

# EXPANDING HORIZONS

MINING FOR A FUTURE



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## OUR REPORTING SUITE



Our **integrated annual report** includes our annual financial statements and is available on our website at:

<https://www.panafricanresources.com/investors/financial-reports/>



Our **provisional summarised audited results** are available on our website at:

<https://www.panafricanresources.com/investors/financial-reports/>



Our **Mineral Resources and Mineral Reserves report** provides technical information in compliance with the SAMREC Code and is available on our website at:

<https://www.panafricanresources.com/african-mines/mineral-resource-mineral-reserve/>



Our **sustainable development report** contains additional non-financial disclosures and is available on our website at:

<https://www.panafricanresources.com/investors/gri-and-sustainability/>



Our **corporate governance report**, including a comprehensive King IV™ index, is available on our website at:

<https://www.panafricanresources.com/about/corporate-governance/>




Our **notice of annual general meeting** will be available on our website on 30 October 2024 at:

<https://www.panafricanresources.com/investors/shareholder-announcements/>

**General view of Wadi Dirut  
in Block 12A South**

# ABOUT THIS REPORT

This is the second Pan African Resources PLC (Pan African or the Company or the Group) climate change report. In publishing this report, we aim to provide our stakeholders with an account of Pan African’s concerted efforts to address climate-related risks and opportunities. The information has been developed to align with the framework and recommendations put forward by the Task Force on Climate-related Financial Disclosures (TCFD). This report should be read with our  2024 sustainable development report, integrated annual report and corporate governance report.



## BOUNDARY AND SCOPE

The report covers the activities of the Group, unless there are specific exclusions, and our operating subsidiaries for the financial year 1 July 2023 to 30 June 2024. We have also included information on material events after 30 June 2024 and up to the date the board approved this report.

### Our sustainability reporting boundary

To ensure completeness, the operational boundary of our greenhouse gas (GHG) inventory includes Barberton Mines Proprietary Limited, Evander Gold Mining Proprietary Limited, Mogale Tailings Retreatment Proprietary Limited, the Sudan exploration, Barberton Blue Proprietary Limited and the corporate office. However, for energy and GHG emissions per ounce of gold sold, only Evander Mines and Barberton Mines are accounted for since other operations do not have gold ounces.

### Holding company – Pan African

Corporate		Gold mining and tailings reatment operations	
100%	Pan African Resources SA Holdings Proprietary Limited	100%	Barberton Mines Proprietary Limited (Barberton Mines)
100%	Pan African Resources Funding Company Proprietary Limited	100%	Evander Gold Mining Proprietary Limited (Evander Mines)
49.9%	PAR Gold Proprietary Limited	100%	Evander Gold Mines Proprietary Limited
100%	Pan African Resources Management Services Company Proprietary Limited	100%	Mogale Tailings Retreatment Proprietary Limited (MTR)
100%	Pan African Resources Properties Proprietary Limited	100%	Mogale Gold Proprietary Limited (Mogale Gold)
100%	Concrete Rose Proprietary Limited	100%	Mintails SA Soweto Cluster Proprietary Limited (MSC)
70%	Mogale Clay Proprietary Limited		
Agricultural, solar and ESG projects		Exploration programmes	
80%	Barberton Blue Proprietary Limited	80%	Pan African Resources Minerals DMCC
100%	Evander Solar Solutions Proprietary Limited	100%	Pan African Resources Minerals Co Limited
100%	Barberton Green Proprietary Limited		

## SUSTAINABILITY REPORTING BOUNDARY

Our sustainability reporting boundary is outlined on [page 52](#).

## ABOUT THIS REPORT continued


### REPORT FRAMEWORKS

The report has been compiled and presented in accordance with the:

- GHG Protocol
- Global Reporting Initiative (GRI) Standards and the related Mining and Metals Supplement
- IFRS® Sustainability Disclosure Standards S1 and S2 of the International Sustainability Standards Board
- Task Force on Climate-related Financial Disclosures
- United Nations Sustainable Development Goals (UN SDGs).

### COMBINED ASSURANCE

A combined assurance model is applied and includes assurance obtained from management and external assurance providers. The board and the social and ethics committee assessed the effectiveness of controls for the year ended 30 June 2024 as satisfactory through formal confirmation from executive management and considered reports from internal audit and other assurance providers. The execution of our combined assurance model is monitored by the audit and risk committee, which reports to the board on a regular basis on the execution of the combined assurance plan.

Reported values containing the gold seal<sup>®</sup> of approval indicate limited assurance granted by PricewaterhouseCoopers Inc. (PwC Inc.). The limited assurance report from PwC Inc. can be found on **pages 69 to 71** in the  2024 sustainable development report.

### FORWARD-LOOKING STATEMENTS

Statements in this report that address exploration activities, mining future potential and Pan African's plans and objectives are forward-looking statements and forward-looking information that involve various risks, assumptions and uncertainties and are not statements of fact.

The directors and management of Pan African believe that the expectations expressed in such forward-looking statements or forward-looking information are based on reasonable assumptions, expectations, estimates and projections. These statements, however, should not be construed as being guarantees or warranties (whether expressed or implied) of future performance.

There can be no assurance that such statements will prove to be accurate, and actual values, results and future events could differ materially from those anticipated in these statements. Important factors that could cause actual results to differ materially from statements expressed in this report include, among others, the actual results of exploration activities, technical analysis, the lack of availability to Pan African of necessary capital on acceptable terms, general economic, business and financial market conditions, political risks, industry trends, competition, changes in government regulations, delays in obtaining governmental approvals, interest rate fluctuations, currency fluctuations, changes in business strategy or development plans and other risks.

Although Pan African has attempted to identify important factors that could cause actual results to differ materially, there may be other factors that cause results to differ materially than anticipated, estimated or intended. Pan African is not obliged to publicly update any forward-looking statements included in this report or revise any changes in events, conditions or circumstances on which any such statements are based occurring after the publication date of this report other than as required by regulation.

### REPORT APPROVAL

The board assumes ultimate responsibility for the integrity of this report. The board is satisfied that the report addresses all material matters and fairly presents the Group's performance for the financial year 1 July 2023 to 30 June 2024. The report accurately reflects our strategic commitments for the short, medium and long term.

The board is of the opinion that the 2024 climate change report complies in all material respects with the relevant reporting commitments.

This report is prepared under the supervision of senior management and is subject to an internal and external review process. The social and ethics committee reviews its content and the collation process, relying on the assurance provided at the various reporting levels.

On the recommendation of the social and ethics committee and the audit and risk committee, the board approved the climate change report on 11 September 2024.

**Keith Spencer**  
*Chairman*

**Dawn Earp**  
*Lead independent director*

**Thabo Mosololi**  
*Director*

**Charles Needham**  
*Director*

**Yvonne Themba**  
*Director*

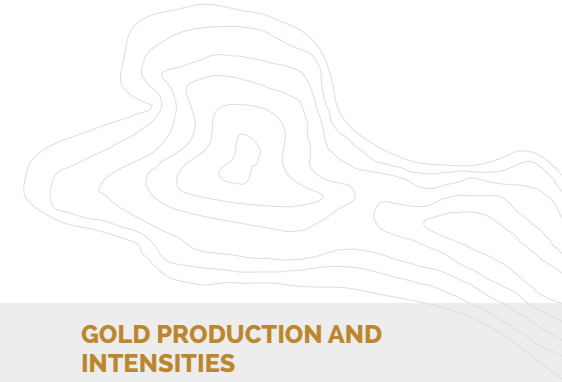
**Cobus Loots**  
*Chief executive officer*

**Deon Louw**  
*Financial director*

*Signatures were removed to protect the security and privacy of the signatories.*

