emoyeni Wind Farm, built on a former coal corridor, demonstrates how existing transmission lines can be re-used to avoid costly grid upgrades. Simultaneously, tailings and slag heaps – once environmental liabilities – are being mined for critical minerals such as vanadium, offering a second life for ageing assets.

Fiscal policy is also playing a critical role.

Sections 12B and 12BA of the Income Tax Act allow accelerated depreciation and enhanced deductions for renewable energy projects. If properly aligned, these instruments can accelerate the bankability of new projects while encouraging broader private-sector participation.

In the realm of human capital, the proposed Mpumalanga Green Skills Zone could offer a scalable model for inclusive development. By linking TVET colleges to renewable energy employers and applying a modest **2% levy on mining profits,** the program could help close the gap between training and deployment. Meanwhile, firms such as Exxaro are experimenting with blockchain certification to track the progress of retrained workers – an innovation that could enhance transparency and satisfy EU compliance requirements for ethical supply chains.

Finally, the transition offers a powerful opportunity to revitalize agriculture in former mining zones. Mpumalanga's Highveld, home to nearly half of South Africa's arable land, is increasingly being eyed for bioenergy and high-value export crops. Sugarcane-to-ethanol conversion projects are already under discussion, while the macadamia nut industry – growing at 18% annually – presents a viable export pivot for communities previously reliant on coal royalties.

South Africa's transition is not a retreat from mining; it is a redefinition. The industry must now do two things at once: manage the orderly decline of coal and drive the growth of critical minerals and green infrastructure. The draft IRP 2023 has exposed a stark reality – without at least \$6.8 billion annually in blended finance and 5 GW in new grid capacity, load-shedding will remain entrenched and mine closures will continue to outpace opportunity creation. To succeed, this transition must treat coal communities not as casualties of decarbonization, but as collaborators.

Key Shifts in South Africa's Transition Policy

IRP 2019

RETIRE 11 GW OF COAL BY 2030

BUILD 26 GW OF RENEWABLES (SOLAR & WIND) BY 2030

RENEWABLES FAVORED DUE TO FALLING COSTS

SUPPORT GRADUAL TRANSITION FROM COAL

OVER
3.4
MILLION
HOUSEHOLDS
LACK
CONSISTENT
ACCESS
AVOID LOADSHEDDING
AND GRID
INSTABILITY

IRP 2023 (DRAFT)

PUSH MAJOR COAL RETIREMENTS OUT TO 2040

RENEWABLES SCALED BACK -13.8 GW OF SOLAR & WIND BY 2030

LOAD-SHEDDING LIKELY TO RE-MAIN THROUGH 2030

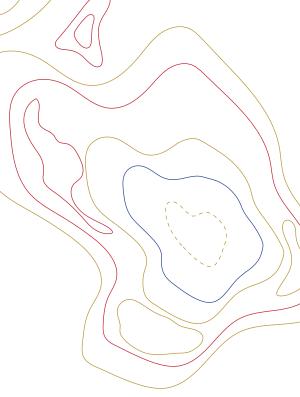








As Africa's mining sector enters a new era, evolving regulations, geopolitical landscapes and investment dynamics are reshaping the continent's potential. From growing discussions on resource sovereignty to the challenges faced by junior mining companies, the outlook for Africa's mining industry is anything but static.







SECTION THREE

Africa's New Regulatory Era: Building Investment-Ready Environments

As global interest in Africa's mineral wealth intensifies, the regulatory environments shaping mining activity are undergoing a parallel transformation. Across the continent, governments are not only opening their doors to foreign investment, but actively working to de-risk it. From licensing reforms to transparency initiatives and beneficiation mandates, a new regulatory era is emerging, focused on making Africa's mining sector more competitive, accountable and investment-ready.

Fast-Tracking Licensing

Historically, lengthy and opaque licensing processes have deterred investment across many African mining jurisdictions. Today, however, several countries are actively working to streamline procedures and accelerate project development.

In Zambia, President Hakainde Hichilema's administration has made regulatory clarity a cornerstone of its ambition to produce 3 million metric tons of copper annually by 2032. Supporting this goal, the Zambia Integrated Mining Information System – launched in February 2025 – aims to enhance efficiency and transparency in the licensing process. In 2024, the country recorded a 79% year-on-year increase in mining licenses granted.

