

# Namibia at 36

**The new resource frontier**

The next phase of Namibia's mining and energy story will not be defined by what has been mined, but by what is about to be unlocked.



# A LOOK AHEAD TO 2026 IN NAMIBIA - RECONAFRICA

As our work with the communities and authorities of Namibia continues into 2026, we are pleased to share a number of successes and developments around our exploration activities under PEL 073, as well as a look to the year ahead.



## KEY SUCCESSES OF 2025

In 2025, ReconAfrica progressed key priorities by drilling our second exploration well in the Damara Fold Belt. The results showed indications of oil and gas over eight separate intervals in the Kavango West 1X well. A total of 64 metres (210 feet) of the sections contained confirmed hydrocarbons, with additional promising signs deeper in the well within the limestone reservoir. These findings suggest that the Damara Fold Belt has real potential for future energy development.

Following these positive results, PEL 073 partners ReconAfrica (operator), NAMCOR, and BW Energy met with Her Excellency President Nandi-Ndaitwah to discuss the oil and gas findings and explore how the partnership could support onshore development and help strengthen Namibia's long-term energy future.



## WORKING WITH COMMUNITIES IN KAVANGO EAST AND KAVANGO WEST

ReconAfrica continues to invest in and work with local communities and is proud to have an industry-leading Environmental, Social and Governance programme in Namibia.

To date, ReconAfrica has:

- Locally hired and contracted over 2,700 short and long term positions, and worked with over 550 local, regional and national service and supply companies
- Supported 10 STEAM and 7 SAN Nursing students from the Kavango East and Kavango West regions with scholarships
- Installed 36 solar-powered community water wells in remote areas

- Completed more than 2,600 community engagement sessions
- Provided N\$19 million in funding for medical services, equipment, training and wellness programmes
- Provided funding for environmental and social projects in various communities

## WHAT IS NEXT FOR RECONAFRICA IN NAMIBIA?

Preparations are underway for a production test of the Kavango West 1X well this year. The team is currently procuring the necessary equipment and has applied for permits required for production testing in order to evaluate the zones of interest. This will be the first production test for hydrocarbons in Namibia and could result in the first flow of hydrocarbons to surface for the Country. We expect to conclude this testing by the third quarter of 2026.

In all aspects of our operations, ReconAfrica is committed to minimal disturbance of habitat in line with international standards and implementing environmental and social best practices in our project areas.

We remain grateful to the people of Namibia for your partnership in exploring the potential for long-term energy development in the area and look forward to providing further updates throughout 2026.

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# Namibia at 36 – the new resource frontier

**N**amibia is 36, and there can never be a time for celebration without reflection. Reflection, however, should not leave the country looking backwards for too long. The real weight of this moment lies ahead, in what Namibia is becoming.

The next phase of Namibia’s mining story will not be defined by what has been mined, but by what is about to be unlocked.

Offshore, the country stands on the brink of a petroleum era that could fundamentally alter its economic structure. Discoveries in the Orange Basin have shifted Namibia from a frontier explorer to one of the world’s most closely watched emerging oil provinces. What matters now is not discovery, but delivery. The path to first oil, the structuring of fiscal regimes, the building of offshore and onshore infrastructure, and

the management of revenues will determine whether oil becomes a blessing or a burden. The scale is undeniable, but so is the responsibility. Oil will test Namibia in ways mining never has, but commercial production has not yet begun and remains dependent on final investment decisions and development timelines.

Onshore, uranium is no longer a story of





potential. It is a story of expansion layered on an already mature base. Namibia is one of the few countries globally with multiple large-scale uranium operations, including Rössing, Husab, and Langer Heinrich, and the next decade is expected to strengthen

this position further.

Existing mines are being optimised, while new projects such as Etango and Tumas progress through development. The global return to nuclear energy has repositioned uranium from a sidelined commodity to a strategic

one. Namibia is not waiting for that future. It is already inside it. The opportunity now lies in ensuring that growth translates into long-term national value, not just increased output.

Gold continues to offer something that few commodities can:

consistency. In a world of volatile markets and shifting demand cycles, gold provides a steady anchor. Namibia's existing operations, particularly Otjikoto and Navachab, have proven their resilience and continue to deliver stable production.

The future lies less in large discoveries and more in extending mine lives and incremental exploration success, ensuring gold remains a reliable contributor rather than a transformational one.

Copper, once central to Namibia's mining identity, is returning with renewed significance, though still at an early stage.

The global push towards electrification has transformed copper into one of the most important metals of the modern era. Namibia's geological potential, long understood but underdeveloped, is attracting new exploration interest.

The revival of historical mining

areas and targeted exploration programmes signal momentum, but large-scale production growth will depend on successful project development and supporting infrastructure.

Lithium and battery minerals represent a different kind of opportunity. They are not yet part of Namibia's production base, but part of its emerging future.

The presence of lithium within pegmatite systems, including areas historically mined for tin such as Uis, is opening new pathways. These developments are still in early stages, but their significance lies in the timing. Namibia is entering the battery minerals space at a moment when global demand is

accelerating.

The challenge will be to move beyond extraction and into processing, capturing more value within the country.

Critical minerals add another dimension to this future.

Rare earth elements, along with metals such as germanium and gallium, are placing Namibia within global supply chains that extend far beyond traditional mining.

Projects targeting rare earths, including developments such as Lofdal, and the repositioning of the Tsumeb smelter towards critical metals, signal strategic intent. However, these sectors are still in development and not yet major contributors to current production. Their importance lies in future positioning rather than present output.

What ties all of this together is not the



minerals themselves, but the convergence of opportunity.

Namibia remains largely dependent on uranium and diamonds, but a broader portfolio is beginning to take shape. Oil and gas, uranium expansion, gold stability, copper potential, lithium prospects, and critical minerals are all advancing at different stages, each tied to a distinct global demand cycle.

The world increasingly needs what Namibia has to offer.

That reality is beginning

to shift the country's position from a traditional exporter of raw materials to a potential participant in strategic global supply chains. It creates leverage, but also raises expectations.

Execution will determine outcomes. Infrastructure must expand, particularly in energy and water. Policy must remain clear and consistent, even as the country seeks greater participation in its resource sectors. Skills development must accelerate to ensure that Namibians are not only employed but are leading and innovating within

these industries.

Oil potential, uranium expansion, and the rise of new minerals all present the same challenge: how to ensure that wealth generated from the ground translates into opportunity above it.

Namibia is not a country searching for direction. It is a country standing at a convergence point. Multiple resource sectors are advancing simultaneously, each at a different stage of maturity, with the potential to reshape the economy if developed correctly.



URANIUM

# Namibia's uranium story over 36 years

**W**hen Namibia became independent on 21 March 1990, it did not inherit a uranium frontier.

It inherited a working uranium industry built around one giant mine: Rössing.

The open-pit operation near Arandis had started production in 1976 and, by independence, had already made Namibia part of the global nuclear fuel chain.

At that stage, however, the industry was still defined by external control.

Rössing's

ownership structure reflected the old order: Rio Tinto held 68.62%, the Iranian Foreign Investment Company 15.29%, South Africa's Industrial Development Corporation 10.22%, the Namibian government 3.42%, and other minority shareholders 2.45%. Even with only 3.42% equity, the Namibian state held 51% of the voting rights, giving the government political leverage over a mine whose economic value was still largely

exported.

That was the uranium sector at independence: one globally important mine, no local beneficiation beyond yellowcake, and very limited Namibian ownership of value.

Uranium oxide was exported as a concentrate, while conversion, enrichment, and nuclear fuel fabrication were carried out elsewhere. Namibia had a strategic mineral, but not yet a



strategic uranium policy.

In the 1990s, the new government chose continuity over disruption. Rössing kept operating, investors were reassured, and the state focused on building the legal and regulatory framework to govern mining under sovereign rule.

The 1990s were not a boom period for uranium. Global nuclear demand was softer after the Cold War, and uranium prices were weak for much of the decade. That meant Namibia's uranium story in the first 15 years of independence was more about consolidation than expansion.

Rössing remained the backbone of the sector, and the country used that period to strengthen institutions, regulate mining more

clearly, and improve the logistics and infrastructure that would later support growth.

This quieter phase matters because the boom that followed did not appear out of nowhere; it rested on the predictability and mining governance Namibia built after independence.

The real expansion phase began in the 2000s, as uranium prices rose on renewed interest in nuclear power. Namibia moved from being a one-mine uranium country to a multi-mine jurisdiction.

The key milestone was Langer Heinrich. Paladin acquired the project in 2002, brought it into production in late 2006, and established a second major uranium operation in the Erongo region.

Years later, in January 2014, CNNC Overseas Uranium Holding bought

a 25% stake in Langer Heinrich for US\$190 million, leaving Paladin with 75% and CNNC with 25%. That 75:25 structure still defines Langer Heinrich today.

The mine was placed on care and maintenance in 2018 during the uranium downturn, but production resumed in March 2024.

The numbers show how Namibia's global importance in uranium rose over time.

According to the World Nuclear Association, Namibia produced 2,993 tonnes of uranium in 2015, 3,654 tonnes in 2016, 4,224 tonnes in 2017, 5,525 tonnes in 2018, 5,476



tonnes in 2019, 5,413 tonnes in 2020, 5,753 tonnes in 2021, 5,611 tonnes in 2022, 6,986 tonnes in 2023 and 7,333 tonnes in 2024.

In 2024, Namibia accounted for 12% of global mine supply, ranking it third globally behind Kazakhstan at 39% and Canada at 24%.

Earlier in the cycle, Namibia had ranked even higher: in 2020, it accounted for 11% of world uranium output and was the world's second-largest producer.

These figures explain why uranium moved from being just another export mineral to a strategic pillar of Namibia's mining economy.