**Evander Mines'  
8 Shaft complex**

# 2024 HIGHLIGHTS



## RESOURCE CONSUMPTION, ENERGY AND EMISSIONS

### Fuels consumption

Diesel consumption was up 33.3% from 1.2ML to

**1.6ML**Ⓢ

Petrol consumption was 57.2kl, up 105.8% from

**27.8kl**

Explosives consumption increased by 24.1% to

**531.1t**

from 428.0t

### Electricity consumption

Non-renewable electricity consumption was

**376.6GWh**Ⓢ

increasing 2.9% from 366GWh

Renewable electricity consumption was

**24.6GWh**Ⓢ

up 3.4% from 23.8GWh, making up 6.1% of the electricity mix

### Energy consumption

Direct energy (diesel and petrol) was up 34.6% from 44.2TJ to

**59.5TJ**

Indirect energy (non-renewable electricity) decreased by 2.5% to

**1,317TJ**

from 1,351TJ

Indirect energy (renewable electricity) was

**86TJ**

Energy consumption (direct and indirect) was

**1,503.77TJ**Ⓢ

up by 3.9% from 1,447.17TJ

### Energy mix

Renewable energy as a percentage of total electricity consumed

was up 0.6% at

**6.1%**Ⓢ

### Water consumption

Water consumption was down 10.9% at

**9,184.8ML**

from 10,304.4ML

Water recycled from the water treatment plant was up 1,568.5% to

**747.5ML**

from 44.8ML, representing a 45.6% reduction in Rand Water consumption and 8.1% water recycled

### GHG emissions

Scope 1 emissions (diesel, petrol and explosives) increased by 35.1% from 3.7ktCO<sub>2</sub>e to

**5.0ktCO<sub>2</sub>e**Ⓢ

Scope 2 (non-renewable electricity) increased by 4.7% from 332.5ktCO<sub>2</sub>e to

**348.0ktCO<sub>2</sub>e**Ⓢ

GHG emissions (Scope 1 and 2 emissions) were

up 5.0% from 336.2ktCO<sub>2</sub>e to

**353.0ktCO<sub>2</sub>e**

### GHG emissions averted

GHG emissions averted (renewable electricity) were

**22.8ktCO<sub>2</sub>e**Ⓢ

up 5.6% from 21.6ktCO<sub>2</sub>e

GHG emissions averted (energy efficiency) were

**2.8ktCO<sub>2</sub>e**

from electricity savings of 3.0GWh

### WASTE GENERATED

Total waste generated was up 75% from 2.2kt to

**3.9kt**

of which 36% was recycled

## GOLD PRODUCTION AND INTENSITIES

### Gold production

Gold sold was

**184,885oz**

up 4.9% from 176,216oz

### Intensities

Energy consumption per ounce of gold sold was

**8.02GJ/oz**Ⓢ

down 2.3% from 8.21GJ/oz

GHG emissions per ounce of gold sold were

**1.88tCO<sub>2</sub>e/oz**Ⓢ

down 1.6% from 1.91tCO<sub>2</sub>e/oz

Water consumption per ounce of gold sold was down 15.0% from 58.48m<sup>3</sup>/oz to

**49.68m<sup>3</sup>/oz**

Total waste generated per ounce of gold was up

66.9% from 12.58kt/oz to

**20.99kt/oz**

# LEADERSHIP MESSAGE

The negative impacts of climate change pose significant risks to the achievement of sustainable development outcomes. This is because climate change presents physical and transition risks with cascading and interrelated potentially irreversible adverse impacts on social, environmental and economic systems. Operating in Africa, we are specifically at risk from the adverse effects of climate change. According to the Notre Dame Global Adaptation Initiative Index, South Africa ranks 95th out of 182 countries in terms of its climate change vulnerability. Our country's outlook is the same.



THABO MOSOLOLI | Chairman of the social and ethics committee

According to the World Bank<sup>1</sup>, *“South Africa is likely to become hotter and drier in the future, with rainfall variability continuing and temperatures rising; the country will continue to experience extreme events like droughts, floods and other climate-related hazards. This will likely result in adverse environmental impacts, including soil erosion, deforestation, recurrent droughts, desertification, land degradation and the loss of biodiversity, including the country’s unique wildlife populations.”*

South Africa has a unique history, and large geographical areas of the country depend on a fossil energy-based economy. Economic sectors such as agriculture, mining and manufacturing have significant levels of embedded carbon in their activities and outputs. These sectors will likely become less competitive in a decarbonised world, adding to already heightened trade concerns. Furthermore, decarbonisation efforts are challenging in South Africa because the country's reliance on coal-generated electricity makes it one of the world's top GHG emitters.

Rising temperatures are likely to alter future electricity requirements, increasing peak load demands during hotter summers. Projected trends in rainfall and temperature are also expected to increase maintenance and repair costs for power

and energy infrastructure and disrupt supplies and transmission. We must work together to address these challenges.

The social impacts of climate change may impact our business through decreasing levels of social cohesion and increasing levels of inequality. This may affect our social licence to operate and lead to growing demands from local communities to assist in socio-economic development. We are also concerned that climate change impacts will disproportionately impact vulnerable communities.

Adverse health outcomes resulting from climate change may also affect us. A recent study on the impact of climate change on South Africa notes that: *“Climate change could reduce the availability of labour and productivity, costing South Africa up to 11% of GDP per capita by the end of the century.”*

We note and appreciate the work of the government in developing fundamental structures, policies and plans to guide climate change adaptation and mitigation strategies. These initiatives include the Presidential Climate Commission, the Climate Change Bill, the Low Emissions Development Strategy, the National Climate Change Adaptation Strategy and the Just Energy Transition Framework (JET Framework).

We also support the implementation of bills and legislation, such as the carbon tax bill and the pathway it presents, even with its challenges. We are also pleased with South Africa's progress in meeting its climate change commitments. However, a significant contributor to our slow progress in transitioning to a greener economy is lacklustre economic growth, which has worsened because of the country's energy crisis, among other things.

We also support the Paris Agreement's aim of limiting the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts towards limiting it to 1.5°C. Scientific data produced by the Intergovernmental Panel on Climate Change (IPCC) shows that breaching the long-term temperature goal of the Paris Agreement could result in extreme weather with knock-on effects on societies and ecosystems, increasing poverty and biodiversity loss.

Our operations require energy and water as inputs and generate significant waste as an output of our activities. Some of our operations are also located adjacent to protected areas characterised by high biodiversity value and population centres.

<sup>1</sup> *Climate Risk Country Profile: South Africa, 2021.*

## LEADERSHIP MESSAGE continued

These challenges make climate change a key component of our strategic planning and execution activities. Our approach to climate change must, therefore, carefully balance the following three aspects: mitigation of our carbon footprint, building climate adaptation and resilience and supporting the JET Framework<sup>1</sup>.

There is no time to delay, as climate change impacts are already evident in South Africa, with increased storms, drought conditions and temperature variations across different parts of the country. We look forward to further engaging with relevant stakeholders to strengthen our country's resilience in the face of climate change.

### CLIMATE CHANGE APPROACH

Our approach to building climate resilience and sustainability has been through actions and measures that directly reduce GHG emissions demonstrated by our renewable energy portfolio, which is aligned with sustainable mining and climate response. Furthermore, our GHG emissions intensity management is strategic in decarbonising our gold production for global competitiveness.

We see our climate change response both strengthening our relative competitive advantage and reducing strategic risks.

We have enhanced our governance of climate change matters by including climate change in the mandates of our social and ethics committee, our safety, health, environment and quality (SHEQ) committee and our audit and risk

committee. In addition, at the operational level, we have established the climate change and energy management committee, which is a cross-functional committee consisting of the Group's engineer and environmental, social and governance (ESG) specialist. At the operations level, members include engineering managers, energy managers, SHEQ managers/officers and environmental managers/officers. This committee produces monthly reports that keep executive management abreast of energy efficiency initiatives, energy consumption and related emissions data, as well as potential projects that will mitigate and adapt to the climate crisis.