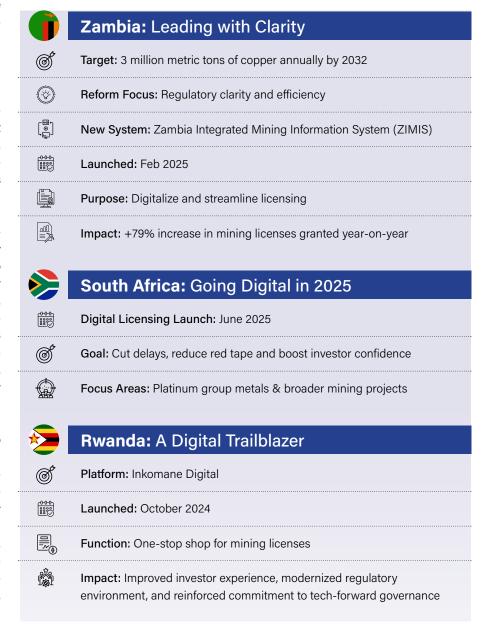
Meanwhile, South Africa is preparing to launch its first digital mining licensing system by June 2025. The initiative is designed to improve transparency and reduce processing times, making it easier to initiate new mining projects, including those focused on platinum group metals. Rwanda has also embraced digital transformation with the launch of the Inkomane Digital platform in October 2024,

streamlining licensing procedures and reinforcing the country's commitment to a modern, investor-friendly mining environment.

Transparency as a Risk Mitigator

African governments are also expand-

ing transparency and governance measures to build investor confidence to attract them to the market. The Extractive Industries Transparency Initiative (EITI), which now includes more than a dozen African countries, continues to serve as a standard benchmark for reporting on revenues, as well as contracts and state participation.







Senegal and Mauritania have expanded EITI-related disclosures to include project-specific data and, in Senegal's case, sub-national payments – enhancing investor ability to assess fiscal risk and social license to operate. In Sierra Leone, where diamonds, iron ore and mineral sands account for over 80% of exports but just 15% of total government revenues, authorities are undertaking a review of the Mines and Minerals Act and individual mining licenses as part of a broader effort to improve sector transparency and renegotiate mining contracts.

Beneficiation Mandates: Opportunity or Obstacle?

A growing number of African governments are introducing policies that require or incentivize local processing and value addition before minerals are exported – a strategy aimed at capturing more economic benefit from mineral wealth.

Zimbabwe has banned the export of raw lithium, requiring miners to process the metal domestically before shipment. Namibia has followed suit, pausing new lithium and rare earth export permits pending the establishment of local beneficiation frameworks. The DRC has also imposed similar rules on cobalt and copper concentrate exports, though implementation remains inconsistent.

For investors, these policies present both opportunity and complexity. On one hand, they create openings for investment in downstream infrastructure – refineries, processing plants, and even battery precursor production. On the other hand, unclear timelines, insufficient energy infrastructure and lack of skilled labor can delay or derail project economics.

The key for governments will be balancing national development goals with investor realities – offering incentives, fis-

cal support and phased implementation strategies that make local value addition both attractive and viable.

Striking the Right Balance

The new wave of regulatory reform across African mining jurisdictions reflects a clear shift in mindset: from passive resource extraction to active sector stewardship. By cutting red tape, improving transparency and shaping policies around long-term value creation, African governments are beginning to lay the groundwork for a more resilient and competitive mining investment environment.

Still, reforms must be consistent, consultative and backed by institutional capacity to be effective. As the global race for critical minerals heats up, countries that align investor interests with national development priorities – while maintaining regulatory stability – will be the ones that



Zimbabwe



Export Ban on raw lithium



Mandatory local processing before export



Goal: Build a domestic lithium battery supply chain



Namibia



Pause on new permits for lithium & rare earth exports



Pending: National beneficiation framework



Goal: Attract local processing and tech investment



Democratic Republic of Congo (DRC)



Restrictions on exports of cobalt and copper concentrates



Challenges: Inconsistent enforcement



Goal: Move up the battery materials value chain







Sovereign Risk in Flux: Nationalization Talk Is Back But Is It Real?