The single biggest structural shift in the industry

came with Husab. The deposit, discovered in the 2000s and developed after China's entry, changed both Namibia's production profile and its ownership map. In 2012, CGNPC's move to acquire Extract Resources and the Husab project cleared the way for Chinese control, while a separate agreement gave the Namibian state mining company, Epangelo, a 10% stake.

Husab eventually entered production in 2016 and became one of the world's largest uranium mines. Its

ownership is now widely reported as 90% held through China General Nuclear interests and 10% by Epangelo. That made Husab not only a production giant but also one of the clearest examples of how Namibia's uranium sector shifted from Western multinational dominance toward Chinese-backed ownership with a defined state stake.

Rössing itself also changed hands. For decades, it symbolised the colonial-era uranium economy: a giant mine run by Rio Tinto with a legacy share register that included Iran and South Africa. That changed in 2018–2019, when Rio agreed to sell, and then completed, its entire 68.62% stake to China National Uranium Corporation Limited.

The deal



was capped at US\$106.5 million, comprising an initial US\$6.5 million and contingent payments linked to uranium prices and mine performance. On 16 July 2019, CNUC became the new majority shareholder. That transaction was more than a corporate deal; it marked a geopolitical handover in Namibia's uranium industry, with Chinese capital now controlling both Husab and the majority stake in Rössing.

The post-Fukushima period after 2011 tested Namibia's uranium sector. Prices fell, projects stalled, and Langer Heinrich went into care and maintenance in 2018. Yet Namibia remained a major producer because Rössing continued and Husab ramped up. That resilience is visible in the output figures: even in weaker years, Namibia remained

among the world's top producers.

The country did not leave the uranium business; it rode out the cycle. When the market improved again on the back of decarbonisation, energy security and renewed support for nuclear power, Namibia was already positioned to benefit.

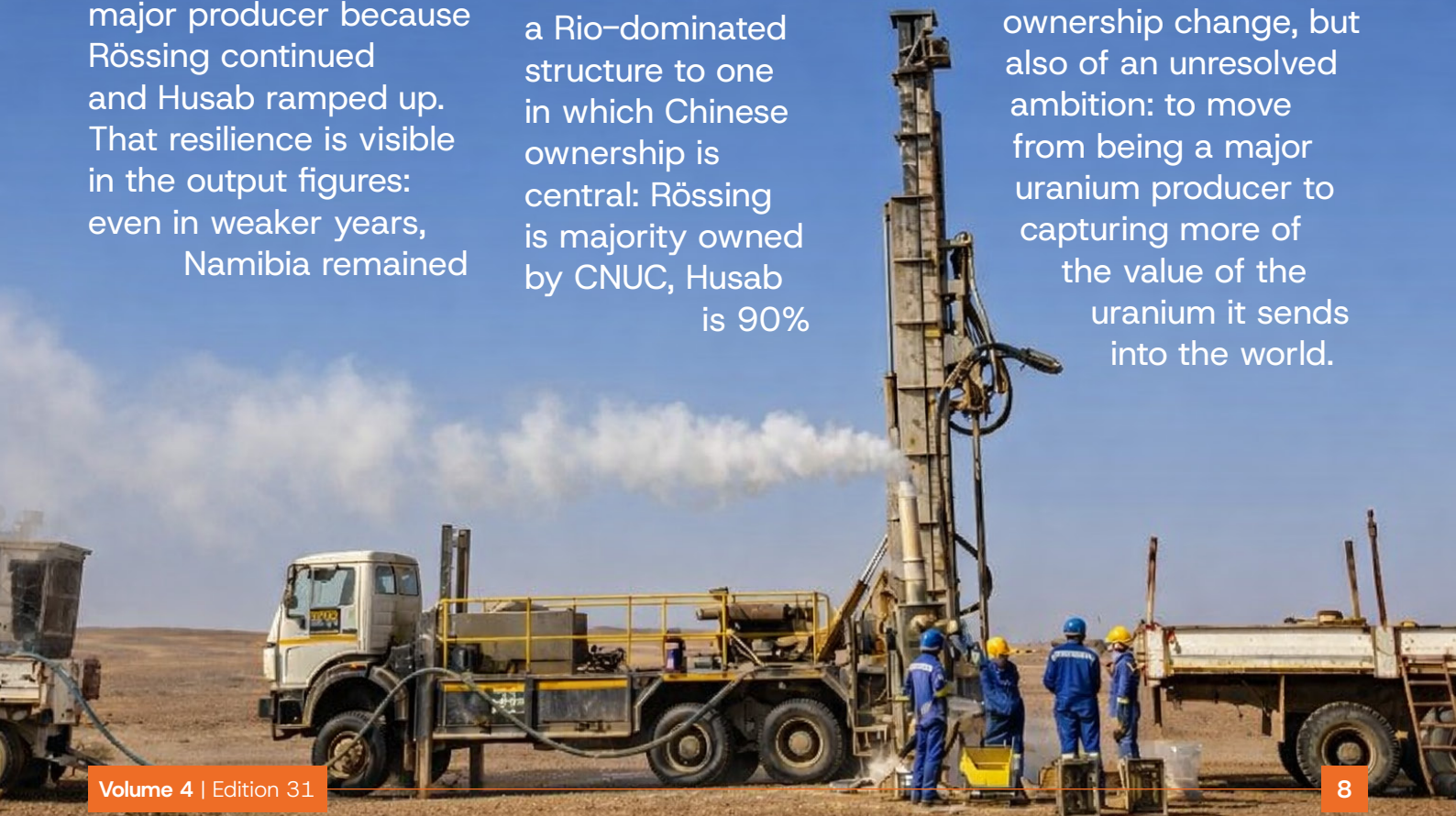
The restart of Langer Heinrich in 2024 added another production source to a sector already anchored by Rössing and Husab.

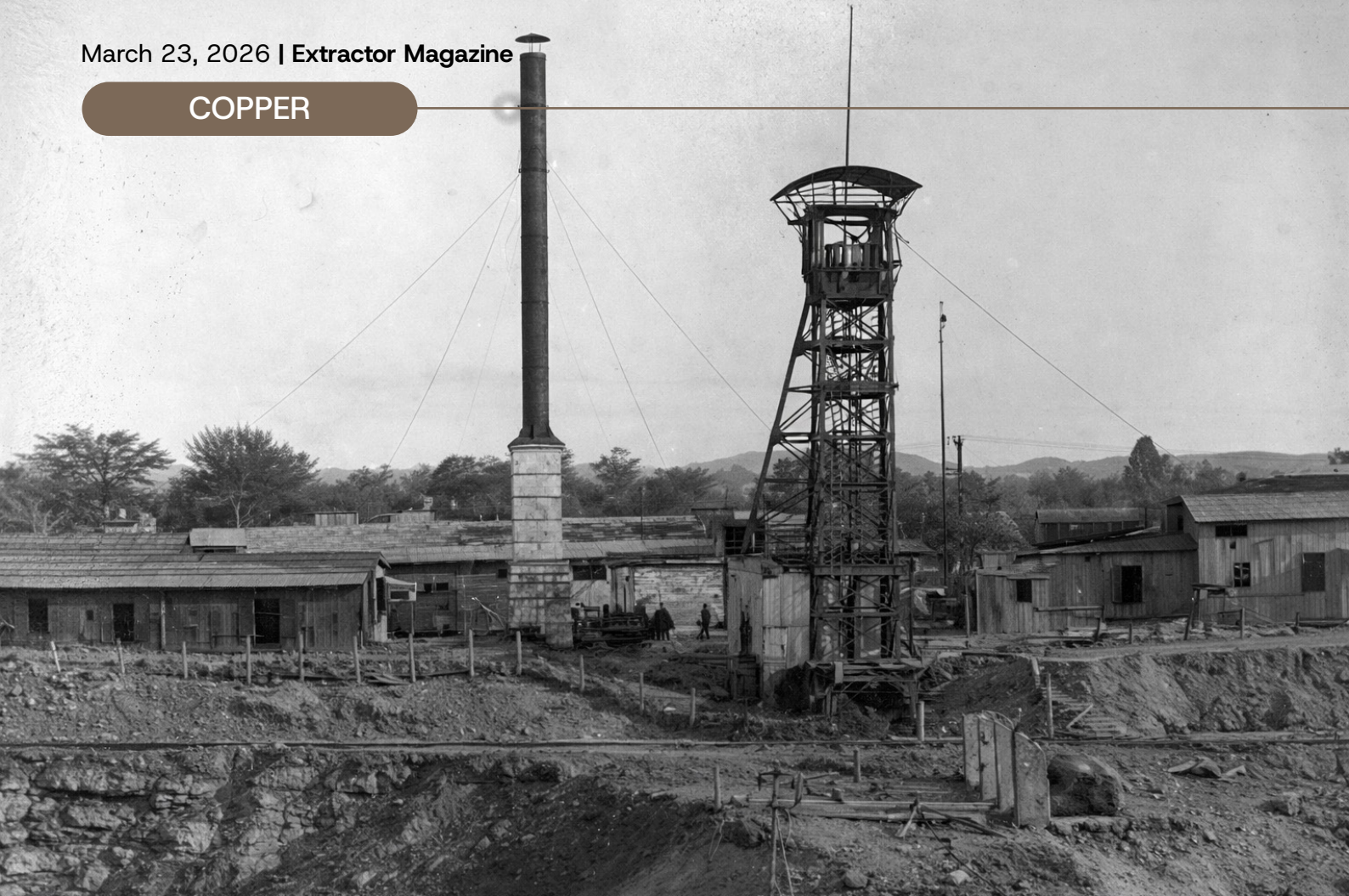
Today, after 36 years of independence, Namibia's uranium sector looks very different from the one it inherited in 1990. It has moved from one mine to three major producers. It has moved from a Rio-dominated structure to one in which Chinese ownership is central: Rössing is majority owned by CNUC, Husab is 90%

Chinese-owned with a 10% Epangelo stake, and Langer Heinrich is split 75% to Paladin and 25% to CNNC. Namibia has also moved up the global rankings, producing 7,333 tonnes of uranium in 2024 and ranking third worldwide.