Over the past two years, we have taken significant actions to improve our understanding of climate change risks and opportunities. For example, we have commissioned audits and assessments relating to our use of energy, water and waste management. These have facilitated the implementation of energy, water and waste management initiatives and are being incorporated into our risk management processes.

The implementation of renewable energy projects is already benefiting us by reducing our reliance on the constrained supply from the national grid, decreasing the cost of electricity and significantly lowering our carbon footprint. Several efficiency initiatives in the energy and water spaces are also contributing to this achievement, and as you read our reports, you will find more details on these innovative initiatives.

On the topic of our climate-related metrics, we continue to report on our Scope 1 and 2 GHG emissions management. We have commissioned a specialist company to undertake an indirect emissions assessment to determine which emission sources should be included in our Scope 3 reporting. Furthermore, we are reviewing our carbon management plan in conjunction with potential emissions target-setting.

In addition to the above-mentioned steps taken, our key focus areas going forward will focus on ongoing adaptation, ensuring our long-term resilience. A key feature of adaptation responses is that they have a much stronger local context than mitigation responses, and their benefits may appear much faster and are often more tangible, such as measurable improvement in local environmental quality. Effective adaptation responses can also create employment opportunities in the green economy, and contribute significantly to sustainable development goals. Well-planned adaptation responses can thus be effectively integrated with sustainable development policies.

We look forward to providing additional information on our progress with adaptation measures in future reports.



**Evander Mines' 9.975MWac solar plant**

<sup>1</sup> A shift towards a low-carbon, climate-resilient economy and society and ecologically sustainable economies and societies which contribute toward the creation of decent work for all, social inclusion and the eradication of poverty.

# AN AFRICAN-FOCUSED GOLD PRODUCER

Pan African is a mid-tier African-focused gold producer, dual primary listed on the AIM Market (AIM) of the London Stock Exchange (ticker: PAF) in the United Kingdom and the Main Board of the JSE Limited (JSE) (ticker: PAN) as well as the A2X Market in South Africa. Our shares trade on the OTCQX Best Market in the United States of America through a Level 1 American Depository Receipt (ADR) programme (ticker: PAFRY) sponsored by the Bank of New York Mellon and ordinary shares (ticker: PAFRF).

Our activities associated with the exploration, extraction and processing of Mineral Resources result in the unavoidable disturbance of land, the consumption of resources, the generation of waste and atmospheric and water pollutants. We invest in innovation and global best practices to manage and mitigate risks and their impacts on the environment while developing and upskilling our people to understand the complex environment within which we operate.

Our operations include both underground and surface operations. We are leaders in gold tailings reclamation projects, turning tailings waste into attractive investments by applying modern technology and our expertise in this field. Our value-accretive investment transforms hazardous waste material into a more stable form with a smaller environmental footprint, making large areas of land available for other productive uses.

## OUR PURPOSE

To extract gold optimally and consistently from mineral deposits in a manner that creates sustainable value for our stakeholders.

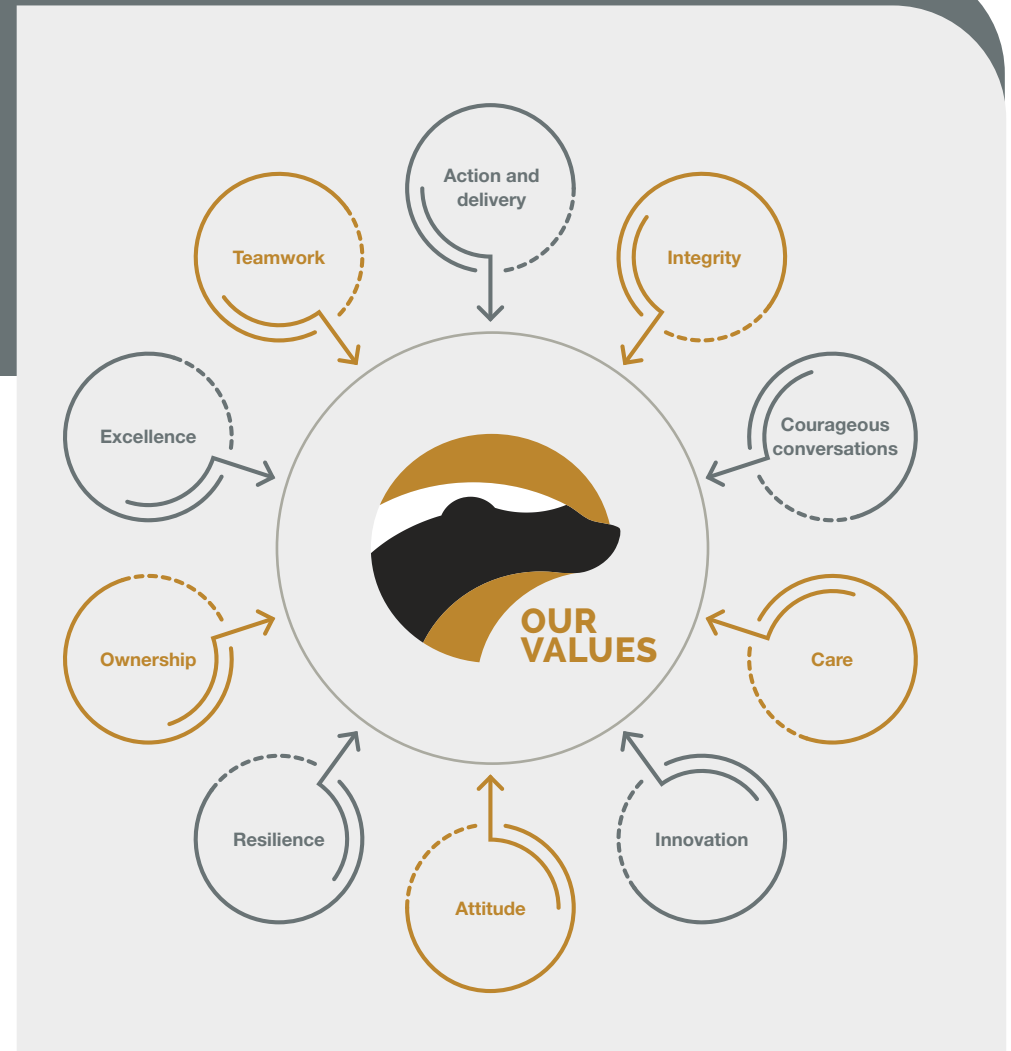
## OUR VISION

To continue growing Pan African as a mid-tier gold producer that delivers on its purpose.

## OUR SUSTAINABILITY COMMITMENT

To pursue a 'beyond compliance' ESG approach through collaboration and partnerships with specialists in community, conservation and sustainability initiatives for the benefit of all stakeholders.

