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Langer Heinrich Mine makes first post-restart shipment of uranium concentrate

The Langer Heinrich uranium mine achieved a milestone on Thursday when it shipped its first batch of uranium concentrate since restarting production in March 2024.

The production and drumming of the uranium concentrate was completed on 30 March 2024, marking a crucial step in Langer Heinrich's operational resurgence.

"Achieving first production at the Langer Heinrich Mine is an important milestone for Paladin. I would like to thank all our staff and contractors for their hard work and dedication in returning this globally significant uranium mine to production" said Paladin's CEO, Ian Purdy.

This comes as the uranium mining giant announced that it had successfully raised N$169 million from a share purchase plan aimed at funding the restart of operations at the Langer Heinrich uranium mine in May 2022.

This funding was secured from a pool of applications totalling over N$1.2 billion, which formed part of a larger N$2.4 billion fundraising initiative planned by the

company.

The mine restart project commenced early work activities immediately, with the goal of resuming uranium production at the mine in 2024.

Following the successful completion of the restart project and the recommencement of commercial production in March 2024, Paladin Energy, the mine parent company, has allocated N$477 million (US$26 million) in capital expenditure for FY2025 to ramp up production at the mine in Namibia.

According to the company, full-scale mining activities are expected to resume in FY2026, and the mine is projected to achieve significant production levels in FY2025, with higher volumes anticipated in the second half of the year.

Paladin forecasts production to fall within a range of 4.0 to 4.5 million pounds of uranium oxide (U_3O_8) for FY25 and achieve a plant recovery rate of 85-90%.

The company has also outlined its cost expectations, estimating a cost of production between N$ 514 (US$28) and N$569 (US$31) per pound of U_3O_8.

The cost includes stockpile rehandling, processing, and site administration costs, but excludes general and administrative costs.

Energy

Namibia lacks infrastructure for green hydrogen exports

Namibia currently lacks the industrial infrastructure needed to achieve the goals set out in the Green Hydrogen and Derivatives Strategy, a new report by Dechema says.

The strategy outlines a production goal of

1 to 2 million tonnes of green hydrogen by 2030 and 10 to 15 million tonnes of green hydrogen equivalents by 2050.

According to the co-author of the report, Chokri Boumrifak, transportation infrastructure is very important as shipping green hydrogen can be expensive due to the energy-intensive processes required to convert it into a liquid state for transport.

He says focusing on products like ammonia, which can be transported in a liquid form and used directly in fertiliser or chemical production, can bypass this cost increase.

"Long-distance transportation becomes more feasible when conversion steps are reduced. Therefore, it becomes imperative to focus on products that can be further processed with higher value," he says.

He further explained that most of Namibia's green hydrogen projects will produce ammonia, which can be transported in a liquid form.

In these cases, it would be favourable to utilise ammonia as an intermediate for chemicals or fertilisers instead of cracking the compound to regain the hydrogen.

Despite currently higher green hydrogen production costs (US$4-9 per kg) compared to conventional methods (US$1-2.5 per kg), Namibia has a significant advantage.

The report says the country's renewable energy potential can significantly lower electricity costs, a key factor in production efficiency.

