

# MINING DEVELOPMENTS

JULY - AUGUST 2023

MAGAZINE



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## Anglo American's Game-Changing Investment

### *\$1.5 Billion Boosting South Africa's Mining Projects*



Anglo American, one of the world's largest mining companies, has announced plans to invest \$1.5 billion in South African mining projects over the next five years. The investments will focus on the company's platinum, iron ore, and metallurgical coal operations in South Africa.

The investment is a vote of confidence in South Africa's mining industry, which has been struggling in recent years due to low commodity prices and regulatory challenges. The investment is also expected to create jobs and boost economic growth in South Africa.

Anglo American's platinum operations in South Africa are among the world's largest. The company plans to invest \$500 million in these operations over the next five years to extend the life of mines and increase production.

Anglo American's iron ore operations in South Africa are also significant. The company plans to invest \$500 million in these operations over the next five years to expand production and improve efficiency.

Anglo American's metallurgical coal operations in South Africa are also important. The company plans to invest \$500 million in these operations over the next five years to expand production and improve environmental performance







The investment by Anglo American is a welcome boost for South Africa's mining industry. The investment is expected to create jobs, boost economic growth, and help to position South Africa as a leading mining destination in the years to come.

#### some of the key benefits of the investment:

- It will create jobs and boost economic growth in South Africa.
- It will help to position South Africa as a leading mining destination in the years to come.
- It will support the company's long-term growth plans.
- It will help to improve the environmental performance of the company's operations.

#### challenges that the investment faces:

- The low price of commodities could impact the profitability of the investment.
- Regulatory challenges could also impact the investment.
- The investment could face opposition from environmental groups.

The investment by Anglo American is a positive development for South Africa's mining industry. The investment is expected to create jobs, boost economic growth, and help to position South Africa as a leading mining destination in the years to come.

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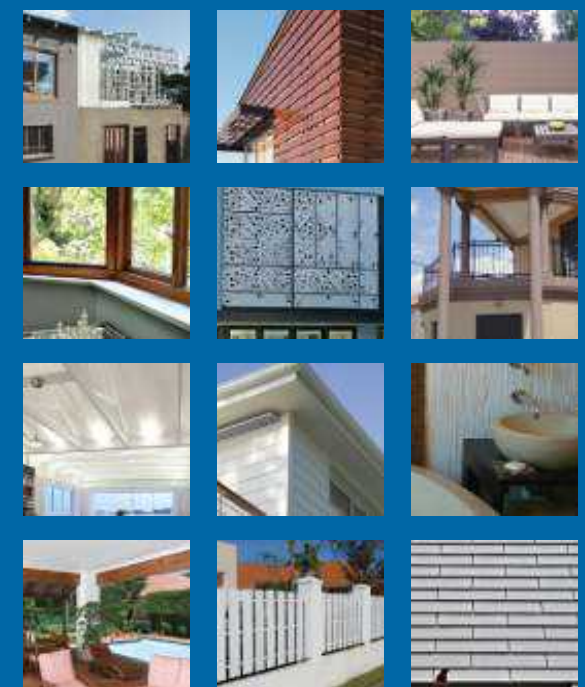
# Lasting Strength with fibre cement

▶ Everite Building Products has over the years established a reputation for producing a variety of outstanding quality products which have been used in a wide range of external and internal applications.

Nutec is the registered name for products manufactured without asbestos as a raw material. Nutec fibre cement product are manufactured using a mixture of cellulose fibre, cement, silica and water.

Everite is renowned for its comprehensive range of Nutec Roofing and Cladding Solutions and includes fibre-cement roofing, cladding, ceilings and building columns amongst others.

Nutec fibre-cement high performance properties and added benefits include: the use of safe renewable fibres; considerable tensile strength with enhanced dynamic load bearing properties; excellent thermal properties; water-and wind resistance; hail resistance; fire resistance and resistance to fungus, rodents and acid.



▶ Everite Building Products, is an appointed licensee by the Xella Group to manufacturer Hebel Autoclaved Aerated Concrete (AAC). Everite Building Products is the only manufacturer of AAC in Africa.