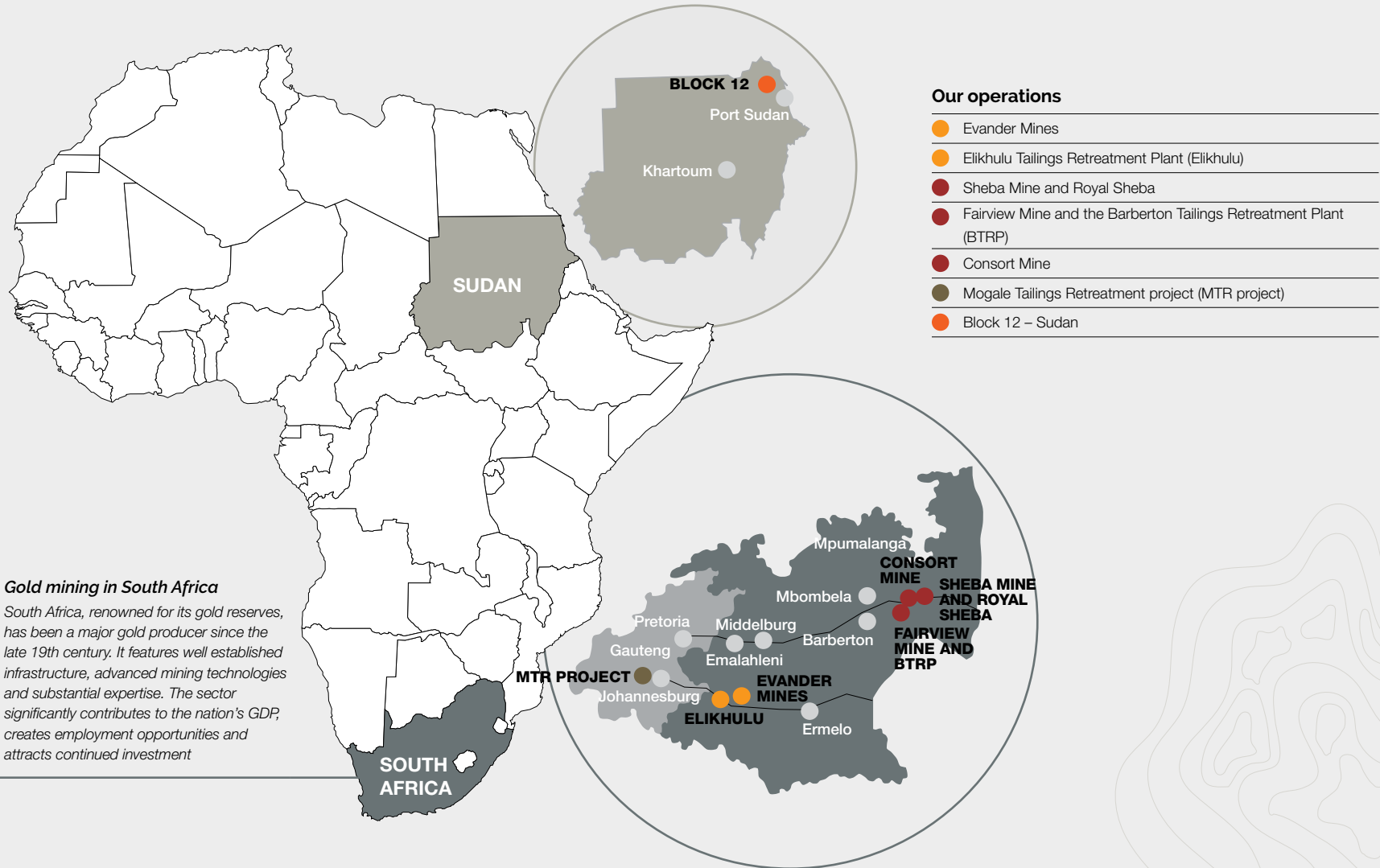
Refer to our 2024 sustainable development report at <https://www.panafricanresources.com/investors/gri-and-sustainability/>



# AN AFRICAN-FOCUSED GOLD PRODUCER continued

## OUR GOLD MINING ASSETS

A unique combination of African underground and surface mining operations.



# AN AFRICAN-FOCUSED GOLD PRODUCER continued

## OUR OPERATIONS

Production (oz/annum) 2024 (2023)	Mineral Reserves 2024 (2023)	Mineral Resources 2024 (2023)	Production (tonnes milled and processed) 2024 (2023)	Recovered grade (g/t) 2024 (2023)	AISC (US\$/oz) 2024 (2023) <sup>1</sup>	Life- of-mine (years) 2024 (2023)
<b>BARBERTON MINES (UNDERGROUND MINING OPERATIONS)</b>						
A long-life, high-grade operation comprising three underground mines: Fairview, Sheba and Consort						
71,470 (64,586)	5.8Mt at 5.87g/t 1.09Moz (5.5Mt at 6.49g/t) (1.14Moz)	13.8Mt at 6.22g/t 2.77Moz (24.1Mt at 4.14g/t) (3.20Moz)	358,936 (342,622)	6.2 (5.9)	1,777 (1,800)	20 (20)
<b>BARBERTON TAILINGS RETREATMENT PLANT</b>						
The plant was completed in June 2013 and adds high-margin and low-risk ounces to our production profile						
18,888 (19,875)	3.6Mt at 1.63g/t 0.19Moz (3.9Mt at 3.03g/t) (0.38Moz)	20.7Mt at 1.11g/t 0.74Moz (22.7Mt at 1.25g/t) (0.91Moz)	828,392 (921,753)	0.7 (0.7)	669 (721)	2 <sup>2</sup> (3)
<b>ELIKHULU TAILINGS RETREATMENT PLANT</b>						
This plant exploits tailings deposited on the Kinross, Leslie/Bracken and Winkelhaak tailings storage facilities (TSFs) in Evander. It commenced production in 2018						
54,812 (50,573)	130.6Mt at 0.27g/t 1.12Moz (140.9Mt at 0.27g/t) (1.24Moz)	155.4Mt at 0.27g/t 1.34Moz (163.4Mt at 0.27g/t) (1.42Moz)	14,198,865 (13,587,371)	0.1 (0.1)	1,034 (989)	9 (10)
<b>EVANDER MINES (UNDERGROUND MINING OPERATIONS)</b>						
Extraction of the 8 Shaft pillar and the development of the 24, 25 and 26 Level high-grade areas at Evander Mines						
38,285 (33,256)	4.29Mt at 7.08g/t 0.98Moz (3.5Mt at 6.82g/t) (0.77Moz)	30.6Mt at 8.82g/t 8.68Moz (24.0Mt at 10.28g/t) (7.95Moz)	192,050 (159,063)	6.2 (6.4)	1,307 (1,113)	11 (13)

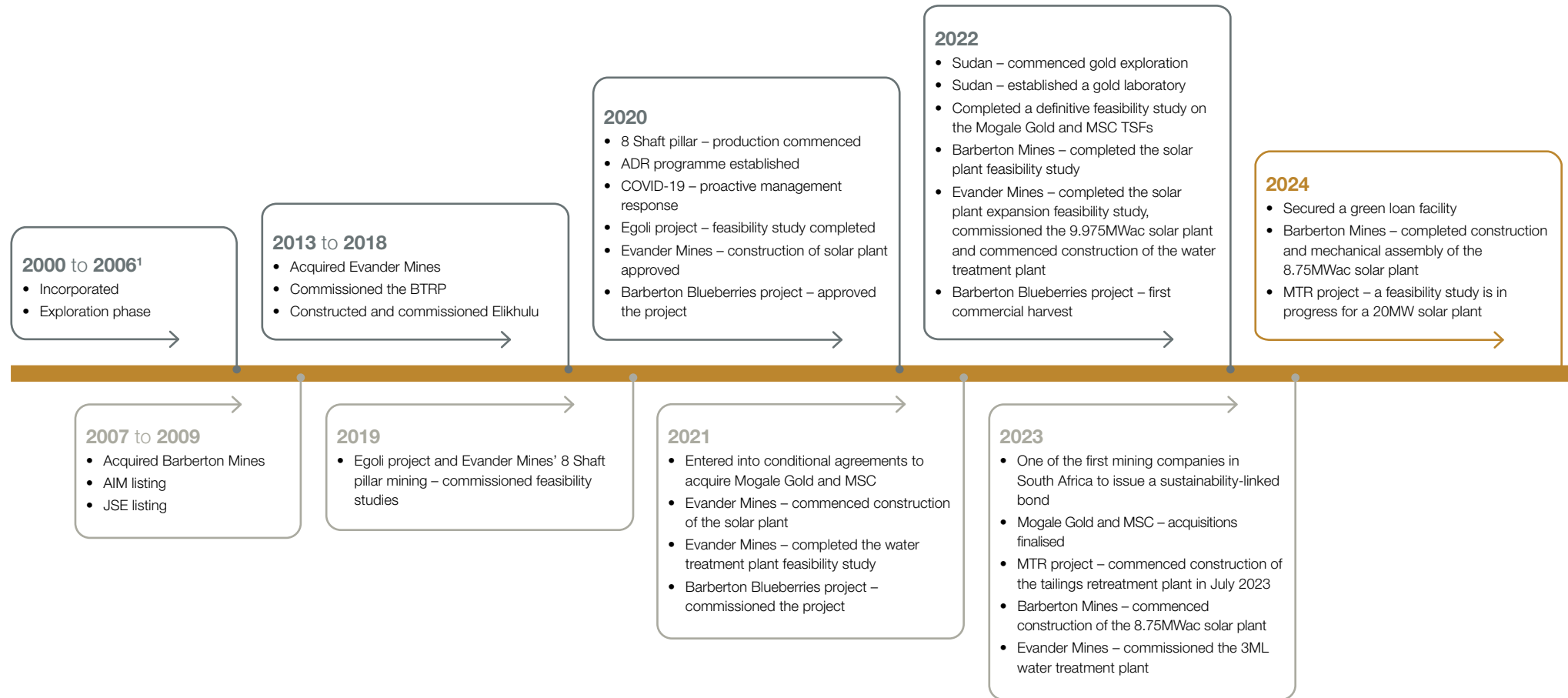
The BTRP metallurgical plant at Barberton Mines