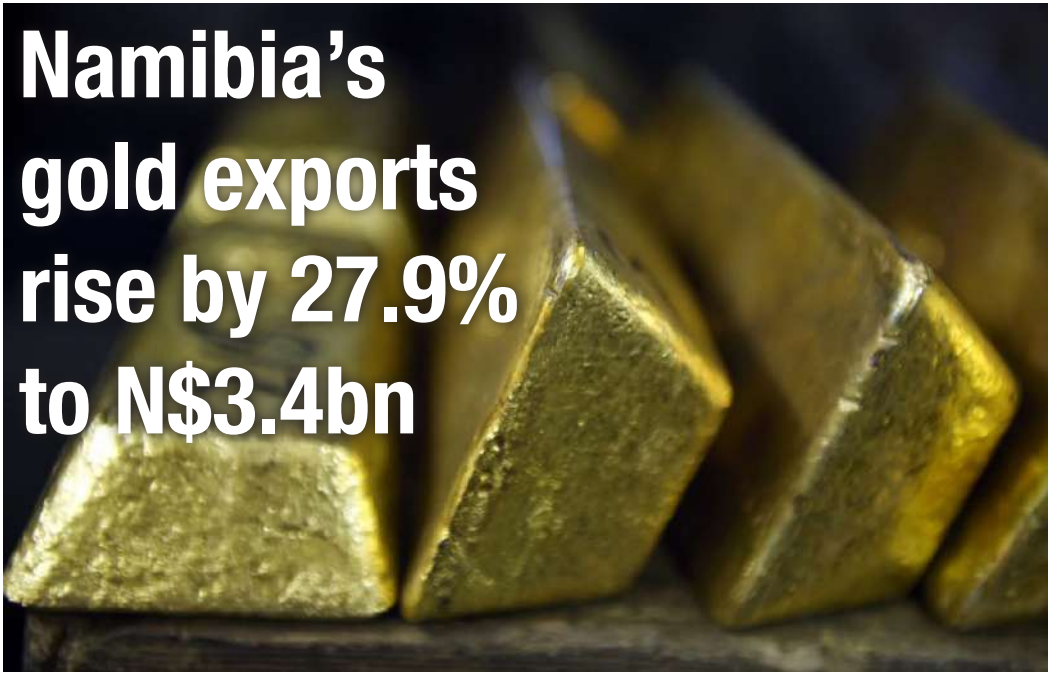
The report further says Namibia's photovoltaic potential ranges between 2,150 and 2,450 kWh/m2/a. The wind potential for the port areas Walvis Bay and Lüderitz are estimated to be 3,047 kWh/m2/a and 4,936 kWh/m^2/a, respectively.

It is estimated that in 2030, around 227 kt of green hydrogen can be produced at Omaruru, Walvis Bay and Lüderitz together.

Dechema is a non-profit association with over 5,500 members that brings together experts from various fields to promote scientific exchange in relevant fields, while ISOE, a leading institute for sustainability research, focuses on solutions that consider ecological, social and economic conditions.

Mining

Namibia's gold exports rise by 27.9% to N$3.4bn



The Bank of Namibia reports that gold exports have increased by 27.9%, reaching N$3.4 billion attributed to increased export volumes, a higher US Dollar gold price, and the depreciation of the local currency.

According to the Bank of Namibia's Quarterly Bulletin, export revenue from other minerals also increased annually but decreased on a quarterly basis mainly due to changes in the volume of gold exports.

Annual export earnings from other minerals grew by 23.7% to N$4.2 billion, driven by higher gold export volumes and increased international prices. The value of gold exports specifically rose due to the same factors.

"Gold prices increased, supported by strong buying by central banks for safe haven purposes and concerns over sluggish global economic activity," the bank said.

Conversely, export revenue from other minerals dropped by 6.7% on a quarterly basis to N$4.2 billion.

"This decline resulted from lower zinc concentrate export receipts, influenced by decreased prices and volumes, as well as reduced gold export receipts due to lower volumes," said the report.

Gold production saw a year-on-year increase due to the mining of higher-grade ore but declined on a quarterly basis in the first quarter of 2024.

Year-on-year, gold production rose by 24.4% to 2,345kg in the reviewed quarter compared to the same quarter in 2023.

"This increase stemmed from higher-grade ore mined from both the underground mine and open pit mining areas. However, on a

quarterly basis, gold production significantly declined by 31.5% from 3,422kg recorded in the preceding quarter," the report noted.

The Bulletin highlighted that these fluctuations were due to variations in the grade and quantity of ore processed during the first quarter of 2024.

Meanwhile, international gold prices hit record levels, rising year-on-year and quarter-on-quarter by 9.7% and 4.9%, respectively, to average US$2,072 per fine ounce during the reviewed quarter.

"The yearly increase in gold prices was driven by strong demand from central banks and investors amidst global uncertainty as geopolitical tensions intensified," the bank added.

The quarterly increase was further supported by rising expectations that monetary authorities might soften their hawkish stance, making the non-interest-bearing metal more attractive.

Energy

Daures seeks generation licence for 739.2 kWp Solar PV Project

Daures Net Zero Green Hydrogen (Pty) Ltd, Namibia, has applied for a generation licence at the Electricity Control Board.

The proposed project, located in the Daures Constituency of the Erongo Region, includes an installed capacity of 739.2kWp Solar PV.

The Daures Green Hydrogen Village project was initiated with a grant of N$220 million from the German government.

It is being implemented in phases, with the first phase focusing on research and development, while phases two, three and four will scale up production for international markets. While ammonia fertiliser production is envisioned to begin in the second half of phase one, starting from June 2024 to 2027, it is during phase two that ammonia fertiliser will be exported to international markets.