After years of relative policy stability across key mining jurisdictions in Africa, a new wave of government intervention is drawing investor scrutiny. From Zimbabwe's tighter grip on lithium exports to Mali's increased assertion of resource sovereignty, concerns over sovereign risk are resurfacing in boardroom discussions. But does this signal a new era of resource nationalism, or merely a strategic recalibration?

In truth, the signals are mixed. While political headlines often amplify threats of expropriation or state takeovers, the underlying trend in most African mining markets is not wholesale nationalization, but rather a push for greater local value capture through beneficiation mandates, revised fiscal terms and state equity participation. For investors, that means the challenge is less about losing control, and more about navigating a more complex, more assertive policy environment.

What's Driving the Shift?

Several dynamics are contributing to the current flux. First is the global race for strategic minerals, particularly lithium, cobalt and rare earths, which have become geopolitical assets in their own right. Second is the post-COVID fiscal pressure many African governments face, which is driving a harder stance on revenue generation from extractive industries. Third is the growing demand from citizens, communities and civil society for mining to deliver visible, long-term development benefits beyond taxes – such as jobs, infrastructure and social programs.

In response, African governments are increasingly introducing local processing requirements, renegotiating tax holidays, and in some cases, asserting a stronger state-

owned presence. But while these policies signal greater state assertiveness, they don't necessarily reflect a wholesale rejection of private capital.

Markets to Watch: DRC, Zimbabwe and Mali

In the DRC, the government has doubled down on its Gécamines joint venture strategy, aiming to increase state participation in copper and cobalt projects. At the same time, it has called for the review of existing contracts and expressed concerns about exports of unprocessed minerals. However, rather than threatening existing deals, these actions are part of a broader effort to increase domestic refining and enforce

compliance with the country's mining code.

Zimbabwe has taken an even more aggressive approach, banning the export of raw lithium and insisting on local processing. Its creation of state-run entities to oversee selected mineral value chains has sparked concern among some operators — yet major Chinese investors have continued to commit capital, suggesting the environment remains navigable for those aligned with policy goals.

In Mali, revisions to the 2023 mining code grant the state up to a 35% stake in mining projects, up from 20%, and increase royalty taxes from 6% to 10.5%. A new decree also mandates that foreign subcontractors



JV Push: Expanding state role through Gécamines joint ventures

Contract Reviews: Not rollbacks, but efforts to enforce mining code compliance

Refining Priority: Encouraging domestic processing over raw mineral exports



Focus: Lithium & Strategic Minerals

Export Ban: No raw lithium exports allowed

Local processing required before shipment

State Entities: Overseeing mineral value chains

China Stays Invested: Despite policy controls, major investors remain active





What Investors Need to Know

Beneficiation is Non-Negotiable



Local Processing Required: Smelting, refining, manufacturing



Investor Action: Factor downstream infrastructure or partners into project plans

Rising State Equity Participation



More State Ownership: Joint ventures, free-carried interest



Deal Impact: New dynamics in structuring and relationship-building

Contract Stability Remains



Existing Agreements Protected: Arbitration, treaties, fiscal stabilizations



Investor Security: Legal frameworks largely intact despite rhetoric

Community Expectations Evolving



Local Content & Social Initiatives: Core to license to operate



Risk: Community dissatisfaction threatens project continuity



Investor Response: Proactive engagement & inclusive strategies

Savvy Investors Are Adapting



ESG Front-Loading: Environmental, social, and governance commitments early



Flexible Fiscal Models & Exit Clauses for regime changes



Political Risk Tools: Multilateral guarantees & insurance standard



Role of Development Finance Institutions: Buffer political risk & attract lenders

providing services to mining companies must have 35% Malian ownership. While these changes are expected to enhance local company and workforce participation throughout Mali's mining value chain, some provisions still require further clarification or implementation.

What Investors Need to **Know**

Across key markets, several consistent themes are emerging. First, beneficiation is increasingly non-negotiable. Governments are pushing mining companies to contribute more directly to domestic industrial development through in-country smelting, refining or manufacturing. As a result, investors need to factor potential downstream infrastructure into their project budgets or identify partners who can support these efforts.

At the same time, equity participation by

the state is on the rise. Whether through free-carried interest models or joint ventures with national mining companies, many governments are asserting a stronger financial stake in projects. This shift doesn't necessarily reduce profitability, but it does introduce new dynamics in deal structuring and underscores the importance of relationship-building at both national and local levels.