Production (oz/annum) 2024 (2023)	Mineral Reserves 2024 (2023)	Mineral Resources 2024 (2023)	Production (tonnes milled and processed) 2024 (2023)	Recovered grade (g/t) 2024 (2023)	AISC (US\$/oz) 2024 (2023) <sup>1</sup>	Life- of-mine (years) 2024 (2023)
<b>EVANDER MINES (SURFACE SOURCES)</b>						
The purchase of gold-bearing material from third parties – leveraging the excess capacity of Evander Mines' metallurgical plants						
2,584 (6,919)	Not reported	Not reported	104,157 (248,575)	0.8 (0.9)	2,174 (1,718)	Not reported
<b>MOGALE TAILINGS RETREATMENT PROJECT</b>						
A plant is being constructed to process gold tailings deposited onto the Mogale Gold and MSC TSFs Figures in the table below are based on the expected definitive feasibility study results announced in June 2022						
50,000 (19,875)	227.7Mt at 0.29g/t 0.19Moz (3.9Mt at 3.03g/t) (0.38Moz)	259.8Mt at 0.30g/t 0.74Moz (22.7Mt at 1.25g/t) (0.91Moz)	9,600,000 (921,753)	0.1 (0.7)	<1,000 (721)	21 (3)
for the Mogale Cluster – for the initial five years						
12,000,000 including the Soweto Cluster – from year six onwards						

<sup>1</sup> Restated due to prior period adjustments.

<sup>2</sup> Subsequent to the reporting period the Group was able to extend the life-of-mine for BTRP to seven years following positive Mineral Reserves studies.

# TIMELINE



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total production (oz)	130,493	188,179	175,857	204,928	173,285	160,444	172,442	179,457	201,777	205,688	175,209	<b>186,039</b>
Market capitalisation (US\$ million <sup>2</sup> )	388.2	307.0	206.9	364.7	433.0	248.7	344.7	733.5	540.0	438.0	497.0	<b>744.7<sup>3</sup></b>

<sup>1</sup> The timeline represents the period spanning the start of one financial year to the end of the subsequent financial year.

<sup>2</sup> Source: JSE's Trading and Market Services. Calculated at the end of each calendar year at quoted prices and the closing US\$/ZAR exchange rate.

<sup>3</sup> Source: JSE's Trading and Market Services. Calculated at 30 June 2024 using the quoted price and the closing US\$/ZAR exchange rate at that date.

# INTRODUCTION

Pan African has embarked on a journey to integrate the TCFD recommendations into its business model and community stakeholder engagement process to contribute towards a sustainable mining future.

We are pleased to present our second climate change report. The layout of this report aligns with the four core TCFD recommendations on governance, strategy, risk management and metrics and targets, respectively, as illustrated alongside.

Each section summarises the core recommended disclosures, feedback on additional items and our next steps to strengthen our compliance with each recommendation.

This report is also linked to the JET Framework. This concept emphasises the need to address the challenges of climate change while ensuring fairness and equity for all stakeholders, including workers and communities affected by the transition to a low-carbon economy.

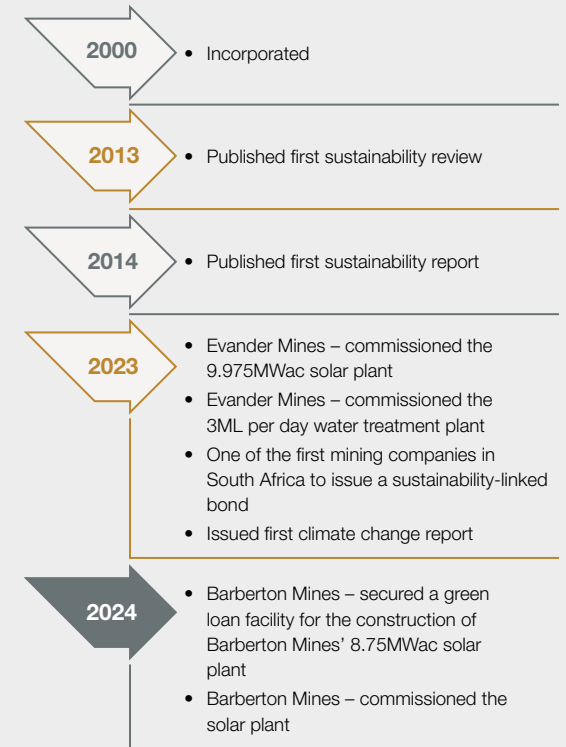
According to the Presidential Climate Commission<sup>1</sup>, South Africa's public and private sectors' climate-related investments would have to increase three to five times from the current average of ZAR131 billion a year. Estimates show that the country needs about ZAR334 billion per year to reach net zero carbon emissions by 2050 and ZAR535 billion per year to meet the climate goals set by the government in terms of the 2016 Paris Agreement.

## Core elements of recommended climate-related financial disclosures<sup>2</sup>



<sup>1</sup> The South African Climate Finance Landscape 2023.

## OUR CLIMATE CHANGE MILESTONES



# OUR CLIMATE CHANGE FRAMEWORK

## GUIDING FRAMEWORKS

- Paris Agreement
- Kunming-Montreal Global Biodiversity Framework
- UN SDGs
- International Bill of Human Rights
- JET Framework
- GHG Protocol, GRI Standards and IFRS S1 and S2

## PAN AFRICAN'S CLIMATE CHANGE PRINCIPLES

- Application of mitigation hierarchy
- Stakeholder inclusivity
- Respect for human rights
- Incorporation of sustainable development considerations
- Application of just transition principles
- Adherence to responsible corporate governance practices
- Cost-effectiveness
- Evidence-based approach

## CLIMATE-RELATED POLICIES

- ESG policy
- Human rights policy
- Board committee charters
- Group ethics code

## CLIMATE CHANGE FOCUS AREAS

- Optimal renewable energy mix
- Climate adaptation and resilience

## SUSTAINABLE DEVELOPMENT FOCUS AREAS

- Energy
- Water
- Waste
- Biodiversity
- Local communities
- Employees

### Climate change initiatives (mitigation)

#### Metrics and targets

- Resource-efficient and cleaner production focusing on energy, water and waste
- Enhance renewable energy use
- Biodiversity stewardship
- Land rehabilitation
- Focus on the circular economy
- Assess climate change impacts along our value chain