The project is expected to produce 18 tonnes of green hydrogen and 100 tonnes of green ammonia per year.

During phase 1, 0.88MW of solar and 0.1MW of wind energy is produced annually on a 300-hectare site.

Green hydrogen is produced through the process of electrolysis, which involves splitting water molecules, releasing the oxygen molecule and converting the remaining hydrogen molecules into energy – a cheaper and environmentally friendly source of energy.

Phase two of the project will run from 2029 to 2032 and is expected to export green ammonia both regionally and internationally.

During phase three, 700,000 tonnes of ammonia are expected to be exported internationally.

As Africa's first net-zero (carbon-free) village, the Daures Green Hydrogen Village comprises a solar panel field with a substation and electrolyser, training and laboratory facilities, a campsite for students, visitors, and workers, as well as a greenhouse, a nursery, and seven boreholes that pump 70 cubic metres of water daily.

The project is expected to produce 18 tonnes of green hydrogen and 100 tonnes of green ammonia per year.

Currently, 206 people are employed at the village, with the majority being residents of the Daures Constituency.

The Daures Green Hydrogen Village is a collaborative effort between Enersense Namibia (90% shareholding), the Daure Daman Traditional Authority (5.5% shareholding), and the Tsiseb Conservancy (2.5% shareholding).

Metals

Namibia ramps up battery material processing with new N$600m plant

Chinese lithium miner Xinfeng has completed construction of a N$600 million processing plant in Uis, Namibia, positioning the country to capitalize on the global electric vehicle (EV) boom.

This strategic move aligns with Namibia's recent ban on unprocessed lithium exports, aiming to capture greater value addition and economic benefits from its abundant natural resources.

Chinese Ambassador Zhao Weiping, who announced the completion, emphasized the significant impact of the new plant on the Namibian economy.

"While I may not have the exact details of the plant's capacity, I can affirm that its construction has likely cost hundreds of millions of Namibian dollars," Ambassador Weiping remarked at a recent engagement at the Chinese Embassy in Windhoek.

The plant, built using cutting-edge dense medium technology, boasts efficient processing while adhering to Namibia's

strict environmental sustainability standards. This echoes the government's call for responsible mining practices that prioritize value addition over raw material exports.

Xinfeng Spokesperson Aqisha Jooste previously highlighted the company's commitment to these goals.

"Our investment will be in the range of N$600 million for the processing plant. The technology is expected to be top of the range, one of only three on the continent, which is good for the environment as water use is limited due to environmental demand."

In a strategic move to boost local industry, Namibia banned the export of unprocessed lithium and other critical minerals in June, seeking to encourage local processing and benefit from the growing global demand for metals used in clean energy technologies.

This policy shift is expected to increase Namibia's value addition capacity and create more jobs in the local mining and processing sectors.

The establishment of the lithium processing plant represents a significant step forward for Namibia's economy, positioning the country as a key player in the global supply chain for battery materials. By enhancing its processing capabilities, Namibia aims to increase its share of the profits from the lucrative lithium market, reduce its dependency on raw mineral exports, and foster sustainable economic growth.

This development is not only crucial for the mining sector but also for Namibia's broader economic aspirations. The country's strategic focus on renewable energy and sustainable practices is expected to attract more foreign investment, create job opportunities, and improve the livelihoods of its citizens.

Energy

Giuseppe Surace appointed Hyphen COO

Hyphen Hydrogen Energy (Hyphen) has appointed Giuseppe Surace to the position of Chief Operating Officer (COO) effective from 1 July 2024.

Surace has a strong understanding of African and international energy markets and was until recently Chief Operating Officer for six years at the largest single-train oil refinery in the world, Dangote Petrochemical Refinery, where he provided strategic and operational leadership.

An experienced energy sector executive with nearly 30 years' experience managing and growing large-scale infrastructure projects globally, Surace will support the

development of Hyphen's green hydrogen project in Namibia by providing strategic direction, leadership, and structure for the project, including the delivery of Hyphen's socio-economic development targets and ensuring the project is designed to comply with the highest international environmental and safety standards.

Surace holds a Master's Degree in mechanical engineering from the University of Calabria and an MBA from Bocconi University and MIP School of Management in Milan, Italy.

"I've spent my entire career in the energy sector and it's clear to see that the industry is changing for the better. Green hydrogen will play an increasingly important role in the future energy mix as industry moves away from reliance on fossil fuels. In this respect, Hyphen's transformative impact will extend far beyond Namibia and it's so exciting to be joining the company at this time," he said of his appointment.