Yet one question remains unfinished. Namibia has succeeded in mining uranium at scale, attracting global capital and maintaining world-ranking output. What it has not yet fully achieved is deep value addition. The yellowcake still leaves.

The downstream value still largely accrues elsewhere. That means Namibia's uranium story over 36 years is a story of growth, ranking and ownership change, but also of an unresolved ambition: to move from being a major uranium producer to capturing more of the value of the uranium it sends into the world.





# The copper story – from Tsumeb to the Kalahari

**O**ver the past 36 years, Namibia's copper story has come full circle.

It began with a world-class mine in Tsumeb, declined into a period of uncertainty, and is now rebuilding through a combination of revival and discovery.

At independence in 1990, Namibia inherited a copper industry anchored by the Tsumeb Mine, one of the world's

richest polymetallic deposits.

Over its life, the mine produced more than 30 million tonnes of ore, with average grades of about 4.3% copper, alongside zinc and lead.

It was not only a major producer but also one of the most complex orebodies globally, yielding over 240 identified minerals.

Yet by independence, the mine was already

nearing exhaustion.

In 1996, Tsumeb closed after more than 90 years of continuous operation. With that closure, Namibia effectively lost its primary copper production base. The impact was immediate: copper's contribution to GDP and exports dropped sharply, and the country exited the ranks of meaningful global copper producers.

What remained was

one strategic asset — the smelter.

The Tsumeb smelter would go on to define Namibia's copper story long after mining ceased.

Originally part of the Tsumeb Corporation, ownership shifted after closure to Ongopolo Mining and Processing, which took over the Tsumeb assets in the late 1990s to revive mining and processing.

Ongopolo restarted limited operations but struggled financially, eventually collapsing under debt in the early 2000s.

In 2006, the smelter and associated assets were acquired by Weatherly International, which sought to rebuild

Namibia's copper industry by integrating mining and processing.

Weatherly restarted the smelter and attempted to revive nearby mines, but persistent financial constraints and operational challenges limited long-term success.

A major turning point came in 2010 when Dundee Precious Metals acquired the Tsumeb smelter. Under Dundee, the facility was repositioned as a custom smelter, processing complex concentrates sourced globally rather than relying solely on Namibian ore.

At its peak under Dundee, the smelter

processed approximately 200,000 to 240,000 tonnes of concentrate per year, producing around 30,000 tonnes of blister copper annually.

Its ability to treat high-arsenic concentrates — which many smelters globally cannot process — made it a critical asset in the international copper market.

This created a paradox.

Namibia had one of the world's most specialised copper smelters, yet very little domestic copper production.

At one stage, most of Namibia's active copper mines and the smelter were effectively under one company umbrella. That



consolidation happened first under Ongopolo Mining and Processing, which controlled key assets, including Kombat, Khusib Springs, Otjihase, Matchless, and the Tsumeb smelter, before its financial collapse.

When Weatherly International took over Ongopolo in 2006, it inherited that same cluster of assets. Briefly, it became the dominant owner of Namibia's copper mining and smelting base, with mines at Otjihase, Matchless, Kombat, Tsumeb/Tsumeb West and later Tschudi, alongside the Tsumeb smelter. In effect, Namibia's copper sector moved, for a period, from being centred on one historic giant, Tsumeb, to being consolidated again under a single corporate group, before fragmenting into the more diversified ownership structure seen today.

Ownership shifted again in 2024 when Sinomine Resource

Group acquired the Tsumeb smelter from Dundee for approximately US\$49 million.

The new owner is repositioning the facility beyond copper, targeting the recovery of critical minerals such as germanium and gallium, reflecting global demand for technology and energy-transition materials.

While this signals diversification, the smelter remains central to Namibia's copper infrastructure.

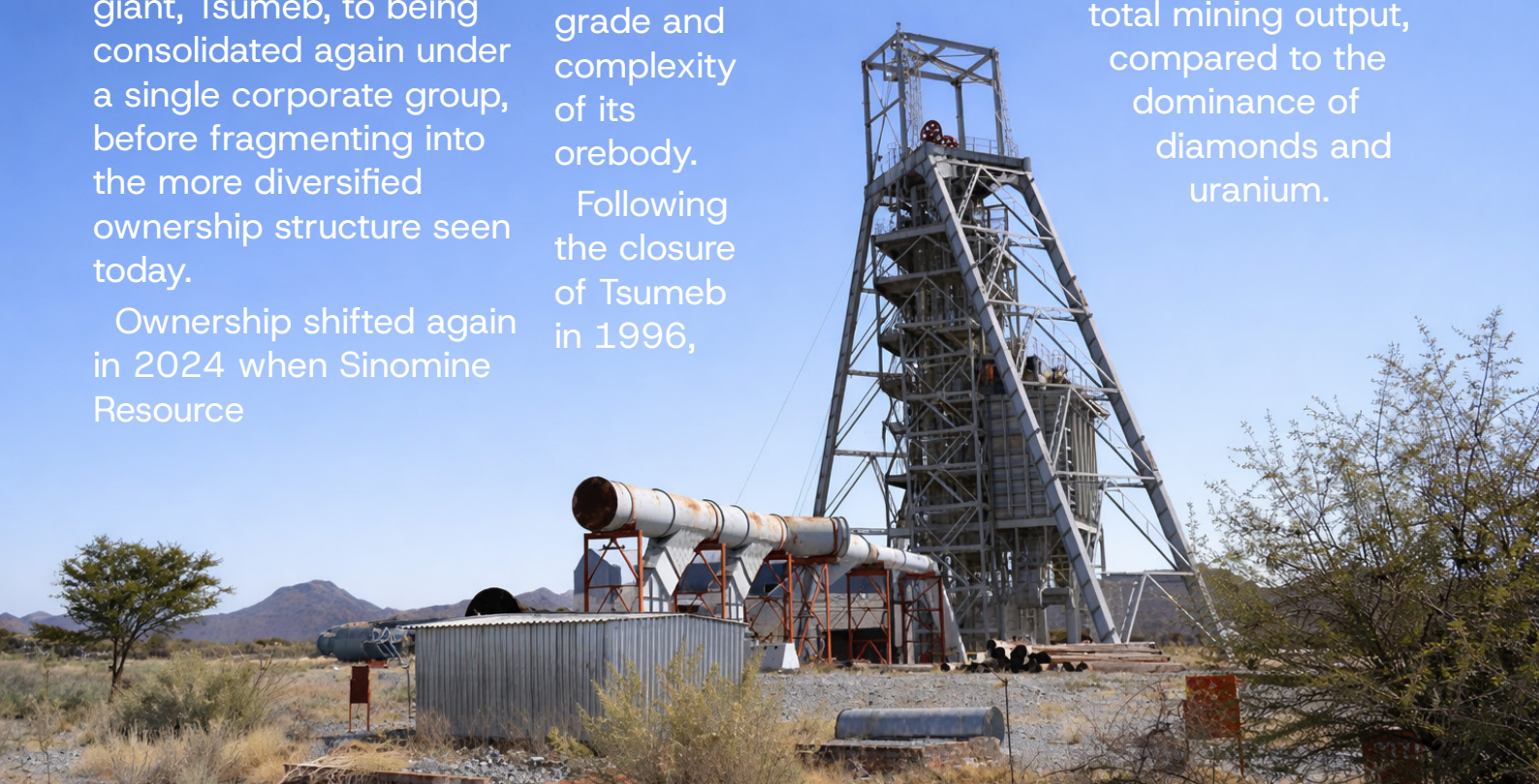
During the Tsumeb era, Namibia was never among the world's largest copper producers, but it held a unique position due to the exceptional grade and complexity of its orebody.

Following the closure of Tsumeb in 1996,

the country effectively dropped out of global copper rankings, with production falling to negligible levels for more than a decade.

Even today, Namibia is not counted among the major copper-producing nations. Still, its relevance is returning through the emergence of the Kalahari Copper Belt and the continued strategic importance of the Tsumeb smelter in processing complex concentrates.

For more than a decade after Tsumeb's closure, Namibia's copper mining sector remained subdued. Production levels were negligible, and the sector contributed only a marginal share to GDP — often less than 1% of total mining output, compared to the dominance of diamonds and uranium.





The revival began in the 2010s and gained traction in the early 2020s.

Historic operations in the Otavi Mountain Land have become central to this recovery. The region, long known for its high-

grade carbonate-hosted copper deposits, is once again attracting sustained investment.

The Trigon Metals-owned Kombat Mine has led this revival, restarting production in 2021 with initial

output of approximately 1,500–2,000 tonnes of copper per year. Beyond Kombat, the company is advancing expansion plans targeting higher production levels, supported by significant remaining resources and

infrastructure.

Other historic deposits in the Otavi region, including Otjihase and Matchless, are also being reassessed as part of broader redevelopment strategies.

These deposits historically produced high-grade copper and remain geologically attractive, with potential for both underground

and open-pit extensions. Exploration and redevelopment efforts across these assets are focused on extending mine life, improving resource definition and integrating operations where possible.

The Otavi Mountain Land is now seen as more than a legacy district. It represents a near-term production

hub with existing infrastructure, known mineralisation, and relatively lower development risk than greenfield projects.

If fully developed, the region could restore Namibia's copper output to several thousand tonnes per year, forming a bridge between historic production and future large-scale



developments.

Ownership changes again played a defining role. The sector shifted from large, vertically integrated operators like Tsumeb to smaller, more agile mining companies capable of reviving previously uneconomic assets. These companies rely on phased development, lower capital intensity and targeted production strategies.