### Climate change initiatives (adaptation)

#### Governance

- Introduce controls and procedures supporting oversight of climate-related risks and opportunities
- Enhance climate change knowledge and skills across the Group at different organisational levels
- Align responsibilities of climate change and energy management committee members with policies, terms of reference and related mandates

#### Risk management

- Integration of climate change adaptation response into governance, strategy and risk management processes
- Develop policies and processes for identifying, assessing, prioritising, monitoring and reporting climate-related risks and opportunities
- Review emergency procedures and develop contingency plans

#### Strategy

- Resource mobilisation to enable implementation of climate change strategies and decision-making aligned with building climate resilience
- Enhance cooperation and partnerships on climate responses
- Develop a climate-related transition plan
- Implementation of technology to improve climate adaptation
- Review engineering design and construction standards for facilities
- Increase focus on tailings as a gold source

#### Stakeholder engagement

- Enhance stakeholder engagement and participation in climate-related awareness and discourse
- Enhance focus and promotion of climate-related research and development (R&D)

### Long-term outcomes and the links to our strategic objectives

1

#### Reduced resource input costs

- Ensure adequate, competitively priced and flexible financial resources for the funding of our operations and disciplined capital allocation for sustainable long-term value creation
- Manage our operations with climate-conscious practices that preserve and protect natural resources and promote sustainability

2

#### Enhanced climate resilience

- Optimise the use of technology and harness the expertise of our teams to consistently deliver safe, reliable, efficient and responsible mining operations
- Unlock the full potential of our Mineral Resources and Mineral Reserves through sustainable extraction and processing, while embracing renewable energy, to pave the way for a responsible and prosperous mining future

3

#### Enhanced adaptive capacity

- Attract, cultivate and retain exceptional talent while fostering a culture of safety, respect and continuous learning

4

#### Improved social licence to operate

- Engage stakeholders to build positive relationships, maintain our social licence to operate and create sustainable value

# GUIDING FRAMEWORKS

Our approach to climate change is informed by our reflections on international and local regulations, reporting frameworks and global goals, including:

- The Paris Agreement seeks to strengthen the global response to the threat of climate change. It provides the two overarching goals of holding “*the increase in the global average temperature to well below 2°C above pre-industrial levels*” and pursuing efforts to “*limit the temperature increase to 1.5°C above pre-industrial levels*”.
  - The GHG Protocol is a climate programme through a joint initiative of the World Resources Institute and the World Business Council for Sustainable Development. Its purpose includes providing standards for accounting and reporting GHG emissions at the corporate or organisational level by promoting transparency, consistency and accuracy in assessing and disclosing GHG emissions. The GHG Protocol standards are espoused by various frameworks, including the GRI and IFRS S2 frameworks, which Pan African uses for reporting climate-related matters.
  - The Kunming-Montreal Global Biodiversity Framework seeks to respond to the fact that biodiversity is deteriorating worldwide at rates unprecedented in human history. It also provides a plan to transform our societies’ relationship with biodiversity.
  - The 2030 Agenda for Sustainable Development contains 17 goals that outline a roadmap for sustainable development until 2030. The SDGs highlight the interconnectedness of various development dimensions and demonstrate how economic, social and environmental dimensions of development can interact. However, we can use these connections to extend our positive development outcomes and impacts. Together, the goals and targets present us with a framework for addressing the world’s most pressing challenges.
  - According to the Office of the United Nations High Commissioner for Human Rights, climate change has the potential to reduce the value of human rights as it impacts the right to water and sanitation, food, health, housing, self-determination, culture and development – in other words, life itself. However, as we address issues of climate change, we must aim to uphold and strengthen access to human rights and commit to ensuring that climate efforts comply with human rights obligations.
  - The JET Framework report by the Presidential Climate Commission states that it “*aims to support South Africa’s broader efforts to redesign the economy to the benefit of most citizens to enable deep, just and transformational shifts (i.e. addressing the triple challenges), in the context of delivering an effective response to climate change (i.e. improving resilience, making substantial cuts to GHG emissions and protecting and promoting the health of communities)*”. The framework focuses on managing the social and economic consequences of those policies while putting human development concerns at the centre of decision-making. The framework also considers the alternative economic models that may be needed to enable a just transition. Three principles underpin a just transition towards an environmentally sustainable economy and society in South Africa: distributive justice, restorative justice and procedural justice.
- As a company committed to achieving positive, sustainable development outcomes, we need to monitor and measure the right sustainability key performance indicators (KPIs). International frameworks, standards and methodologies such as the GRI Universal Standards and IFRS S1 and S2 enable us to do that transparently and comparably.


## CLIMATE CHANGE PRINCIPLES

The principles we use to guide our climate change efforts reflect international best practices for sustainable development, adapted for local context:

- 1 Application of mitigation hierarchy**  
We apply the mitigation hierarchy, which aims to limit negative environmental impacts on development projects and operations. It emphasises best practices for avoiding and minimising any negative consequences, restoring sites no longer used by a project or operation and finally considering offsetting residual impacts.
- 2 Stakeholder inclusivity**  
We apply a transparent stakeholder-inclusive approach to our activities, in which decision-making considers the legitimate and reasonable needs, interests and expectations of our material stakeholders in executing our activities.
- 3 Respect for human rights**  
In all our activities, we strive to uphold and strengthen individuals’ ability to enjoy human rights.
- 4 Incorporation of sustainable development considerations**  
As we consider projects, we must ensure that over the project life cycle, we incorporate sustainable development considerations into project planning and execution. This would include considerations such as design, durability, energy efficiency, waste reduction, air quality, water conservation and materials used.
- 5 Application of just transition principles**  
We consider whether our actions will enhance or detract from the principles of delivering distributive, restorative and procedural justice.
- 6 Adherence to responsible corporate governance practices**  
As responsible corporate citizens, we are committed to continue complying with good corporate governance practices, such as those espoused in the King IV Report on Corporate Governance for South Africa, 2016™.
- 7 Cost-effectiveness**  
We must balance our sustainable development efforts with our obligations to our stakeholders. Therefore, we must be mindful of how we use financial resources and maximise their value.
- 8 Evidence-based approach:** We must make evidence-based decisions. We therefore encourage the use of empirical knowledge and research-supported data to strengthen our recommendations to decision-makers.

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# GOVERNANCE

Pan African is committed to the highest standards of corporate governance and recognises that an influential corporate governance culture is critical to long-term performance. The board is responsible for overseeing Pan African's management and providing strategic direction. The board has established committees to assist it in executing its functions. More information on Pan African's corporate governance can be found in our  2024 corporate governance report.

## RECOMMENDED DISCLOSURES

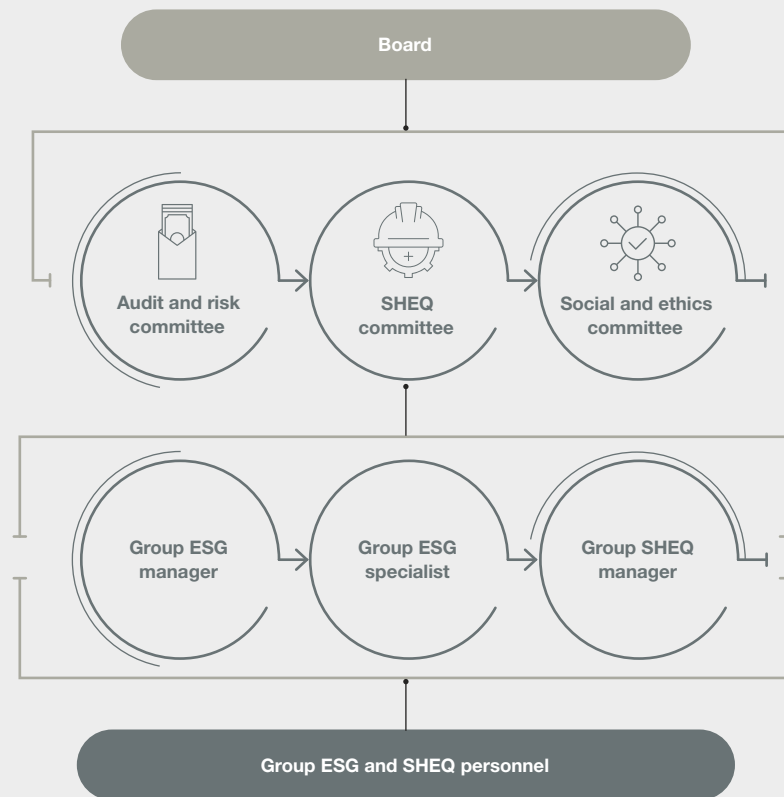
- Describe the board's oversight of climate-related risks and opportunities
- Describe management's role in assessing and managing climate-related risks and opportunities.