AAC as a building material has gained a considerable share of the international construction market since its inception in 1923 in Sweden and today maintains its reputation of the building material of the future. It is viewed as a revolutionary material that offers a unique combination of strength, light-weight, thermal insulation, sound absorption, unsurpassed fire resistance and unprecedented ease of construction.

Since commissioning the AAC plant in 2017, Everite Building Products has enjoyed considerable success in specification of the product to landmark projects in South Africa.





# Determining drinking water safety is essential



Access to safe drinking water is a privilege not shared by many in Africa. Often, drinking water is contaminated - by damaged infrastructure and distribution systems, breakdowns at treatment facilities, rapid urbanisation and general water pollution - meaning scores of South Africans are obliged to turn to groundwater.

However, to avoid disease and ill health, it is important to ascertain whether this groundwater is fit for human consumption.

Condition monitoring specialist company, WearCheck, recently integrated its sister company - previously Set Point Water Laboratories, now WearCheck Water - into its operations, adding yet another analysis service to the company's repertoire.

WearCheck's extensive range of condition monitoring services also includes the scientific analysis of used oil and other fluids, asset reliability care (ARC), transformer oil testing, lubricant-enabled reliability (LER) services and advanced field services (AFS), (rope testing, technical compliance and non-destructive testing), amongst others.

Thelma Horsfield, general manager of WearCheck Water, explains that the company is ISO 17025:2017 accredited, and tests water from any source. 'We conduct analysis on water from many sources - ranging from drinking water to factory/industrial effluent, and everything in between - to determine the presence and levels of potentially harmful substances, whether the water is used for drinking, agriculture or to be disposed of after an industrial process,' she said.

Horsfield continues, 'Naturally available ground and surface water are invaluable sources of water that should, when being utilised, be closely monitored. The South African Bureau of Standards (SABS) and National Water Act published SANS241: Drinking Water Quality,

outlining the minimum requirements for safe drinking water.

WearCheck Water operates two ISO17025-accredited laboratories - one in Cape Town, the other in Johannesburg. Technicians at these laboratories conduct scientific analysis of water samples for a range of clients in different industries from across Africa.

Moses Lelaka, WearCheck's technical water lab manager in Johannesburg, explains some of the quality systems that govern the water-testing process:

'SANS241 sets out the minimum requirements for potable water to be considered safe for human consumption, covering physical quality, chemical components, heavy metals levels, organics and microbiology. Additional determinants for nearby pollutant influences must be added to SANS241. For instance; where there is nearby agriculture, checking for fertiliser contamination should be included.

'However, we find that, while annual testing of SANS241 determinands is followed by water providers, monitoring programmes are often lacking. Daily, weekly, and bi-weekly monitoring, based on the number of people serviced, is often overlooked by SANS241 standards.

'Monitoring is an invaluable tool that signals environmental changes in the water table that can quickly occur due to seasonal changes, rainfall, drought, heavy industry, agriculture, natural disasters, and so much more. Responsible monitoring signals any changes in water quality before any harm to life occurs.'

WearCheck offers water analysis services in every region in Africa where the company has a presence (RSA, Zambia, Zimbabwe, Ghana, Namibia, Mozambique, and the DRC).

For more information, please visit [www.wearcheck.co.za](http://www.wearcheck.co.za), email [marketing@wearcheck.co.za](mailto:marketing@wearcheck.co.za) or call

WearCheck's water division in Johannesburg on +27 11 392 6322 or in Cape Town on +27 21 001 2100.



Moses Lelaka, WearCheck Water's technical water lab manager, believes it is imperative that drinking water is tested before consumption, due to many and varied sources of potential contamination that can severely affect people's health. It is equally important to determine the safety of effluent, to ensure that it is disposed of in an earth-friendly manner.



Condition monitoring is  
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## Contributions

The editors welcome news items, press releases, articles and photographs relating to the Mining Industry. These will be considered and, if accepted, published. No responsibility will be accepted should contributions be lost, damaged or incorrectly printed.