At the same time, a new frontier began to emerge.

The Kalahari Copper Belt, stretching across Namibia and Botswana, is now one of the most significant copper exploration regions globally.

Unlike Tsumeb's deep underground orebody, deposits in this belt are more laterally extensive and potentially suitable for open-pit mining, offering lower-cost development opportunities.

Exploration activity has intensified.

Companies such as Noronex and Koryx Copper are advancing drilling programmes across Namibia's portion of the belt.

While most projects remain at the exploration or early development stage, initial results point to the potential for large-scale copper systems.

Regional developments have strengthened confidence.

The Motheo mine in Botswana, developed by Sandfire Resources, is expected to produce approximately 30,000 tonnes of copper per year, demonstrating the commercial viability of the Kalahari Copper Belt.

Namibia's side of the basin is still earlier in its development cycle, but the geological continuity suggests similar potential.

The Kaoko Basin, located in northwestern Namibia, is emerging as another frontier for copper exploration.

However, it remains at a much earlier stage than the Otavi Mountain Land or the Kalahari Copper Belt.

The basin forms part of a broader geological system that extends into Angola and is considered prospective for sediment-hosted copper mineralisation, with similarities to other large-scale copper provinces worldwide. Exploration activity in the region has been increasing, with companies targeting structurally controlled mineralisation through early-stage drilling, geophysics and geochemical programmes.

While no commercial copper production has yet been established, the scale of the basin and its relatively underexplored nature position it as a longer-term opportunity that could add to Namibia's future copper pipeline if exploration success translates into defined resources and eventual development.

DIAMOND

# Diamonds carried Namibia long before 1990

**D**iamonds did not arrive in Namibia with independence. They were already there, buried in sand, guarded behind fences, and extracted under a system that kept both people and value at a distance.

By the time Namibia became independent in 1990, diamonds were already the backbone of the economy,

concentrated along the country's southern coastline in the restricted Sperrgebiet.

What independence changed was not the presence of diamonds, but who would benefit from them.

At the time, the industry was dominated by De Beers through its operations in Consolidated Diamond Mines, in partnership with the South African state.

Production was stable, exports were strong, but Namibia had limited control over pricing, marketing or downstream value.

Diamonds were largely exported in rough form, with most of the value chain offshore.

That structure shifted in 1994 when Namibia entered into a 50:50 joint venture with De Beers to form Namdeb Diamond Corporation. It was a decisive move.

For the first time,



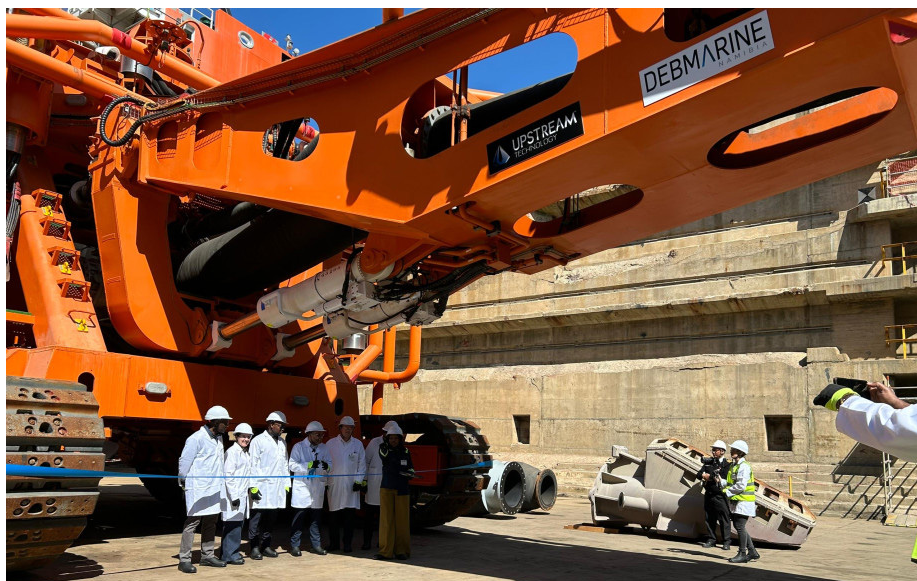
the Namibian government became an equal shareholder in its most valuable natural resource. The same model would later be replicated offshore through Debmarine Namibia, also jointly owned by the government and De Beers, creating a structure that has defined the industry for three decades.

In the years immediately after independence, diamond mining remained largely land-based, centred around Oranjemund and Lüderitz.

Namdeb operated a wide portfolio of onshore alluvial mining areas, including Mining Areas 1, 2, and 3 around Oranjemund, as well as key operations such as Elizabeth Bay and Sendelingsdrift along the Orange River, and coastal deposits at Dreigrat and Bogenfels.

Production volumes were relatively modest, typically ranging from 1 to 2 million carats per year. Yet Namibia quickly distinguished itself differently.

Its diamonds were among the highest quality in the world,



**What independence changed was not the diamonds, but who would benefit from them.**

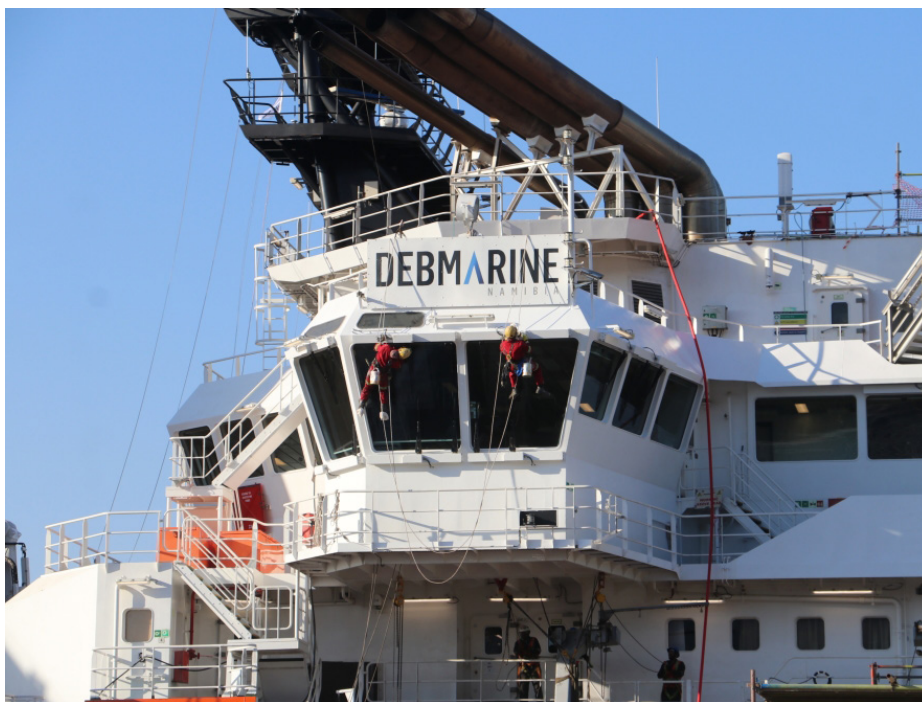
consistently achieving some of the highest prices per carat globally, often exceeding US\$400 per carat. This meant Namibia’s diamond story was never about scale. It was about value.

That value translated directly into economic significance. Over the past three decades, diamonds have contributed between 8% and 12% of Namibia’s

GDP in stronger years and at times accounted for up to 20% of export earnings. The sector has also been a major source of government revenue through taxes, royalties, and dividends generated by the joint venture structure. For long periods, diamonds have been Namibia’s single most important export commodity.

By the early 2000s, however, a challenge had begun to emerge. The richest onshore deposits were gradually being depleted, and the economics of land-based mining began to weaken.

Namdeb’s once extensive land-based portfolio — including operations at Elizabeth Bay, Sendelingsdrift, Dreigrat and Bogenfels — was progressively



depleted, scaled down or exited.

Elizabeth Bay, one of the most prominent operations, was placed on care and maintenance and later sold to Sperrgebiet Diamond Mining.

In contrast, river-based operations at Sendelingsdrift were reduced as costs rose and grades declined. Across the broader Oranjemund mining areas, activity shifted from multiple active pits to more selective, lower-scale operations.

The answer to sustaining the industry lay offshore.

Over millions of years, diamonds had been transported by ancient river systems from inland kimberlite sources to the Atlantic Ocean, settling

on the seabed.

These marine deposits were vast, but extracting them required entirely new technology.

Namibia responded by investing in offshore mining through Debmarine, developing a fleet of specialised vessels capable of recovering diamond-bearing gravel from depths of up to 150 metres below the ocean surface.

This marked the most important structural shift in Namibia's diamond industry.

Today, more than 90% of Namibia's diamonds are produced offshore, making the country the global leader in marine diamond mining.

Annual production now averages between 2

million and 2.5 million carats, with Debmarine accounting for the majority of output.

The shift from land to sea did not just extend the industry's life; it redefined it.

What has remained consistent through this transformation is the ownership model.

The 50:50 partnership between the Namibian government and De Beers has ensured that Namibia captures value not only through taxation but also through direct participation in profits.

This has provided the state with a steady revenue stream while maintaining investor confidence and access to global markets.

At the same time, Namibia has attempted to move beyond extraction.

At independence, virtually all diamonds were exported in rough form. Over time, the government introduced policies to encourage local beneficiation.

The Namibia Diamond Trading Company (NDTC), a joint venture between the government and De Beers, was established to aggregate and sort diamonds

locally, ensuring that a portion of production is made available to Namibian cutting and polishing companies.

While the beneficiation sector has faced challenges, including high operating costs and global competition, it represents a shift in how Namibia approaches its resources — not just as exports, but as part of a broader economic value chain.