Despite the tougher rhetoric, contract stability remains relatively strong. Most African governments recognize the importance of maintaining investor confidence and are unlikely to upend existing agreements without due process. Tools like bilateral investment treaties, arbitration clauses and fiscal stabilization mechanisms continue to play a vital role in protecting investor interests.

Finally, community expectations are evolving rapidly. Local content obligations and social development initiatives have become integral to license to operate, not just regulatory hurdles. Increasingly, community dissatisfaction - rather than policy shifts - poses the most immediate risk to project continuity, making proactive engagement and inclusive development strategies essential.

As a result, savvy investors are increasingly front-loading ESG commitments, building flexibility into fiscal models and structuring agreements with exit clauses or arbitration pathways in case of regime change. Multilateral guarantees and political risk insurance - once niche tools - are now standard considerations. Development finance institutions are also playing a larger role in early-stage funding, particularly where projects align with local beneficiation, climate and infrastructure objectives. Their presence often serves as a political risk buffer and provides added comfort to commercial lenders.





The Junior Crunch: Can Early-Stage Projects Survive the Capital Drought?



Capital Flows: A Dry Spell for Juniors

The global mining industry has witnessed a significant shift in investment patterns, with capital increasingly flowing toward established operations and away from high-risk early-stage projects. In Africa, this trend is particularly pronounced. Investors are exhibiting caution due to geopolitical uncertainties, regulatory challenges and the inherent risks associated with exploration activities. Consequently, many junior miners are finding it difficult to attract the necessary funding to initiate or continue exploration programs.

According to industry reports, private equity and venture capital firms are becoming more selective, favoring projects with clear paths to production and established resource estimates. This risk-averse approach has left many juniors in a precarious position, struggling to maintain operations and retain talent.

Junior-Major Joint Ventures: A Strategic Lifeline

In response to the capital scarcity, junior mining companies are increasingly entering into JV agreements with major mining firms. These partnerships provide juniors with access to capital, technical expertise and infrastructure, while majors benefit from the exploration prowess and agility of smaller companies.

A notable example is the collaboration between BHP and ASX-listed Cobre Limited. Under an eight-year "earn-in" agreement, BHP will fund Cobre's exploration of the Kitlanya East and West prospects in Botswana's Kalahari Copper Belt, aiming for

a 75% stake in the projects. This partnership allows Cobre to advance its exploration activities while leveraging BHP's resources and industry experience. Such JV arrangements are becoming a strategic necessity for juniors seeking to de-risk their projects and attract investment in a challenging financial environment.

The Role of DFI-Backed Exploration Funds

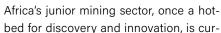
DFIs have traditionally played a crucial role in supporting early-stage mining projects, particularly in emerging markets. By providing risk capital and technical assistance, DFIs aim to catalyze private sector investment and promote sustainable development.

However, recent reports indicate a decline in DFI-backed funding for mining exploration in Africa. Factors contributing to this trend include shifting investment priorities toward renewable energy and infrastructure, as well as concerns over environmental and social governance (ESG) compliance in the mining sector. This reduction in support has exacerbated the funding challenges faced by junior miners.

Nevertheless, some DFIs continue to invest in mining exploration. For instance, the African Lion Mining Fund III, supported by the European Investment Bank, focuses on early-stage equity investments in medium-scale mineral resource companies throughout Africa, emphasizing gold and base metals.

Insights from Exploration-Stage Companies

Exploration-stage companies are adapt-



rently grappling with a severe capital drought. Early-stage exploration companies, often referred to as "juniors," are facing unprecedented challenges in securing the necessary funding to advance their projects. Key dynamics shaping the landscape include shifting capital flows, increasing reliance on joint ventures (JVs) with major mining firms, the pivotal role of development finance institutions (DFIs), and perspectives from exploration-stage companies navigating this



challenging landscape.





ing to the capital drought by adopting innovative strategies to attract investment and advance their projects. These include:

- Alternative Financing Models:
 Companies are exploring non-traditional financing options such as royalty agreements, streaming deals and crowdfunding platforms to raise capital without diluting equity.
- Strategic Partnerships: Forming alliances with local communities, governments and non-governmental organizations to enhance project credibility and secure social licenses to operate.
- Operational Efficiency: Implementing cost-effective exploration techniques and leveraging technology to maximize resource discovery while minimizing expenditures.