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# South Africa's Shimmering Dilemma

## Platinum Group Metals Production Plunges

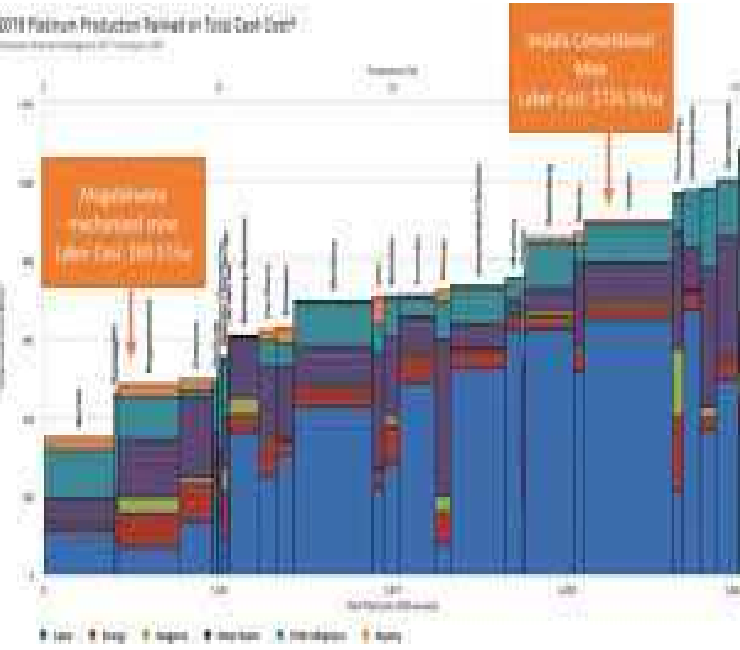
**Johannesburg, South Africa** - Production of platinum group metals (PGMs) in South Africa fell by 10% in the first quarter of 2023, compared to the same period in 2022. The decline was driven by lower production at several of the country's major PGM mines.



The South African Chamber of Mines said that the decline in PGM production was due to a number of factors, including power outages, labor disruptions, and lower grades. The chamber said that the power outages, which have been caused by the country's ongoing electricity crisis, have had a significant impact on mining operations.

The labor disruptions have also been a problem for the mining industry. In recent months, there have been a number of strikes at PGM mines, which have led to production losses. The lower grades have also contributed to the decline in PGM production. The grades of ore that are being mined are declining, which means that miners are having to extract more ore to produce the same amount of PGMs.

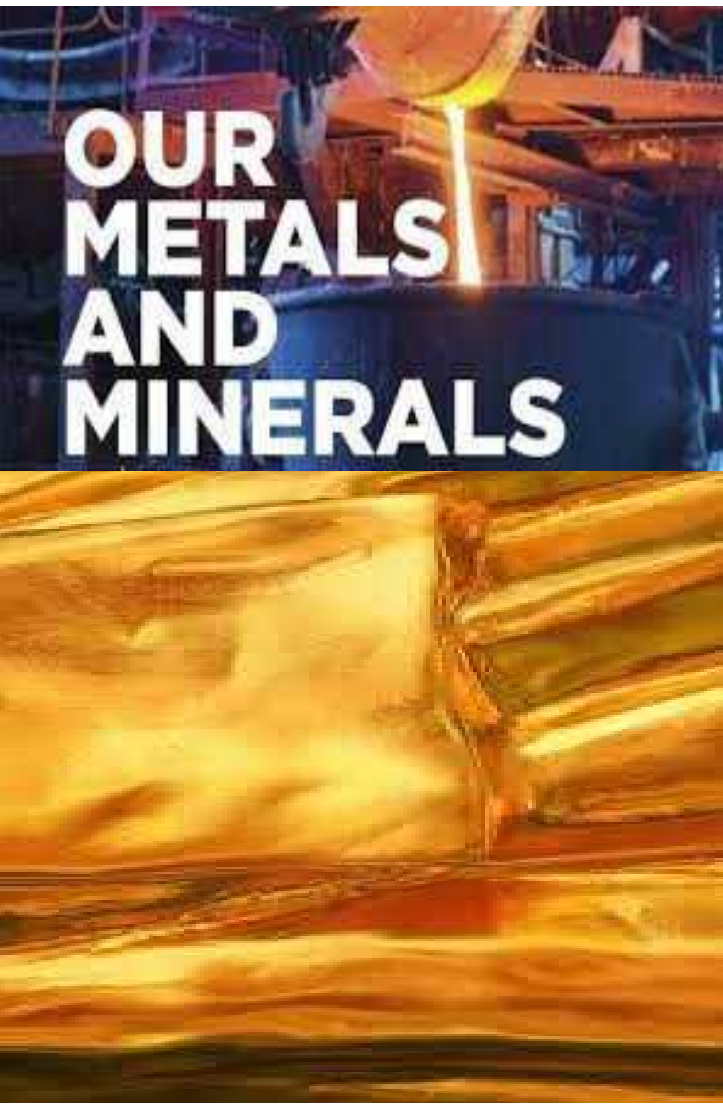
The decline in PGM production is a setback for the South African mining industry. PGMs are a major export earner for the country, and they contribute significantly to the economy. The decline in production is also likely to have a knock-on effect on other sectors of the economy, such as manufacturing and services.