The industry has also continued to evolve technologically. One of the most significant recent developments has been the commissioning of the Benguela Gem, a US\$468 million offshore mining vessel introduced in 2022.

The vessel is expected to add around 500,000 carats per year to Namibia's production capacity and represents one of the most advanced diamond recovery systems in the world.

It signals a future in which Namibia's diamond industry is almost entirely marine-based.

Despite its strengths, the sector faces a changing global environment. The rise of lab-grown diamonds

is introducing new competition, particularly in lower-value market segments.

Consumer preferences are shifting, and global demand for luxury goods remains sensitive to economic cycles. At the same time, environmental and sustainability expectations are increasing, requiring mining operations to demonstrate responsible practices.

Yet Namibia's position remains strong.

Its diamonds are natural, high-quality and traceable. Its offshore mining reduces many of the land-use conflicts associated with traditional mining.

Its ownership model provides stability. And its long history in the industry has built both technical expertise and institutional strength.

After 36 years of independence, Namibia's diamond sector has undergone a profound transformation. It has moved from a colonial extraction model to a jointly owned industry.

It has shifted from land-based mining to offshore dominance. It has begun to build a downstream value chain, even if

that process remains incomplete. And it has maintained its position as one of the world's highest-value diamond producers.

What has not changed is the central role diamonds play in the economy.

From the restricted sands of the Sperrgebiet to the depths of the Atlantic Ocean, diamonds have funded development, supported employment and anchored Namibia's export earnings. They remain one of the clearest examples of how natural resources can shape a nation's economic trajectory.

The next phase of Namibia's diamond story will not be defined by discovery. The diamonds are already known. The technology to extract them already exists.

The question now is whether Namibia can capture more of the value those diamonds represent — not just through mining, but through processing, trading and integration into a broader industrial economy.

Because after 36 years, Namibia is no longer just a diamond producer.

# Enduring zinc story

**Z**inc in Namibia has always been a story of two mines — one that never stopped digging, and one that had to reinvent itself to survive.

From the underground tunnels of Rosh Pinah Zinc Mine to the refinery stacks of Skorpion Zinc Mine, the country's zinc industry has moved through cycles of stability, disruption and reinvention over the past 36 years. What began as a conventional mining

story has evolved into something more complex — and more strategic.

## The story begins at Rosh Pinah.

The deposit was discovered in 1963 within the Gariep Belt, a geologically rich zone along Namibia's southern frontier. Development followed later in the decade, and by 1969 underground mining had begun, establishing what would become one of Namibia's longest-running base-metal

operations. By the time of independence in 1990, Rosh Pinah was already a mature producer, exporting zinc and lead concentrates to global markets.

Ownership of Rosh Pinah has been shaped by a series of layered transactions rather than a single transfer. Glencore held a controlling stake in the operation for years as part of its global zinc portfolio. At the same time, Trevali Mining Corporation gradually built its position through a series of transactions,



including the acquisition of the Perkoa mine in Burkina Faso. By the late 2010s, Trevali had assumed operational control, positioning itself as a mid-tier zinc producer with Rosh Pinah as its core asset.

That structure collapsed in 2022 following catastrophic flooding at Perkoa, which halted production and triggered a financial crisis that pushed Trevali into administration.

Its assets, including Rosh Pinah, were subsequently taken over by creditors and later acquired by funds managed by Appian Capital Advisory, marking a shift from listed ownership to private capital-backed control.

Despite these changes, the mine itself has remained steady.

Rosh Pinah has consistently produced between 70,000 and 100,000 tonnes of zinc in concentrate per year, alongside lead and silver by-products. It is now undergoing the RP2.0 expansion, a major reinvestment programme aimed at increasing throughput from roughly



0.7 million tonnes per annum to over 1.3 million tonnes, improving

recoveries and extending mine life beyond 2030. Once fully ramped



up, the expansion is expected to lift production significantly, reinforcing the mine's role as Namibia's primary zinc producer.

The Skorpion Zinc Mine was first identified in the 1970s, but its development was delayed for decades due to the complexity of its ore. Unlike most zinc deposits, Skorpion is an oxide orebody, requiring hydrometallurgical processing rather than conventional flotation.

It was only in the late 1990s, after advances in processing technology, that the project became viable.

Developed by Anglo American, Skorpion entered production in 2003 as a fully integrated operation combining open-pit



mining with on-site refining.

At its peak, the mine produced approximately 150,000 tonnes of Special High Grade (SHG) zinc metal per year, placing Namibia among a small group of countries capable of producing refined zinc domestically.

**This was a significant shift.**

Namibia was no longer just exporting

concentrate — it was producing finished metal.

Ownership changed in 2011, when Anglo American sold Skorpion to Vedanta Resources as part of a broader portfolio restructuring. Under Vedanta, the operation continued to perform strongly until 2020, when the oxide orebody was largely depleted.

For most mines, that would have marked the end.



### **For Skorpion, it marked a transition.**

The operation was placed on care and maintenance, but instead of permanently shutting down, Vedanta initiated a conversion strategy.

The refinery is being reconfigured to process sulphide concentrates, sourced both from Rosh Pinah and international suppliers, effectively transforming Skorpion into a regional processing hub.

It preserves Namibia's position in the zinc value chain and retains industrial capacity that would otherwise have been lost. Few

mining jurisdictions manage to keep refining infrastructure alive after resource depletion. Namibia has.

Together, Rosh Pinah and Skorpion define the structure of Namibia's zinc sector — one anchored in geology, the other in technology.

At its peak, zinc contributed between 2% and 4% of Namibia's mining GDP, providing export revenue, employment, and industrial capacity, particularly in the southern regions. While it remains smaller than diamonds and uranium, its role in diversifying the mining economy is significant.

At Rosh Pinah, expansion is driving future production. At Skorpion, conversion is redefining purpose. Unlike copper or gold, Namibia's zinc story is not being driven by major discoveries. It is being shaped by how effectively existing assets can be extended, repurposed and sustained.

After 36 years, zinc has proven to be one of Namibia's most resilient minerals.

It has survived ownership upheavals, technological challenges and resource depletion — and adapted each time.



# The future sees expanded gold fields

**I**t was not until the mid-2010s, with the arrival of a second large-scale mine, that gold became one of Namibia's most spoken about minerals — and one of its most significant contributors to the economy.

**Before that, gold existed, but quietly.**

At independence in 1990, Namibia's gold industry was defined by a single operation, the

Navachab Gold Mine, which had only just come into production. For more than two decades, Navachab stood alone, producing around 100,000 ounces per year, keeping gold present but not dominant in a mining sector led by diamonds.

That changed in 2015 with the commissioning of the Otjikoto Gold Mine by B2Gold, which pushed Namibia's gold output

beyond 300,000 ounces annually and repositioned the metal as a major contributor to export earnings, mining GDP and government revenue.

The foundation of Namibia's gold sector lies in Navachab. Discovered in 1984 and brought into production in 1989, the deposit was developed by Anglo American as Namibia's first modern gold mine. It is hosted within the Damara

Belt and characterised by low-grade, bulk-tonnage mineralisation amenable to open-pit mining. Through the 1990s, Navachab established itself as a steady producer, typically delivering between 90,000 and 120,000 ounces annually, supported by a conventional carbon-in-pulp processing circuit.

Ownership of the mine has shifted in line with broader trends in the global gold sector. In 1998, Anglo American sold Navachab to Ashanti Goldfields, which later merged with AngloGold to form AngloGold Ashanti in 2004. A decade later, in 2014, AngloGold Ashanti divested the asset to QKR Corporation, marking a shift away from major multinational ownership. Today,

Navachab is majority-owned by QKR (92.5%), with Namibia's state mining company, Epangelo Mining, holding 7.5%. The mine continues to operate with a resource base exceeding 2 million ounces, supported by pit optimisation and ongoing exploration to extend mine life.

For more than two decades, Navachab defined Namibia's gold sector — stable, reliable, but limited in scale.

That changed with the development of Otjikoto, a project that fundamentally reshaped the industry. The deposit was discovered in 2011 by Auryx Gold Corp, which rapidly advanced the project through drilling and resource definition. In the same year, B2Gold acquired Auryx in a deal valued at approximately US\$160 million, securing full ownership of

the project and fast-tracking development. Construction began soon after, and the mine poured its first gold in December 2014, reaching commercial production in 2015.

Otjikoto was developed as a large-scale open-pit operation with an initial reserve base exceeding 2.5 million ounces of gold, supported by a conventional processing plant combining gravity recovery and carbon-in-pulp circuits. At its peak, the mine produced more than 200,000 ounces annually, making it Namibia's largest gold producer and effectively doubling national output. The operation has since evolved to include the Wolfshag underground deposit, extending mine life and improving grade profiles. Production is expected to continue into the late 2020s,





supported by ongoing resource conversion and exploration success. Ownership remains unchanged, with B2Gold holding a 90% stake and the Namibian government retaining a 10% stake.

The combined output of Navachab and Otjikoto transformed Namibia into a mid-tier gold producer. National production now typically ranges between 250,000 and 300,000 ounces per year, with

gold contributing approximately 6% to 8% of total export earnings.

Today, Namibia's gold sector is defined by a concentrated but evolving ownership structure and a growing pipeline of projects.

Navachab remains majority owned by QKR Corporation, while Epangelo Mining retains a minority stake. Otjikoto continues under B2Gold with state participation. Beyond the producing

mines, the next phase of growth is expected to come from the Twin Hills Gold Project, originally developed by Osino Resources and now owned by Yintai Gold following its 2024 acquisition. Twin Hills hosts a resource exceeding 2 million ounces and is expected to produce between 130,000 and 170,000 ounces per year, positioning it as Namibia's next major gold mine.