These approaches demonstrate the resilience and adaptability of junior miners in the face of financial constraints. In short, the capital drought confronting Africa's junior mining sector presents significant challenges, but also opportunities for innovation and strategic collaboration. By forging partnerships with major mining companies, exploring alternative financing mechanisms and engaging with DFIs, junior miners can navigate the current financial landscape and continue to contribute to the continent's mineral development.







What's Driving the Next Wave of African Mining Investment?



1. M&A Activity: Consolidation and Strategic Positioning

Merger and acquisition activity in Africa's mining sector is on the rise, driven by the pursuit of operational scale, resource consolidation and portfolio diversification. The industry is seeing a move away from organic growth toward acquiring advanced-stage projects with proven resources. In particular, mid-tier and major mining companies are targeting junior miners with promising assets but limited capital.

A notable example is Gold Fields' acquisition of Australia's Gold Road Resources for \$2.4 billion – significantly increasing its gold production profile while reinforcing the growing appetite for low-risk, high-grade assets across borders. In Africa, deals like Ivanhoe Mines' exploration expansion into the DRC and Zambia also underscore the strategic importance of key jurisdictions in the copper belt, lithium triangle and platinum group metals (PGM) regions.

With gold, copper, cobalt and lithium prices projected to remain strong due to global demand for clean technologies, many resource-rich African nations have become hotspots for M&A. In particular, lithium deposits in Zimbabwe and Namibia are attracting international bidders seeking to secure long-term supply for electric vehicle batteries and energy storage.

2. Geopolitical Alignments: Africa in a Multipolar Mining World

Geopolitical dynamics in 2025 are playing an increasingly influential role in

shaping mining investment flows into Africa. Western governments, especially the U.S. and the European Union, are pushing for new critical mineral supply chains that reduce reliance on China and Russia. In response, they are turning to Africa-rich in cobalt, graphite, rare earths and lithium-to diversify their sourcing strategies.

A striking example of this realignment is the U.S.-brokered effort to foster a peace accord between the DRC and Rwanda, closely linked with new bilateral mining agreements for tantalum and gold. This diplomatic strategy aims to secure access to critical minerals while promoting regional stability.

On the other hand, some African nations are asserting greater control over their mineral resources. Burkina Faso, for example, announced plans to nationalize foreign-owned mines as part of its resource nationalism drive – a move that has raised investor caution but also reflects a broader trend toward state-led participation in mining revenues. These evolving geopolitical stances are influencing how investors approach risk, conduct due diligence and negotiate terms – underscoring the need for strategic agility in navigating Africa's complex but promising landscape.

3. Technology Trends: Smart Mining Goes Mainstream

Africa's mining sector is rapidly embracing digital transformation. Technologies such as automation, remote operations, artificial intelligence (AI) and blockchain are being deployed to boost productivity, reduce environmental impact and improve health and safety outcomes.



As the world emerges from the economic shocks of the early 2020s, Africa's mining sector is poised for a new wave of investment. With its vast reserves of critical minerals, improving regulatory frameworks and expanding infrastructure, the continent is becoming a focal point for global capital seeking both growth and sustainability. In 2025, several powerful forces – merger and acquisition (M&A) activity, shifting geopolitical alignments, technology-driven innovation and evolving investor expectations – are converging to shape the future of mining in Africa.







Events like African Mining Week 2025 have placed a spotlight on these emerging innovations. Across the continent, mining firms are leveraging digital tools to manage logistics in remote terrains, monitor ore bodies using drones and Li-DAR, and optimize energy use through real-time data analytics.

Additionally, AI-driven exploration is shortening discovery timelines and improving targeting accuracy. Automation is being piloted in operations across South Africa and Botswana, while solar-powered smart grids are enabling off-grid energy solutions for remote mine sites.

Digital traceability systems are also becoming more common, especially for ethically sensitive minerals like cobalt and gold. Blockchain-based platforms are being used to provide end-to-end transparency from mine to market – particularly important to investors concerned with ESG and responsible sourcing.