The South African Chamber of Mines said that it is working with the government to address the challenges facing the mining industry. The chamber said that it is important to ensure that the country has a reliable supply of electricity, and that labor relations in the mining industry are stable. The chamber also said that it is working to improve the grades of ore that are being mined.



The decline in PGM production is a reminder of the challenges facing the South African mining industry. The industry is facing a number of headwinds, including the electricity crisis, labor disruptions, and lower grades. The industry needs to address these challenges in order to maintain its competitiveness and to continue to contribute to the South African economy.



**Factors contributing to the decline in South Africa's PGMs production include:**

- **The depletion of ore reserves.** The platinum deposits in South Africa are some of the oldest and most depleted in the world. This means that it is becoming increasingly difficult and expensive to extract PGMs from these deposits.
- **The rising cost of energy.** South Africa's electricity grid is unreliable and expensive. This is a major challenge for the mining industry, as it relies heavily on electricity to power its operations.

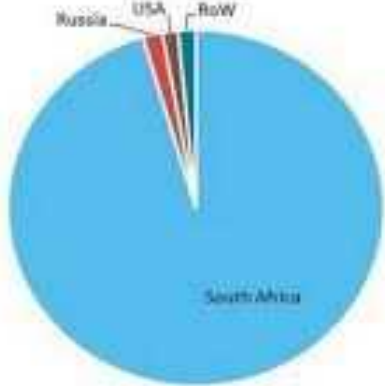
- **The lack of investment.** The South African mining industry has been starved of investment in recent years. This is due to a number of factors, including the country's political and economic instability.

The decline in South Africa's PGMs production is a major concern for the country's economy. PGMs are a valuable export commodity, and they generate billions of dollars in foreign exchange for South Africa. The decline in PGMs production is also likely to have a negative impact on employment in the mining sector.

There are a number of things that the South African government can do to address the decline in PGMs production. These include:

- **Investing in exploration and development.** The government needs to invest in exploration and development in order to discover new PGMs deposits. This will help to ensure that the country's PGMs production remains sustainable in the long term.
- **Addressing the cost of energy.** The government needs to address the cost of energy in order to make it more affordable for the mining industry. This will help to reduce the operating costs of mining companies and make it more profitable for them to operate in South Africa.
- **Attracting investment.** The government needs to create a more favorable investment climate in order to attract investment into the mining industry. This will help to boost the production of PGMs in South Africa.

**World Reserves of Platinum-Group Metals**




The decline in South Africa's PGMs production is a serious challenge for the country's economy. However, the government can take steps to address this challenge and ensure that the country remains a leading producer of PGMs in the years to come.