"Having worked in Africa's energy sector for more than a decade, I look forward to applying my knowledge to help scale up green hydrogen production, drive development and investment in Namibia, and accelerate the global energy transition."

According to Hyphen, Surace has a track record of delivering complex mega projects in new and emerging energy markets, working in engineering, operational, and managerial roles.

"Giuseppe's experience in running and implementing mega projects in the energy sector, both in Africa and internationally, will be invaluable to Hyphen. I personally look forward to working closely with him as we build out this transformational project," said Hyphen Hydrogen Energy CEO, Marco Raffinetti.

Hyphen Hydrogen Energy, a joint venture between Nicholas Holdings Limited and ENERTRAG, was appointed by the government as the preferred bidder to develop the country's first large-scale export green hydrogen (H2) project in two concession areas in the Tsau //khaeb National Park.

Energy

Namibia's renewable energy contribution soars to 11%

Namibia's renewable energy contribution to the national energy mix has risen significantly to 11%, up from 6% nearly four years ago.

This marks significant progress in the country's efforts to diversify its energy sources and achieve energy security.

According to the Electricity Control Board (ECB), this growth is attributed to cost-reflective tariffs that have spurred 23 Independent Power Producers (IPPs) to collectively invest approximately N$5 billion in Namibia's renewable energy sector.

ECB Chief Executive Officer, Robert Kahimise, emphasized the importance of cost reflectivity for the long-term viability and sustainability of the electricity supply industry.

"Cost-reflective tariffs attract private sector investment in Independent Power Producers, as investors are more likely to commit to a sector where returns are predictable and sufficient to cover costs," he said.

Kahimise noted that the drive towards cost-reflective tariffs remains a top priority, not only for Namibia but for regulators in the Southern African Development Community (SADC) region. Originally, SADC

had tasked its member states to adopt cost-reflective tariffs by 2013, but the target was revised to 2019.

The announcement comes amid a substantial energy shortage in the Southern Africa region.

"This situation will prevail over the next several years until enough new generation and transmission capacity has been built; thus putting pressure on energy tariffs not only in Namibia but in the entire SADC region," Kahimise said.

The CEO highlighted that due to drought conditions in countries from which Namibia imports power, such as Zambia and Zimbabwe, NamPower requires sufficient funds to procure power from alternative sources when necessary to ensure a secure supply. Kahimise also noted that while several countries have made significant progress in reforming their tariff methodologies, most SADC member countries' tariffs remain below full-cost reflectivity or are affected by various forms of government subsidies, leading to power outages and load shedding. "It is important to note that amongst all SADC Member States, only Namibia, Mauritius, and Tanzania have cost-reflective tariffs," he said.

Namibia is targeting to generate 10 gigawatts (GW) of renewable energy in the next 20 years, a goal that is 30 times its existing generation capacity. Currently, Namibia has a generation capacity of approximately 486.5 MW against an estimated demand of 600 MW, with independent power producers contributing an estimated 70 MW to the grid.

This ambitious target is part of Namibia's broader strategy to become a leading renewable energy hub in Africa. By leveraging its abundant solar and wind resources, Namibia aims to reduce its dependency on imported electricity and create a sustainable energy future.

The shift towards renewable energy is also expected to have significant economic benefits, including job creation in the renewable energy sector and the stimulation of local industries. As Namibia continues to attract investment in renewable energy, it positions itself as a key player in the global transition to sustainable energy sources.

Namibia's progress underscores its commitment to fostering a resilient and sustainable energy landscape, which is crucial for the country's long-term economic stability and growth. As global demand for clean energy technologies increases, Namibia's strategic investments and policies are likely to yield substantial returns, both economically and environmentally.

Energy

Chevron contracts Deepsea Bollsta Rig for exploration in Namibia's Orange Basin

Chevron Corporation has secured a 63-day contract with Northern Ocean, for the Deepsea Bollsta semi-submersible rig to be deployed in Namibia's Orange Basin for a high-impact exploration campaign commencing in the fourth quarter of 2024.

Chevron confirmed its plans to drill an exploratory well within Block 2813B, governed by Petroleum Exploration Licence (PEL) 90.

This block lies north of TotalEnergies SE's (TTE) significant Venus oil and gas discovery.

According to Northern Ocean, the Deepsea Bollsta, renowned for its capabilities in ultra-deepwater environments, aligns with the challenging conditions of the Orange Basin.

Its advanced technology ensures precise and efficient drilling, minimising risks and maximising exploration success.