4. Investor Priorities: ESG and Impact-Driven Capital

The rise of ESG (Environmental, Social, and Governance) investing has significantly shifted the mining capital landscape. In 2025, mining companies that fail to meet basic ESG benchmarks are increasingly excluded from global capital pools. Investors – especially large institutional funds – demand robust sustainability metrics, third-party audits and tangible community benefit frameworks.

Africa, with its rich natural endowment, also faces high social and environmental expectations. Mining projects that fail to manage water use, local employment, resettlement planning or environmental restoration are considered high-risk – regardless of their profitability. This is particularly important for critical mineral projects linked to the clean energy transition, as "dirty" extraction methods would undermine the purpose of the end-use technology.

Forward-thinking firms are responding by integrating ESG from exploration to closure. Some have adopted IFC Performance Standards and Equator Principles voluntarily. Others are launching community development trusts, gender inclusion programs, and biodiversity offset initiatives. According to Further Africa (2025), investors are now also looking for impact metrics – such as the number of local jobs created or the percentage of renewable energy used in operations – as part of their decision-making frameworks.

Looking beyond 2025, a confluence of strategic M&A, global geopolitical shifts, nextgen mining technologies and ESG-driven capital is shaping a new investment paradigm in Africa. Stakeholders who balance opportunity with compliance, innovation with inclusion, and speed with sustainability are best positioned to lead this next chapter. Africa's mining sector holds the potential to fuel the global clean energy transition and drive inclusive growth. Realizing this potential hinges on how governments, companies and investors align on long-term vision, governance, and shared value creation.









From Volume to Value: The New Face of Mining M&A

№ Regional run-rate is still climbing.

- S&P Global tallies \$15 billion of announced/completed M&A across the Middle East & Africa in Q1 2025, up 35% year-on-year.
- Mining was the third-largest contributor at roughly \$2.7 billion, even though overall deal counts eased 264.

South Africa remains the value engine.

 PwC's SA Mine 2024 records ≈ \$10 billion in disclosed mining deals across 32 transactions in the 12 months through June 2024 – a six-fold jump on the prior year, powered by copper, lithium and PGM assets.

(Sub-Saharan resources still pull the biggest checks.

KPMG finds that investment into mining and energy rose 29% year-on-year to \$5 billion in 2023, even as overall SSA deal volumes leveled off, confirming a shift toward larger, critical-mineral plays.

Key Takeaways:

- Bigger tickets, fewer prints: Value is rising faster than volume as buyers target scale assets in copper, lithium and iron-ore.
- Capital mix is diversifying: Chinese SOEs remain active, but Gulf investors and techbacked explorers have become significant price-setters.
- South Africa is back on the radar: A \$10 billion disclosed-deal year underscores renewed interest despite domestic headwinds.







Five Transactions Framing 2024-25 Pricing

👜 Simandou, Guinea — Baowu Steel & Partners

Financing agreements signed for about \$15 billion to build out the world's largest untapped iron-ore deposit, anchoring China's long-range steel raw-materials strategy.

Mopani Copper Mines, Zambia — International Resources Holding (UAE)

1.1 billion for 51 % and a plan to lift output to 200 kt by 2026, marking Gulf capital's biggest single mining entry on the Copperbelt.

□ Goulamina Lithium, Mali — Ganfeng Lithium (China)

40% stake purchased for \$342.7 million, locking in spodumene supply for China's battery chain.

(US) Mingomba Copper, Zambia — KoBold Metals (US)

Government statements put the build-cost at ≈\$2.3 billion for what could become one of the world's highest-grade underground copper mines, underpinned by Ko-Bold's recent US \$537 million fundraising.

Khoemacau Copper, Botswana — MMG (China)

Part of the surge noted by KPMG, with a headline \$2.08 billion bid that helped push 2023 resource-sector value past the \$5 billion mark.









1-3
OCTOBER
2025
CTICC
CAPE TOWN
SOUTH AFRICA

FROM EXTRACTION TO BENEFICIATION: UNLOCKING AFRICA'S MINERAL WEALTH



CO-LOCATED WITH AFRICAN ENERGY WEEK: INVEST IN AFRICAN ENERGIES

african-miningweek.com

Organized by:



As the energy transition and industrialization drive global demand for minerals, African Mining Week, scheduled for October 1-3, 2025 in Cape Town, will serve as a vital platform to connect stakeholders with sector prospects.