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# Power to the People

## Government Lifts Licensing Barriers for Embedded Generation Projects!



The South African government has announced that it will be lifting the licensing barriers for embedded generation projects. This means that businesses and communities will now be able to generate their own electricity without having to obtain a license from the government.

The decision is a major victory for those who have been calling for more decentralized energy production in South Africa. Embedded generation projects are seen as a way to reduce the country's reliance on the national grid, which is often unreliable and expensive.

The government estimates that the removal of licensing barriers could lead to the addition of up to 10,000 megawatts of new generation capacity in South Africa. This would be a significant boost to the country's energy security, and it would also help to reduce greenhouse gas

The decision has been welcomed by businesses and communities across South Africa. However, some have expressed concerns about the potential impact on the national grid. The government has said that it will work to ensure that the grid is able to cope with the increased demand for electricity.

The removal of licensing barriers for embedded generation projects is a positive step for South Africa's energy sector. It is a move that will help to reduce the country's reliance on the national grid, and it will also help to create new opportunities for businesses and communities.







Some of the potential benefits of the government's decision:

- **Increased energy security:** Embedded generation projects can help to reduce the country's reliance on the national grid, which is often unreliable and expensive. This can help to improve energy security and make the country less vulnerable to black-outs.
- **Reduced greenhouse gas emissions:** Embedded generation projects can help to reduce greenhouse gas emissions by generating electricity from renewable sources such as solar and wind power. This can help South Africa to meet its climate change commitments.
- **Economic development:** Embedded generation projects can create new jobs and opportunities for businesses and communities. This can help to boost economic growth and reduce poverty.



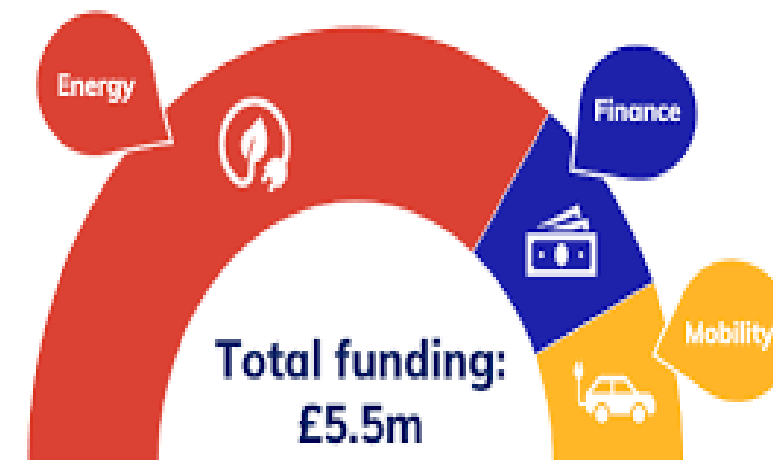
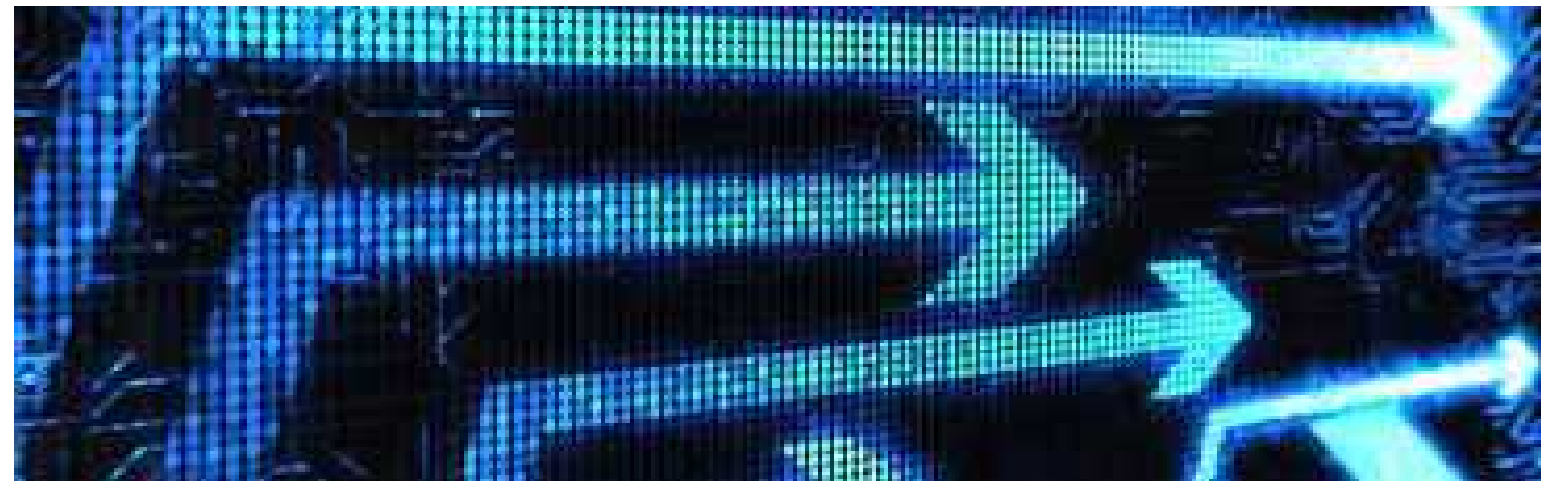
However, there are also some potential challenges that need to be addressed:

- **Impact on the national grid:** The increased demand for electricity from embedded generation projects could put a strain on the national grid. The government will need to ensure that the grid is able to cope with the increased demand.
- **Cost of embedded generation:** The cost of embedded generation projects can be high, which could limit their accessibility to some businesses and communities. The government will need to find ways to make embedded generation more affordable.
- **Regulation:** The government will need to develop clear regulations for embedded generation projects. This will help to ensure that the projects are safe and reliable.

Overall, the government's decision to lift licensing barriers for embedded generation projects is a positive step for South Africa's energy sector. However, there are some potential challenges that need to be addressed. The government will need to work to ensure that the benefits of embedded generation outweigh the challenges.

## • The role of the private sector

The private sector is likely to play a major role in the development of embedded generation projects in South Africa. Many businesses and communities will not have the resources to develop their own projects, so they will need to partner with private companies.



- **The importance of regulation:** The government will need to develop clear regulations for embedded generation projects. This will help to ensure that the projects are safe and reliable, and it will also help to protect consumers.



- **The future of embedded generation:** Embedded generation is likely to become increasingly important in South Africa's energy sector in the years to come. As the country's population grows and the demand for electricity increases, embedded generation projects will provide a way to meet that demand without putting a strain on the national grid.







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## Iron Ore Industry Weighed Down South Africa's 2023 Production Forecasts Hit a Snag



South Africa's iron ore industry is facing a number of challenges that are likely to weigh down production forecasts for 2023. These challenges include:

- **A decline in ore grades:** The ore grades at South Africa's iron ore mines are declining, which means that it is taking more ore to produce the same amount of iron.
- **Higher production costs:** The cost of production is rising at South Africa's iron ore mines, due to factors such as rising energy costs and labor costs.
- **Rail disruptions:** Rail disruptions are a major challenge for South Africa's iron ore industry. The country's rail network is aging and unreliable, which makes it difficult to transport iron ore to ports.
- **Geopolitical uncertainty:** Geopolitical uncertainty is also a challenge for South Africa's iron ore industry. The country is a major supplier of iron ore to China, and any disruptions to trade between the two countries could have a significant impact on South Africa's iron ore industry.