Alongside Twin Hills, Wia Gold is advancing the Kokoseb Gold Project in northwestern Namibia, which has rapidly grown into one of the country's largest undeveloped gold deposits. Following successive drilling campaigns, Kokoseb now



hosts a mineral resource of approximately 2.9 million ounces at around 1.0 g/t gold, placing it in the same league as Namibia's major gold assets. The project has already advanced to scoping and feasibility work, with planned production in the range of 140,000 to 170,000 ounces per year over an initial mine life exceeding a decade. With ongoing drilling expanding the resource and confirming high-grade underground potential, Kokoseb is no longer just an exploration play but a near-development asset that could become Namibia's next gold mine.

Together, these assets reflect a broader shift in ownership within Namibia's gold sector — from major multinationals to a mix of

private capital, mid-tier producers and emerging developers, combined with consistent state participation in key producing operations.

Despite this progress, Namibia remains a relatively small player in global gold production. Countries such as China, Australia and Russia produce several million ounces annually, far exceeding Namibia's output. However, Namibia's strength lies in its stability, regulatory certainty and growing project pipeline.

After 36 years, Namibia's gold sector has evolved from a single-mine industry into a multi-asset, growth-oriented component of the mining economy.

From Navachab's steady early production

to Otjikoto's scale and the emergence of Twin Hills and Kokoseb, gold has secured its place alongside diamonds and uranium as one of the country's key minerals.

The next phase will depend on execution.

If Twin Hills enters production and Kokoseb advances to development, Namibia's gold output could exceed 400,000 ounces per year, further strengthening its contribution to export earnings, government revenue and economic diversification.

Gold may not have defined Namibia's mining industry at independence.

But today, it is firmly part of its foundation.

And its role is still growing.



# Oil and gas no longer a story but reality

**N**amibia's oil and gas story did not begin offshore.

It began on land, in the south, where early wells were drilled around Berseba nearly a century ago in search of oil that was never found.

Those early campaigns confirmed the presence of sedimentary basins, but not the commercial hydrocarbons needed to sustain an industry.

Decades later, the focus

shifted offshore. The discovery of the Kudu Gas Field in the 1970s proved that Namibia had hydrocarbons, but for years, that promise remained stranded.

For much of its history, Namibia searched for oil and gas, finding very little.

Today, it sits at the centre of one of the most significant offshore discovery stories in the world.

The earliest exploration efforts were concentrated in the Nama Basin, particularly around Berseba and Warmbad, where drilling campaigns in the late 1920s and early 1930s, followed by renewed activity in the 1960s and 1970s, attempted to unlock hydrocarbons under South African administration. Several wells were drilled during these campaigns,

including work linked to SOEKOR, South Africa's state oil company. None delivered commercial success, but they confirmed that Namibia possessed sedimentary basins capable of generating hydrocarbons. That confirmation, though quiet at the time, would prove important decades later.

The country's first meaningful offshore breakthrough came in 1974, when Chevron discovered the Kudu Gas Field in what is now Petroleum Exploration Licence 003. Follow-up appraisal by Shell and later operators confirmed approximately 1.3 trillion cubic feet of gas. It was Namibia's first proven hydrocarbon resource of scale. Yet the field never moved into production. Ownership shifted from Chevron to Shell, then through Energy Africa and Tullow Oil before eventually coming under the control of NAMCOR and its partners. Over time, more than a billion US dollars were spent on drilling, appraisal and development planning.

Proposals ranged from pipeline exports to gas-to-power generation of up to 1,000 megawatts. None reached a final investment decision. Kudu became a symbol of Namibia's hydrocarbon dilemma: the presence of resources without a viable economic pathway.

For decades after Kudu, Namibia remained largely overlooked in global oil exploration. The Orange Basin, which extends north from Angola's prolific offshore oil province, saw only limited drilling. Several wells were drilled between the 1990s and early 2010s, but none delivered the kind of results needed to sustain investor confidence. Compared to Angola, where billions of barrels were being produced, Namibia appeared geologically similar but commercially uncertain. For many international companies, it remained a high-risk frontier.

That perception began to change in the late 2010s. Advances in seismic imaging and ultra-deepwater drilling

technology allowed companies to reinterpret Namibia's offshore geology. Independents and smaller explorers played a key role in reopening the basin. Companies such as Chariot, Impact Oil & Gas and Custos Energy secured acreage and generated early geological models that attracted larger partners. These farm-in agreements brought major oil companies back into Namibia, setting the stage for a new phase of exploration.

The turning point came in February 2022, when TotalEnergies drilled the Venus-1X well in Petroleum Exploration Licence 56, Block 2913B, and encountered significant volumes of light oil in high-quality reservoirs. The discovery marked a turning point. It confirmed not only the presence of hydrocarbons but also the existence of a large, potentially commercially viable petroleum system.

Subsequent appraisal drilling reinforced this view. Additional wells

demonstrated thick oil columns, multiple stacked reservoirs and strong continuity across the structure.

Venus is now widely interpreted as a large-scale discovery with multi-billion-barrel potential.

The block is operated by TotalEnergies, which holds roughly 45 per cent per cent, alongside QatarEnergy, NAMCOR, and Impact Oil & Gas. Total's entry into the licence followed a farm-in agreement with Impact,

illustrating how early-stage explorers enabled major capital to enter the basin.

Since the discovery, Total has committed billions of dollars to appraisal drilling and technical studies.

Development is expected to require more than ten billion US dollars, with first oil targeted for the early 2030s.

Almost simultaneously, Shell confirmed that Venus was part of a broader petroleum system.

In Petroleum Exploration Licence 39, Block 2913A, the company drilled the Graff-1 well in 2022, followed by La Rona-1 and Jonker-1. These wells confirmed hydrocarbons across multiple prospects, including oil and gas-condensate. Unlike

Venus, which appears



to be a large, unified structure, Shell's discoveries suggest a more complex geological setting with multiple reservoirs and varying fluid types.

Shell operates the block with QatarEnergy and NAMCOR, and has invested more than a billion US dollars in Namibia's offshore exploration programme. The company is continuing appraisal work to determine which of its discoveries can be developed commercially.

A third major discovery followed in 2024, when Galp Energia drilled the Mopane-1X well in Petroleum Exploration Licence 83. The well confirmed the presence of oil, and a follow-up well, Mopane-2X, reinforced the discovery. Galp operates the licence in partnership with NAMCOR and Custos Energy, another example of a local-international partnership structure. Early indications suggest

that Mopane could support a standalone development, although this remains subject to further appraisal and technical evaluation.

Beyond these headline discoveries, Namibia's offshore is now one of the most active exploration regions globally. Companies including Chevron and BW Energy have secured positions in various petroleum exploration licences, while onshore exploration continues in the Kavango Basin under Reconnaissance Energy Africa. Seismic surveys, drilling campaigns, and basin modelling efforts are ongoing, each contributing to understanding Namibia's subsurface potential.

Since 2022, Namibia has attracted billions of dollars in exploration investment. The scale of capital flowing into the sector reflects the significance of the discoveries and the confidence of

international operators. Yet the country remains at a critical stage. No commercial production has begun, and timelines depend on complex engineering, regulatory approvals and final investment decisions.

Namibia's oil and gas story has unfolded in three distinct phases. It began with the early wells at Berseba, which confirmed geology but delivered no commercial success. It moved offshore with Kudu, which proved the presence of hydrocarbons but remained undeveloped.

It has now entered a third phase in the Orange Basin, where multiple discoveries have confirmed the country as a genuine petroleum province.

After decades of searching, Namibia is no longer looking for oil and gas.

It has found them.



# The rise, fall and possible rise of graphite mining

**N**amibia's graphite story since 1990 is one of promise repeatedly delayed, shaped by small historic production, shifting ownership, and a global market that only recently began to reward the mineral's strategic importance.

The country has never been a major graphite producer in the modern era, yet it hosts both rare-vein and flake graphite deposits that have attracted investors

for more than three decades.

Production figures tell the story best. Since 1990, Namibia has recorded virtually no sustained commercial graphite output, despite having one of the few known vein graphite deposits globally at Aukam and a large flake graphite resource at Okanjande.

The absence of production is not due to a lack of resources. It reflects cycles of

ownership changes, financing constraints and timing in global markets.

In southern Namibia, the Aukam graphite mine stands as the country's most historically significant graphite operation. Although its main production years were between 1940 and 1974, when more than 22,000 tonnes of graphite were mined, the project remained dormant for decades thereafter.

The modern phase



of Aukam began in 2013 when US-listed Next Graphite acquired the asset, marking the first serious post-independence attempt to revive graphite mining in Namibia.

Ownership shifted again in 2020 when Canadian firm Gratomic acquired control of the project through its stake in Gazania Investments 242, consolidating the asset and positioning it for production.

Aukam is not a conventional graphite deposit. It hosts high-grade vein graphite, a rare form that can command premium prices due to its purity and lump characteristics. Grades on site have been reported to range widely, in some cases exceeding 80% carbon.

By the early 2020s, Gratomic had advanced the project into the construction and commissioning phase, targeting initial production levels of 7,600–12,000 tonnes per year.

Yet, like many Namibian graphite ventures, progress has been uneven. Financing delays, corporate governance issues and missed reporting deadlines have slowed momentum. Despite this, the Namibian government has renewed the mining licence through to 2040, signalling long-term confidence in the project.

Aukam today sits on the edge of production, with infrastructure largely in place but commercial output still limited.

Further north, near

Otjiwarongo, lies the Okanjande graphite project, Namibia's most advanced flake graphite deposit. Unlike Aukam's vein graphite, Okanjande hosts flake graphite, which is widely used in lithium-ion batteries and industrial applications.

The project has been associated with several owners over the years, including German- and Canadian-linked interests, before coming under Northern Graphite's control in recent years. Despite its scale and favourable geology, Okanjande has yet to enter sustained production, largely due to funding challenges and fluctuating graphite prices.