Taking place alongside African Energy Week, the event brings together African regulators, project developers, global investors and technology providers to unlock the continent's mining potential through strategic partnerships, deal signings and investment facilitation.

On the Ground: What to Expect at AMW 2025

Multi-Track Agenda

African Mining Week offers a dynamic, multi-track agenda that delivers a comprehensive view of Africa's mining value chain. Delegates will gain access to the Strategic Conference, Technical Conference, and Mining Investment Hub – each offering high-level panel discussions, live project showcases and tailored networking opportunities. Keynotes will explore topics such as regulatory modernization, M&A activity, exploration campaigns, infrastructure developments and local beneficiation strategies.

The Energy-Mining Nexus

Co-located with Africa Energy Week – the continent's premier energy event – African Mining Week provides a unique window into the intersection of mining and energy. This joint platform facilitates cross-sector dialogue and investment, unlocking synergies that support sustainable development and high-return opportunities driven by the energy transition and digital transformation.

Country Spotlights

Country Spotlights will shine a light on priority investment destinations across the continent. Highlights include South Africa's leadership in platinum group metals (PGMs); Gabon's renewed appeal

under its updated Mining Code; Botswana's diamond-fueled growth strategy; and the DRC's push for in-country value addition. Zambia's copper beneficiation efforts, lithium development in Zimbabwe and Namibia, and Morocco's phosphate-driven industrialization will also be featured.

Dedicated Forums

African Mining Week will host a series of targeted forums that reflect the industry's evolving priorities. The Ministerial Forum will address reforms designed to enhance investment readiness. The Gold Summit will spotlight trends in Africa's gold-producing regions, particularly Ghana. The Women in Leadership Forum will champion diversity and inclusion, while the Technology Forum will present cutting-edge solutions in digital mining. The Junior Miners Forum will create space for early-stage companies to engage with capital providers and strategic partners.

Exclusive Networking Opportunities

Tailored networking sessions will offer unparalleled access to key stakeholders across the mining ecosystem. From private investor briefings to country-focused meetups, African Mining Week fosters relationship-building at the highest levels.

Regional Roundtables

Regional Roundtables will highlight Africa's deepening global partnerships, featuring the U.S.-Africa Roundtable, China-Africa Mining Dialogue, European Mining Partnerships and the Middle East-Africa Investment Roundtable. These sessions aim to promote collaboration on investment, technology transfer and infrastructure advancement.

Technical Workshops

Hands-on Technical Workshops will provide practical training in key areas such as mineral processing, ESG compliance, Al-powered exploration and drilling innovation. Designed for engineers, practitioners and project managers, these sessions will deliver actionable insights to improve operational efficiency and sustainability.

High-Level Panel Discussions

Throughout the week, high-level panels will convene ministers, regulators, investors and industry leaders to tackle the sector's most pressing themes – financing and investment trends, digital transformation, traceability, environmental standards, local content development, formalization of small-scale mining and the role of mining in Africa's broader energy transition.







Moore - Your Sector Partner in Africa's Mining Transition

With presence in over 110 countries and deep experience across all stages of the mining value chain, Moore is a trusted advisor to mining companies, investors and regulators shaping the future of the sector.

Our multidisciplinary teams provide insight and practical solutions in tax, ESG strategy, cross-border investment, regulatory advisory and capital structuring. We support clients in delivering growth, governance and value.

As the mining sector transforms, Moore is proud to serve as a knowledge partner to African Mining Week and Energy Capital & Power – contributing both industry perspective and actionable expertise to this leading platform.

To learn more about our work in mining and access global insights via Moore Intelligence, or to connect with Moore experts in your location, visit:

moore-global.com



Director Moore Johannesburg



Director Moore Australia

David Tomasi



Danie Dörfling
Sustainability Lead and Senior
Marketing Coordinator
Moore Infinity







Join the Conversation.

Shape the Future of African Mining.

Register for African Mining Week 2025

Secure your place at the continent's leading mining investment platform.

www.african-miningweek.com



Organized by:

Energy Capital Power

Become a Sponsor or Exhibitor
Showcase your solutions, connect with decision-makers and elevate your brand visibility.

Contact our partnerships team: sales@energycapitalpower.com

General Inquiries & Media Requests

For all event-related questions or media opportunities:

INSERT HERE