"Northern Ocean Ltd. is pleased to announce a contract award for Deepsea Bollsta with a subsidiary of a major operator for work in Namibia. The contract duration is for one well estimated at 63 days and will likely commence in the fourth quarter of 2024," said the Oslo Stock Exchange-listed company.

The company said the rig has been functioning within the Orange Basin for 18 months, having been previously contracted by Shell Namibia Upstream B.V., transited from Norway to Namibia in December 2022.

This period of operation has served to showcase the effectiveness of deploying a sixth-generation semi-submersible rig in the region.

"Before the commencement of the new contract, the Deepsea Bollsta will undertake a five-year class survey and there will also likely be a short idle period prior to commencement," the report said.

The Orange Basin, a promising frontier basin, has attracted major oil companies seeking new reserves. Chevron's exploration underscores the basin's potential for substantial hydrocarbon discoveries.

The basin's geology, combined with recent successes by other energy giants, makes it a prime target for further exploration.

The proximity of Block 2813B to TTE's Venus discovery adds further significance. The Venus

exploration, one of the largest in recent history, has fueled increased interest and investment in the Orange Basin.

Chevron's exploration efforts in a neighboring block solidify the basin's potential for substantial oil and gas reserves, offering a promising outlook for future energy production. The Bollsta rig is managed by Odfjell Drilling following an agreement with Northern Ocean in December 2021.

Energy

Botswana and NAMCOR in talks over fuel storage facility

Botswana President Mokgweetsi Masisi says the Botswana Oil Company has initiated discussions with the Namibia National Petroleum Corporation (NAMCOR) to explore potential collaboration on shared fuel storage facilities at Walvis Bay.

He says this collaboration aims to enhance fuel transportation and streamline oil sourcing from Angola.

"Another potential area of collaboration exists in the energy sector, where Botswana Oil Company has initiated discussions with the Namibia National Petroleum Corporation to explore possibilities for cooperation in establishing shared fuel storage facilities at Walvis Bay. Discussions also include joint efforts for fuel transportation and coordinated approaches toward sourcing oil from Angola," Masisi said.

He said Namibia is also emerging as a key player in oil exploration and green hydrogen development, positioning itself for substantial economic growth.

This potential was highlighted at the

Swakopmund International Trade Expo, an event organised by the Namibia Chamber of Commerce and Industry (NCCI), which promotes trade and investment prospects.

"Namibia is emerging as a key hub for oil exploration and green hydrogen development, poised to elevate the country to unprecedented heights of economic prosperity," Masisi noted, emphasising the importance of events like the Swakopmund International Trade Expo in shedding light on trade and investment opportunities.

As both nations explore these collaborative opportunities, they aim to strengthen their economic ties and enhance regional development.

He said the collaboration extends beyond energy, with both Botswana and Namibia leveraging renowned wildlife safari offerings to boost tourism through joint marketing efforts.

Masisi emphasised the potential benefits, saying: "By engaging in joint marketing efforts, our countries can extract more value. Both nations have ratified significant regional agreements, such as the Southern Africa Development Community Free Trade Protocol and the Tripartite Free Trade Area Agreement".

He said these agreements aim to boost trade by creating a single market of approximately 700 million people, with an estimated GDP of over US$1.4 trillion.

"Our two countries have both ratified comparable regional agreements... aimed to boost trade," Masisi highlighted.

The infrastructure potential was also underscored, focusing on modern communication technologies and fibre optic connectivity.

"Another opportunity is the fact that you have several ports, and we, being land-linked, need to communicate with the rest of the world using the most up-to-date technologies," said Masisi.

A pivotal bilateral project, the Trans-Kalahari rail line, is also under consideration to enhance goods transportation between the two nations and the broader Southern Africa Development Community (SADC) region.

"Governments must uphold the responsibility of fostering trade investment by establishing an environment that enables the private sector to flourish. On a bilateral scale, the Trans-Kalahari rail line stands out as a crucial project that demands robust pursuit to enhance the transportation of goods between our two nations and the broader SADC region," he said.

The plan to establish oil storage facilities outside the country comes as the planned expansion of domestic strategic reserves has dragged on for several years.

The 171 million litres Tshele Hills storage project, which aims to increase the country's strategic oil reserves to 60 days of supply, has been in the works since 2010.

This comes as Botswana Oil announced plans to establish fuel storage facilities at Mozambican and Namibian ports which will double the country's strategic oil reserves and provide a buffer against declining refining capacity in South Africa.