### Africa - Iron Ores And Concentrates - Market Analysis, Forecast, Size, Trends And Insights





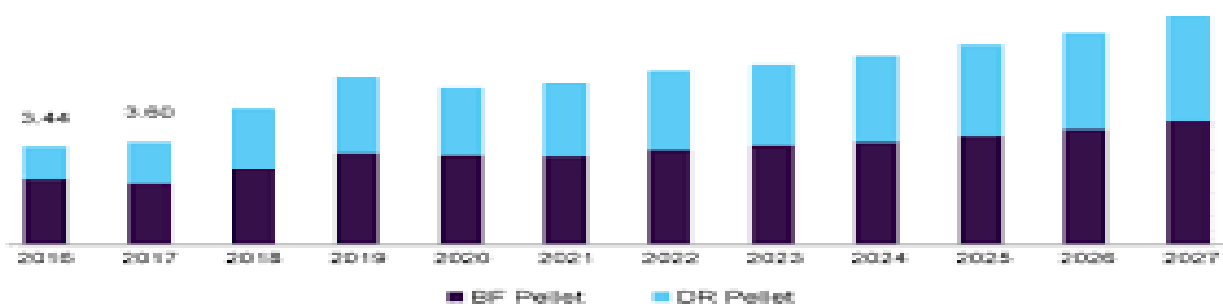


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U.S. iron ore pellets market size, by product, 2016 - 2027 (USD Billion)



Source: [www.grandviewresearch.com](https://www.grandviewresearch.com)

As a result of these challenges, production forecasts for South Africa's iron ore industry in 2023 have been revised down. The Minerals Council South Africa, the industry's trade association, now expects production to reach 66 million tonnes in 2023, down from 71 million tonnes in 2022.

The decline in production is likely to have a negative impact on South Africa's economy. The iron ore industry is a major contributor to the country's GDP, and it also provides employment for thousands of people.



The government is taking steps to address the challenges facing the iron ore industry. These steps include:

- **Investing in exploration:** The government is investing in exploration to discover new iron ore deposits. This will help to ensure that the country's iron ore production remains sustainable in the long term.
- **Reducing production costs:** The government is working with the industry to reduce production costs. This includes measures such as improving the efficiency of the rail network and providing tax breaks to the industry.
- **Attracting investment:** The government is working to attract investment into the iron ore industry. This will help to boost production and create jobs.

## IRON ORE AS A CRITICAL RAW MATERIAL IN THE STEEL INDUSTRY

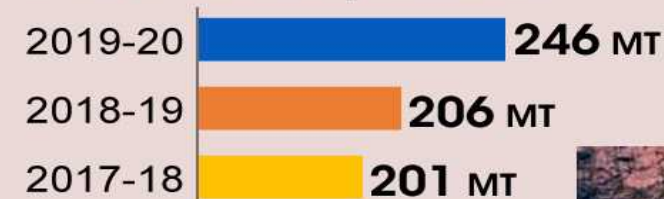
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## Iron-ore