## CLIMATE CHANGE GOVERNANCE STRUCTURE

Climate change-related matters are discussed by the SHEQ, social and ethics and the audit and risk committees. The board is informed regarding climate change matters on a quarterly basis. While ultimate responsibility remains with the board, climate change-related matters have primarily been delegated to the social and ethics committee. Furthermore, the board's SHEQ and audit and risk committees consider climate change-related risks.

The following are Pan African's main structures responsible for climate change governance and management. Group managers hold day-to-day climate change-related responsibilities, including assessing and managing climate risks.

### Overview of Pan African's climate change governance



# GOVERNANCE continued

Our corporate roles in managing climate-related risks and opportunities underscore the unique responsibilities and focus areas, demonstrating the diverse yet linked contributions made towards sustainability and climate resilience. It is crucial to remember that we are all part of a collective effort to tackle climate change, with leadership and all employees playing a vital role.

## 1 Board

### GOVERNANCE

#### Objective

To enable users of general-purpose financial reports to understand the governance processes, controls and procedures an entity uses to monitor, manage and oversee climate-related risks and opportunities

#### The board of directors and board committees (SHEQ, social and ethics, audit and risk)

- Provide strategic direction and oversight on climate-related risks and opportunities
- Approve policies, review management's performance and ensure compliance with climate-related regulations, reporting frameworks and goals
- Put in place governance frameworks to oversee sustainability issues, including climate-related risks and opportunities

#### Chief executive officer

- Lead in setting and approving the Company's climate strategies and ensure integration into governance frameworks
- Influence on continuous improvement in climate-related disclosures and financial reporting
- Guide the board in reflecting climate-related risks and opportunities in terms of reference, mandates, role descriptions and other related policies applicable to governance bodies and individuals (IFRS S2(6)(i))

#### Financial director

- Financial governance and oversight related to climate risks
- Establish robust internal controls to monitor and manage climate-related financial risks
- Ensure compliance with IFRS S2 and TCFD guidelines for climate-related disclosures and financial reporting

### STRATEGY

#### Objective

To enable users of general-purpose financial reports to understand an entity's strategy for managing climate-related risks and opportunities

#### The board of directors and board committees (SHEQ, social and ethics, audit and risk)

- Participate in strategy formulation, integrating sustainability and climate considerations into business goals and long-term planning
- Approve capital allocation for investments in mitigation technologies, adaptation plans and exploitation of opportunities in line with the climate resilience strategy
- Ensure the availability of necessary expertise, capacity building or access to external advice for implementing climate response strategies and compliance (IFRS S2(6)(ii))

#### Chief executive officer

- Promote innovation and adaptation of technologies for environmental sustainability and climate resilience
- Oversee assessments of climate-related risks and opportunities and implementation of mitigation and adaptation strategies
- Communicate a clear strategy for managing climate-related risks and seizing opportunities that are aligned with the Company's long-term sustainability goals

#### Financial director

- Integrate climate considerations into financial strategy and capital allocation decisions
- Assess and quantify financial risks associated with climate change. Disclose potential impacts of climate-related risks and opportunities on financial position, performance and cash flows (IFRS S2 14(d))
- Conduct financial scenario analysis to assess impacts on operations, financial performance and reputation (IFRS S2 (22)(a)(iii)(1,2,3))

**RISK MANAGEMENT**

**Objective**

To enable users of general-purpose financial reports to understand an entity's processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process

**The board of directors and board committees (SHEQ, social and ethics, audit and risk)**

- Oversee the integration of climate-related risks into financial reports following IFRS S2 and TCFD recommendations
- Oversee the identification, assessment and management of climate-related risks across the Company's operations and supply chain
- Ensure appropriate mitigation strategies are implemented to mitigate the physical, transition and liability risks associated with climate change

**Chief executive officer**

- Oversee comprehensive assessments of climate-related risks across the Company's operations, including physical, regulatory and market risks
- Participate in the development of strategies for managing climate risks and seizing opportunities aligned with sustainability goals
- Lead efforts to develop and implement strategies to mitigate identified risks, ensuring resilience and continuity of operations in the face of climate change impacts

**Financial director**

- Lead efforts to assess and quantify climate-related financial risks, including regulatory, market and operational risks
- Develop risk management strategies and financial instruments to mitigate identified climate-related risks while exploiting climate-related opportunities
- Implement financial scenario analysis to mitigate impacts on operations, financial performance and reputation

**METRICS AND TARGETS**

**Objective**

To enable users of general-purpose financial reports to understand an entity's performance regarding its climate-related risks and opportunities, including progress towards any climate-related targets it has set and any targets it must meet by law or regulation

**The board of directors and board committees (SHEQ, social and ethics, audit and risk)**

- Approve the set metrics and targets related to climate-related risks and opportunities
- Oversee the performance of metrics and targets related to climate risks and opportunities (IFRS S2 (14)(a)(v))
- Ensure transparent reporting of climate-related KPIs to stakeholders

**Chief executive officer**

- Set and oversee the performance of ambitious and measurable climate-related targets
- Ensure robust monitoring and reporting systems are in place to track progress against climate-related targets and commitments
- Promote transparent public disclosures on metrics and targets in accordance with TCFD and IFRS S2 guidelines

**Financial director**

- Develop and report financial metrics related to climate performance, including the cost of mitigation and adaptation strategies covering technologies and human capital
- Set and monitor performance on climate-related financial metrics and targets, such as emissions reduction targets.
- Ensure transparent reporting of progress against metrics and targets in financial disclosures

## STAKEHOLDER ENGAGEMENT

### Objective

Stakeholder engagement refers to the policies, processes and practices by which an organisation interacts with those it may impact, including various activities and approaches throughout the life cycle of operations. The spectrum of stakeholder engagement includes communication strategies, information disclosures, inclusive consultation and participation processes and negotiations and partnerships

### The board of directors and board committees (SHEQ, social and ethics, audit and risk)

- Engage with investors, regulators, communities and environmental organisations on sustainability and climate-related matters

### Chief executive officer

- Communicate with stakeholders, including primary users of reports, regulators and communities on the Company's approach to climate-related risks and opportunities

### Financial director

- Integrate climate-related financial disclosures into broader financial reporting frameworks, providing transparency to stakeholders
- Ensure accurate and comprehensive financial reporting of climate-related risks and opportunities guided by IFRS S2 and the TCFD