While the country's existing strategic facilities can carry the national demand for 15 days without additional supply, the facilities due in Mozambique and Namibia would collectively hold 30-day stock.

Botswana consumes approximately 100 million litres of various fuels each month and receives nearly all of its supplies from South Africa.

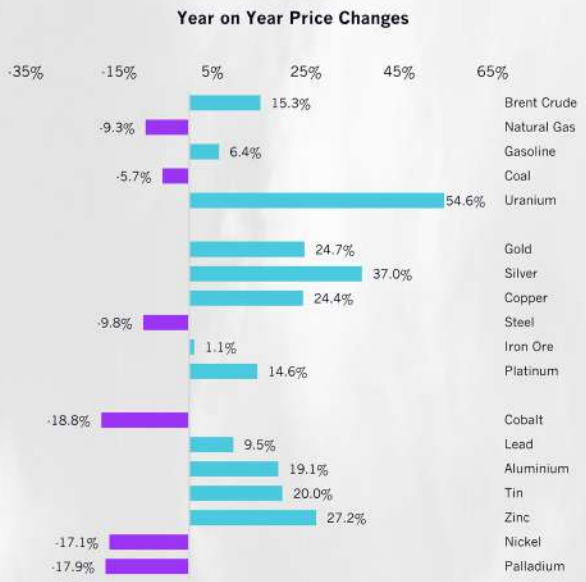
The government maintains strategic reserves as a buffer for emergencies, which have occurred in the past when supplies from South Africa have been disrupted by strikes and protests along the supply routes.

Commodities

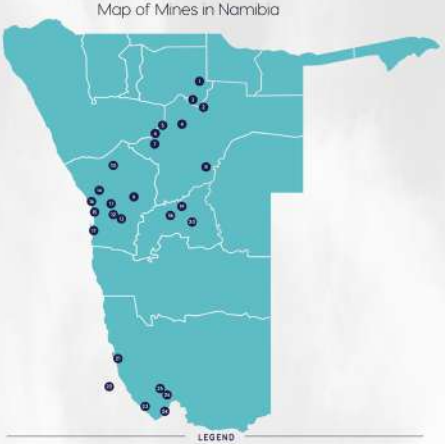
Price Movements

Commodity	Last Spot Price	Change Weekly	Change Monthly
ENERGY			
Brent	87.87	3.4%	10.0%
Natural Gas	2.36	-9.3%	-16.4%
Gasoline	2.62	4.3%	9.0%
Coal	136.5	2.9%	-0.4%
Uranium	85.65	0.3%	-4.5%
METALS			
Gold	2,383.87	2.4%	0.3%
Silver	31.18	6.9%	-0.6%
Copper	4.64	5.6%	-0.9%
Steel	3,369	2.1%	-2.8%
Iron Ore	113.06	6.1%	5.0%
Platinum	1032.40	3.9%	2.0%
INDUSTRIAL			
Cobalt	27,150	0.0%	0.0%
Lead	2,252	1.3%	0.5%
Aluminium	2,536	0.5%	-4.2%
Tin	33,158	3.0%	5.9%
Zinc	3,006	2.4%	3.3%
Nickel	17,404	0.8%	-5.9%
Palladium	1,024	5.9%	10.8%

Source: Bloomberg, Cirrus Data



Map of Mines in Namibia



LEGEND

1. Tschudi Mine
2. Trigon Kombat Copper Mine
3. Ohorongo Cement
4. B2Gold Otjikoto Gold Mine
5. Okorusu Mine
6. Whale Rock Cement
7. Okanjande Graphite Mine
8. Otjozondu Manganese Mine
9. QKR Navachab Gold Mine
10. Andrada Uis Tin Mine
11. Rossing Uranium Mine
12. Swakop Uranium Husab Mine
13. Langer Heinrich Uranium Mine
14. Namib Lead and Zinc Mine
15. The Salt Company
16. Trekkopje Mine
17. Walvis Bay Salt and Chemicals
18. Matchless Mine
19. Otjihase Mine
20. Lodestone Dordabis Iron Ore Mine
21. Elizabeth Bay Mine (Sperrgebiet Diamond Mining)
22. Debmarine Namibia
23. Namdeb Southern Coastal Mines
24. Namdeb Orange River Mines
25. Vedanta Skorpion Zinc Mine
26. Rosh Pinah Zinc Mine

Source: Chamber of Mines of Namibia, 2023 Annual Report