Okanjande represents a different kind of opportunity for Namibia.

Its flake graphite could position the country within global battery supply chains, particularly as demand for electric vehicles accelerates.

**That possibility has now taken a decisive turn.**

A breakthrough came in January 2026, when Northern Graphite signed a US\$200 million (about N\$3.76 billion) term sheet with Saudi Arabia's Al Obeikan Group to develop a large-scale plant for battery anode materials in Yanbu.

The agreement fundamentally changes the outlook for Okanjande. Under the deal, the Saudi-based

plant is expected to secure a long-term supply of up to 50,000 tonnes per year of graphite concentrate from the Namibian mine, providing the commercial anchor that had been missing for years.

This offtake certainty has allowed Northern Graphite to move toward restarting the mine, which has been on care and maintenance since 2018.

The company has indicated that about US\$35 million will be invested to bring Okanjande back into production, including upgrades to the tailings infrastructure and water supply, and the

addition of a solar power component to support operations.

Once operational, the mine is expected to feed into a globally integrated battery materials supply chain, with processing taking place in Saudi Arabia and, potentially, Europe rather than Namibia.

A parallel agreement with German partners, valued at about N\$34.5 million, has further positioned Okanjande within Europe's push to secure non-Chinese graphite supply chains, linking Namibian production to advanced research, recycling and processing technologies.

Together, these deals reposition Okanjande from a stranded asset into a



strategic upstream supplier in the global battery economy.

Other graphite occurrences exist across Namibia, but most remain at the early exploration stage. These include smaller prospects within the Damara Belt and the southern Karas region, where graphite mineralisation has been identified but remains underdeveloped.

The pattern across all these projects is consistent. Namibia has graphite resources, but a very limited production history since its independence.

Global context helps explain why. For much of the 1990s and 2000s, graphite prices remained relatively low, and China dominated supply. Investors showed little interest in developing new projects in frontier markets like Namibia.

That began to change in the 2010s, as graphite emerged as a critical mineral for energy storage. Lithium-ion batteries require graphite as a key component, particularly in anodes, which has driven renewed global exploration.

Namibia's graphite

sector began attracting attention again during this period, leading to renewed work at Aukam and Okanjande.

Even so, the country still lags behind emerging African graphite producers such as Mozambique, Madagascar and Tanzania, all of which have moved projects into production more rapidly.

The reasons are both structural and project-specific. Namibia's deposits, particularly Aukam, are relatively small compared to large-scale flake graphite projects elsewhere. Financing has also been a recurring constraint, with junior mining companies struggling to secure capital in volatile markets.

Infrastructure, while generally strong by regional standards, has not always aligned with project timelines, particularly for energy-intensive processing.

Despite these challenges, Namibia's graphite future is not without promise.

Aukam's high-grade vein graphite offers niche market potential, particularly for premium applications where purity

is critical. Its proximity to Lüderitz port provides logistical advantages, and its long licence horizon to 2040 allows for phased development.

Okanjande, on the other hand, represents scale. If brought into production, it could anchor Namibia's entry into the battery minerals value chain.

The broader opportunity lies beyond mining. Namibia has begun positioning itself as a player in downstream processing, particularly under its green industrialisation strategy. Graphite beneficiation, including the production of spherical graphite for battery anodes, could add significant value if supported by infrastructure and investment.

The global graphite market is shifting. Demand is expected to grow sharply as electric vehicle adoption accelerates, while supply chains are being restructured away from China.

Three decades after independence, the country's graphite sector remains largely untapped, defined more by potential than production.

LITHIUM

# The lithium that came, then stalled

**L**ithium was never the target.

Tin was. Tantalum was. Feldspar was.

Now, in the same rocks that built Namibia's earlier mining history, lithium is emerging as the mineral that could define its next chapter.

At Uis, one of Namibia's oldest mining towns, that shift is already visible. The operation, now run by Andrada Mining Limited, has revived what was once a declining tin mine and turned it into a polymetallic project with lithium at its core.

The significance of Uis lies not in a discovery, but in reinterpretation. The pegmatites that host tin were always known to contain lithium-bearing minerals. What has changed is the economics and the technology to extract them.

Today, lithium is no longer a by-product. It is becoming central to the project's future.

Pilot processing has already confirmed that lithium concentrate can be produced alongside tin. The company has outlined plans to scale

this into commercial production through a phased approach, building lithium circuits on top of an existing tin operation.

Unlike standalone lithium projects, Uis is evolving gradually, with lithium still being defined in terms of recoverability and scale rather than as a fully declared reserve.

Unlike the 2018 Desert Lion shipment from Karibib, Andrada has yet to export lithium at a commercial scale, with production at Uis still limited to pilot-level recovery and testing.



Uis is not yet a conventional lithium mine. It is a project in transition, moving steadily but cautiously toward becoming Namibia's first sustained lithium producer.

Further south, near Karibib, Namibia's lithium story reflects both proof and interruption.

The Rubicon and Helikon deposits, advanced under Desert Lion Energy and later acquired by Lepidico Limited, were among the first to demonstrate that Namibia hosts commercially viable lithium-bearing pegmatites.

The combined resource across the

two deposits has been reported at just under 12 million tonnes grading around 0.45% lithium oxide, with defined ore reserves supporting an initial mining phase. Unlike many exploration-stage projects, Karibib moved into actual production.

In 2018, Desert Lion completed a shipment of approximately 30,000 tonnes of lithium concentrate to Jiangxi Jinhui Lithium Co. in China, exported through Walvis Bay under an offtake agreement.

The material was produced from stockpiled ore and represented

Namibia's first and only meaningful lithium export at a commercial scale.

The shipment was intended to mark the start of a continuous operation, with additional deliveries planned at regular intervals. That transition never occurred.

Desert Lion's financial collapse led to its acquisition by Lepidico Limited in 2019. Still, instead of scaling up concentrate production, Lepidico redirected the project toward its proprietary L-Max chemical processing model. That decision shifted Karibib from a

mining and export operation into a more complex, capital-intensive development requiring downstream integration.

The strategy coincided with growing financial pressure.

By 2024, Lepidico had suspended operations, and by 2025, the company had entered liquidation, leaving the Karibib project without active development despite having reached the feasibility stage.

At the same time, the project became entangled in a long-running dispute with Jiangxi Jinhui Lithium Co., linked to the original Desert Lion offtake agreement.

The matter proceeded to arbitration in Singapore, where an adverse ruling against Lepidico added further financial and legal strain.

Against this backdrop, Lepidico attempted to exit.

In 2025, International Lithium Corp secured an option to acquire 100% of Lepidico Mauritius, the entity holding an 80% stake in the Karibib project.

The deal, valued at just under CAD\$1 million plus

contingent payments, was structured as a low-cost entry into an advanced lithium asset.

The transaction ultimately collapsed.

Although International Lithium indicated it had secured funding, the Toronto Venture Exchange did not approve in time, and the option expired on 27 February 2026. Without regulatory clearance, the acquisition could neither be completed nor extended.

The failure of that deal left Karibib in a state of uncertainty.

Lepidico remains the legal owner, but without the financial capacity to advance the project. The arbitration outcome, unresolved stakeholder disputes and halted operations have combined to stall one of Namibia's most advanced lithium assets.

Beyond these flagship projects, lithium is being identified across a wider geological corridor stretching through central and southern Namibia.

Around Omaruru, Karibib and into the broader Erongo and Hardap regions, exploration companies are mapping pegmatite belts and

basin systems that host lithium alongside tin and tantalum.

Unlike Namibia's hard-rock lithium deposits, Arcadia Minerals Ltd's Bitterwasser project is built on lithium hosted in clays and subsurface brines across a vast salt pan system in the Hardap Region.

The project spans roughly 343,000 hectares and includes multiple pans, with the Eden Pan area currently hosting a JORC-compliant inferred resource of about 85 million tonnes grading around 633 ppm lithium, equivalent to roughly 286,000 tonnes of lithium carbonate equivalent. That resource represents only a fraction of the broader basin, where more than ten additional pans have been identified but not yet fully drilled.

Beneath these pans, geophysical surveys have outlined large conductive anomalies—some stretching tens of kilometres—interpreted as potential lithium-bearing brine reservoirs.

However, no compliant brine resource has yet been declared. The challenge lies in

extraction. Clay-hosted lithium requires chemical leaching to release lithium bound in fine sediments.

At the same time, brine extraction depends on consistent lithium concentrations and fluid flow, both of which remain unproven at Bitterwasser. The project is therefore defined by scale potential rather than certainty, with no reserves, no feasibility study and no production pathway yet established.

In many of these areas, lithium has been confirmed, but not fully quantified. Drill programmes are ongoing. Resource models are evolving. Namibia's lithium inventory is still being built, not yet finalised. What is emerging, however, is the scale of the system itself—multiple geological settings rather than isolated deposits, suggesting that Namibia's lithium potential may be broader than currently reported.

That uncertainty is not unusual. It reflects the stage Namibia is in—a transition from recognition to definition.

What has accelerated this shift is global demand.

Lithium has become central to the energy transition, driven by its role in battery technologies used in electric vehicles, renewable energy storage and electronics.

As demand grows, so does the need for new supply sources outside traditional producers.

Namibia is entering this market without legacy constraints.

It is not replacing an existing lithium industry. It is building one from the ground up, using modern exploration techniques, updated geological models and a policy framework that increasingly prioritises value addition.

The government has already moved to position lithium as a strategic mineral, restricting the export of unprocessed material and signalling a clear intention to capture more value domestically.

That policy shift, however, has not been without controversy.

The lithium rush exposed gaps in regulation, particularly around small-scale mining and export practices. Reports of lithium-bearing material being exported under the

“samples” classification raised concerns about oversight and the loss of value.