GS SCORE  
Datastory

### India's iron ore production:



### 5 largest iron ore mines by production in India

Bailadila Iron Ore Mines (Kirandul Complex), Chhattisgarh: 13.627 MTPA

Bailadila Iron Ore Mines (Bacheli Complex), Chhattisgarh: 12.969 MTPA

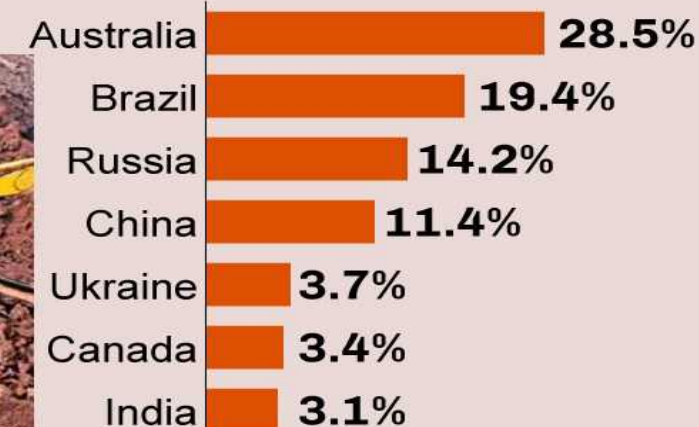
Jajang Rungta Mine, Odisha: 10.509 MTPA

Balda Block Iron Mine, Odisha: 9.36 MTPA

Joda East Mine, Odisha: 9.186 MTPA

MTPA - Million Tonnes per Annum

### World largest reserves of crude iron ore:



### World's top five largest iron ore producing countries (2020):



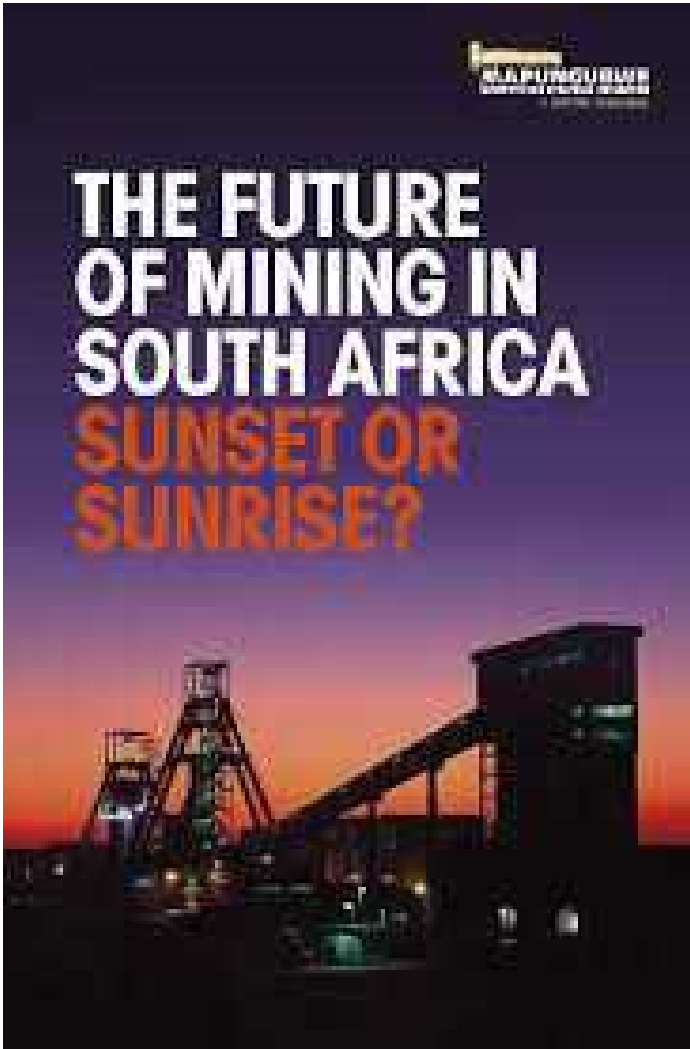


# The future of mining in Africa

The future of mining in Africa is bright. The continent has the potential to become a major mining powerhouse, but it will need to overcome some challenges in order to achieve its full potential. These challenges include:



- **Political instability:** Some countries in Africa are politically unstable, which can make it difficult to attract investment and operate mining businesses.
- **Corruption:** Corruption is a major problem in some African countries, and it can undermine the effectiveness of government regulation and the rule of law.
- **Environmental challenges:** Mining can have a significant impact on the environment, and it is important to ensure that mining operations are conducted in a sustainable manner.



Despite these challenges, the future of mining in Africa is bright. The continent has the potential to become a major mining powerhouse, and it is already attracting significant investment from around the world. With responsible mining practices and government support, Africa can realize its full potential and become a major player in the global mining industry.



Mining in Africa: A Bright Future



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**ACCESSIONAL** specialises in robotic solutions for confined and dangerous spaces and, in doing so, offer our clients the ability to remove employees from dangerous situations – placing them in safe and remote locations whilst performing high-risk tasks. As the official African agents for **Inuktun** and **Seamor Marine**, we offer products from some of the leaders in the field of robotics. We also run our own in-house engineering department with qualified roboticists, developing tailor-made robotic solutions to suit any client's needs.

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PLEASE CONTACT US TODAY FOR MORE INFORMATION

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