At the same time, Namibia still lacks large-scale lithium processing capacity, leaving a disconnect between policy ambition and industrial reality.

There is also a deeper tension.

The memory of Karibib's early export success—and its subsequent stagnation—has shaped how new projects are viewed. Investors, policymakers, and the public are no longer just asking whether lithium exists.

They are asking whether Namibia can sustain production, build value chains and avoid repeating the same cycle.

Still, the sector is far from mature.

There is no large-scale lithium production yet. Resource estimates are still being expanded. Infrastructure requirements, particularly water and energy, remain critical considerations.

Investment decisions are tied to volatile global prices and evolving technologies.



# How one project put Namibia on the rare earth map

**N**amibia's rare earth elements story begins quietly, long before the world understood just how strategic these minerals would become.

Since 1990, the country has hosted one of the world's most unusual and significant heavy rare earth deposits. Yet, for decades it remained largely undeveloped,

overshadowed by uranium, diamonds and base metals. Today, that narrative is shifting as global demand for magnet metals accelerates and Namibia's position in the supply chain becomes harder to ignore.

At the centre of this story is the Lofdal Heavy Rare Earth Project, located in the Kunene

Region, northwest of Khorixas.

Discovered during regional exploration campaigns in the 1970s, Lofdal only began to attract serious attention in the post-independence era as geological understanding improved and rare earth markets evolved.

Early work through the 1990s and early

2000s remained limited, largely because prices were weak and China dominated global supply.

Rare earths were not yet widely treated as critical minerals as they are today, and Namibia's mining industry had other stars commanding capital and policy attention.

That changed as the energy transition gathered speed and the world began scrambling for secure supplies of dysprosium, terbium, neodymium and praseodymium, metals essential to permanent magnets used in electric vehicles, wind turbines, electronics and defence applications.

In Namibia's case,

Lofdal stood out not simply because it contained rare earths, but because it contained heavy rare earths, which are generally scarcer and more strategically sensitive.

Namibia Critical Metals now describes Lofdal as a globally significant deposit of dysprosium and terbium, and as one of the most important heavy rare-earth projects outside China.

The project's evolution has been gradual but substantial. A 2014 preliminary economic assessment first gave the market a glimpse of its potential.

An updated PEA filed in 2022 materially expanded the project's

scale and presented a post-tax net present value of about US\$391 million, a post-tax internal rate of return of 28%, and an estimated post-tax life-of-mine cash flow of roughly US\$698 million over 16 years. Then, in 2024, the mineral resource update pushed combined measured and indicated resources for Areas 4 and 2B to 58.5 million tonnes at 0.16% TREO, up from 44.76 million tonnes at 0.17% TREO in 2021, while contained dysprosium oxide in measured and indicated resources rose to 4,503 tonnes and terbium oxide to 692 tonnes.

By late 2025, Lofdal had moved another step closer to reality.





Namibia Critical Metals released a pre-feasibility study for the 2B-4 project, showing proven and probable reserves of 32 million tonnes, with average annual production of 1,478 tonnes of TREO (excluding lanthanum and cerium), including 119 tonnes of dysprosium, 17.8 tonnes of terbium, and 841 tonnes of yttrium.

The study outlined a 13-year mine life, pre-production capital costs of US\$273.4 million and after-tax NPV of US\$275.5 million in the base case, with stronger upside under a higher-price scenario. Just as important, the project

is fully permitted and carries a 25-year mining licence.

The strategic significance of Lofdal has also been underlined by Japanese involvement.

The project is being developed under a joint venture and funding arrangement with the Japan Organisation for Metals and Energy Security, or JOGMEC, aimed at securing long-term heavy rare earth supply for Japan.

In March 2026, Namibia Critical Metals announced that Toyota Tsusho had been selected through JOGMEC's public tender process to join the project as part of JOGMEC's

ownership interest. That matters because Toyota Tsusho is not only a major Japanese trading house but also an established player in the rare-earth processing industry.

Its arrival gives Lofdal stronger industrial credibility, downstream market access and a clearer commercial pathway than many African critical minerals projects enjoy.

Still, Namibia's rare-earth story is not just about Lofdal. In central Namibia, the Eureka Project, now held by ReeXploration after the company's 2025 rebrand from E-Tech Resources, has built a different kind

of case. Unlike Lofdal's heavy emphasis on rare earths, Eureka is more NdPr-focused and hosted in monazite.

The company says bench-scale work has already demonstrated the production of a clean monazite concentrate. At the same time, the project currently hosts a roughly 310,000-tonne rare-earth resource at 4.8% TREO, with NdPr accounting for about half of the basket value.

The company's stated next steps include further drilling, resource expansion and advancing studies toward PEA and PFS level.

Another project that has helped widen the national picture is Eisenberg, being advanced by Broadmind Mining. Broadmind describes itself as a 100% indigenously owned Namibian company and says it announced a maiden NI 43-101 mineral resource estimate for Eisenberg in March 2022. In May 2024, the company obtained an independent preliminary economic assessment, and it says it has received an environmental

clearance certificate and is applying for a mining licence. Reporting in early 2025 indicated that the proposed operation was envisaged with a 25-year lifespan. Although Eisenberg has not yet reached the same technical maturity or international profile as Lofdal, it is important because it shows that Namibia's rare-earth potential extends beyond a single flagship deposit.

More recently, early-stage momentum has emerged in Bonya, southern Namibia.

Kendrick Resources announced in February 2026 that it had exercised an option and entered into a definitive agreement to acquire a 70% interest in the Bonya licences.

In March, it reported assay results from the rare-earth carbonatite target at Teufelskuppe. Bonya remains an exploration play rather than a development project, but its progress suggests Namibia's rare-earth map is still expanding.

What makes Namibia's rare earth story

especially striking is that, despite this geological promise, the country still has no established large-scale commercial rare earth mine in operation. That means the sector remains more a story of potential than production.

Yet the direction of travel is now much clearer than it was a decade ago. Lofdal has moved into a far more advanced phase with a pre-feasibility study, reserves, permits and strategic Japanese partners.

Eureka is trying to grow into a larger NdPr-centred project with proven metallurgical promise. Eisenberg is pushing through its own licensing and development path. Bonya is adding new exploration energy.

The future of Namibia's rare-earth industry will depend on more than geology alone. Financing, processing routes, infrastructure, environmental management and access to non-Chinese supply chains will all determine whether these deposits become mines.



# Hidden metals return to the surface

**G**ermanium, gallium, niobium and vanadium are not yet major exports—but across old mines, new drilling and revived deposits, Namibia is rebuilding a critical metals pipeline 36 years after independence.

It began underground at the Tsumeb Mine, where early miners extracting copper and lead also encountered germanium, long before the metal found its place in fibre optics and infrared technology.

**That history still shapes Namibia's position today.**

Thirty-six years after independence, the country is not yet a major producer of metals such as germanium, gallium, niobium, tantalum and vanadium.

But across processing plants, historic deposits, and new exploration projects, these metals are returning to the spotlight amid a broader shift in global demand.

The anchor remains the Tsumeb Smelter, now owned by Sinomine Resource Group.

Tsumeb is no longer a mine. It is a processor, and that distinction is central to Namibia's role.

Germanium and gallium are not mined locally at scale. They are recovered during the smelting of polymetallic concentrates, placing Namibia inside global supply chains for semiconductors, fibre optics and specialised industrial applications.

Sinomine is now targeting historical slag dumps at Tsumeb, where internal estimates suggest significant quantities of germanium and gallium remain locked in decades-old material. Plans to reprocess this slag could extend production without new mining,

effectively turning waste into feedstock.

Output, however, will remain dependent on the nature and volume of incoming material.

Away from Tsumeb, Namibia's critical metals story shifts into exploration.

In the Otavi Mountain Land, Golden Deeps Limited is revisiting ground that once fed the Tsumeb system.

The company controls the Abenab–Nosib project, a historically mined deposit where vanadium was produced alongside zinc and lead, with concentrates grading up to around 16% V<sub>2</sub>O<sub>5</sub>. Modern exploration has defined a resource of approximately 2.3 million tonnes at around 1.1% V<sub>2</sub>O<sub>5</sub> equivalent, confirming that the system still holds economic potential.

Nearby, at Khusib Springs, Golden Deeps is targeting copper mineralisation that is also carrying germanium and gallium. Sampling has returned germanium grades exceeding 300 g/t in places, significant in a market where global

production volumes remain limited.

No compliant resource has yet been declared for germanium or gallium at these projects, and development remains at the exploration stage. The company's approach is to develop copper and zinc as primary commodities, with critical metals recovered as by-products.

At Kameelburg, Aldoro Resources Ltd is advancing a carbonatite-hosted system containing rare earth elements and niobium.

Aldoro holds an 85% interest in the project, which spans multiple licences in central Namibia.

The project has already delivered a large inferred resource, which has expanded significantly through ongoing drilling, with recent estimates exceeding 500 million tonnes. Niobium occurs throughout the system, often increasing with depth, alongside rare-earth elements used in magnets and advanced technologies.

Despite its size, Kameelburg remains at an early stage. There are

no declared reserves, no feasibility study and no confirmed production timeline. Development will depend on further drilling, metallurgical testing and financing.

Tantalum is still produced in Namibia, but in limited volumes. At Uis, operated by Andrada Mining Limited, tantalum is recovered as a by-product of tin mining.

The metal is contained within pegmatite-hosted ore, and its recovery is tied to tin production rather than a dedicated tantalum operation.

Namibia also hosts known tantalum deposits, including the Three Aloes project in the Erongo Region, which contains defined resources but is not currently in production.

Vanadium, despite its historical production at Abenab, has not yet re-established itself as a modern mining sector in Namibia.

The metal is gaining attention globally for its role in steel and long-duration energy storage, but locally it remains tied to exploration and historical data rather than active production.



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