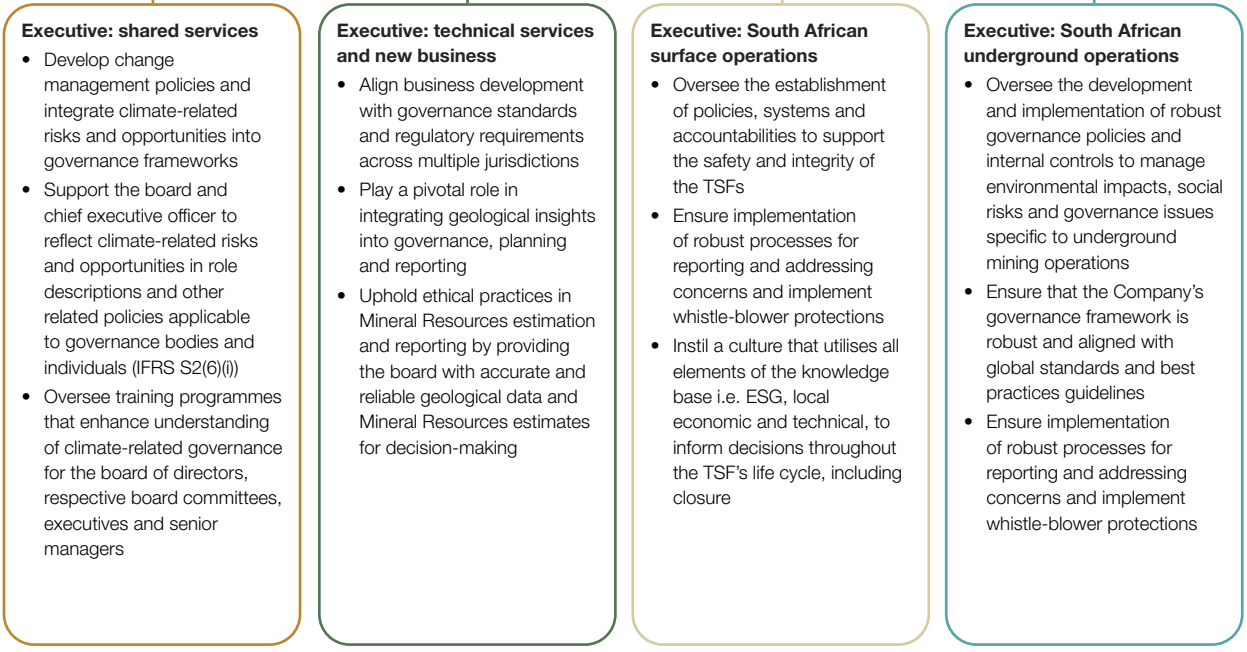
**We take utmost care to preserve the biodiversity of the Barberton Makhonjwa Mountains**

2 Group executives

**GOVERNANCE**

**Objective**

To enable users of general-purpose financial reports to understand the governance processes, controls and procedures an entity uses to monitor, manage and oversee climate-related risks and opportunities



## STRATEGY

### Objective

To enable users of general-purpose financial reports to understand an entity's strategy for managing climate-related risks and opportunities

#### Executive: shared services

- Collaborate with senior management to integrate climate considerations related to human capital into business strategy
- Conduct a scenario analysis to assess the potential impacts of climate-related risks and opportunities on the Company's human capital
- Ensure that human resources (HR) strategies are aligned with the Company's overall climate strategy. Also, ensure that climate goals are reflected in employee objectives and performance metrics

#### Executive: technical services and new business

- Integrate climate resilience into business development, resource exploration, optimisation of resource extraction and long-term planning
- Incorporate climate change considerations when advising on the best methods to extract Mineral Resources efficiently and sustainably
- Develop long-term geological strategies aligned with corporate climate goals and financial planning

#### Executive: South African surface operations

- Develop an organisational culture that promotes learning, communication and early problem recognition
- Identify opportunities to enhance operational efficiency, reduce environmental impact and improve social outcomes while ensuring alignment with the Company's financial objectives and long-term sustainability
- Develop a strategy aligned with the Company's broader business goals while mitigating climate-related risks associated with TSF operations

#### Executive: South African underground operations

- Incorporate ESG and climate-related considerations into underground mining operations strategy, focusing on sustainable resource extraction, waste management and energy efficiency
- Develop an organisational culture that promotes learning, communication and early problem recognition

**RISK MANAGEMENT**

**Objective**

To enable users of general-purpose financial reports to understand an entity's processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process

**Executive: shared services**

- Lead efforts to identify, assess and prioritise climate-related risks specific to the social aspects of the Just Energy Transition
- Ensure collaboration throughout the organisation to promote the integration of climate-related risks and opportunities into the Company's strategic planning and decision-making processes
- Oversee and monitor the performance of resilience plans that address how human capital is supporting the Company's response to climate-related disruptions

**Executive: technical services and new business**

- Assess and mitigate risks related to market volatility, regulatory changes and environmental and climate-related impacts
- Consider climate-related risks, including environmental and social impacts in resource development plans
- Identify and mitigate climate-related geological risks that could impact financial forecasts and business integration

**Executive: South African surface operations**

- Establish and implement reviews as part of a strong quality and risk management system for all phases of the TSF's life cycle, including closure
- Plan, build and operate the TSFs to manage risk at all phases of the life cycle, including closure and post-closure
- Prepare for emergency response to TSF failures and long-term recovery in the event of catastrophic failure

**Executive: South African underground operations**

- Manage underground mining-related environmental risks, such as groundwater contamination, subsidence and biodiversity impacts, with a focus on how climate-related risks could worsen identified risks
- Address climate-related social risks associated with underground mining operations, including community displacement, land use conflicts and stakeholder consultation
- Mitigate governance risks by ensuring compliance with mining regulations, ethical conduct and transparency in operational practices

## METRICS AND TARGETS

### Objective

To enable users of general-purpose financial reports to understand an entity's performance regarding its climate-related risks and opportunities, including progress towards any climate-related targets it has set and any targets it must meet by law or regulation

#### Executive: shared services

- Monitor performance on HR-related metrics reflecting the Company's progress in managing climate-related risks and opportunities
- Oversee that HR participates in cross-functional teams designed to ensure that HR-related climate metrics are accurately reported in line with the requirements of climate reporting frameworks
- Ensure HR-related data and insights are accurately disclosed in sustainability and climate reporting frameworks

#### Executive: technical services and new business

- Establish metrics and targets that are aligned with financial performance, operational efficiency and environmental sustainability, as well as with international reporting framework guidelines
- Ensure compliance with TCFD and IFRS S2 standards in reporting Mineral Resources, which includes transparency and materiality in reporting
- Develop and report on climate-related geological metrics and targets that are relevant for investors and stakeholders

#### Executive: South African surface operations

- Establish TSF metrics aligned with industry standards and investor expectations, and regularly report on sustainability and climate change performance to stakeholders
- Monitor the reporting of metrics such as water management, biodiversity conservation, community engagement and safety performance related to TSFs
- Stay informed about evolving regulatory frameworks and industry guidelines to uphold best practices regarding TSF risk mitigation and enhance operational transparency

#### Executive: South African underground operations

- Develop and track KPIs aligned with IFRS S2 and TCFD guidelines specific to underground mining operations
- Oversee the monitoring and reporting of accurate and timely sustainability and climate disclosures related to underground mining operations for internal and external stakeholders, including regulatory bodies and investors

## STAKEHOLDER ENGAGEMENT

### Objective

Stakeholder engagement refers to the policies, processes and practices by which an organisation interacts with those it may impact, including various activities and approaches throughout the life cycle of operations. The spectrum of stakeholder engagement includes communication strategies, information disclosures, inclusive consultation and participation processes and negotiations and partnerships

#### Executive: shared services

- Ensure communication to stakeholders encompasses information on social climate-related risks and opportunities and that these are managed in accordance with international and local frameworks, specifically ensuring a just energy transition

#### Executive: technical services and new business

- Address climate-related stakeholder concerns from a Mineral Resources management lens. Ensure that geological data is accurately represented and contributes to the sustainable and profitable development of Mineral Resources within the Company's operational context
- Communicate a comprehensive business development approach that balances growth objectives with regulatory compliance and environmental stewardship across multiple jurisdictions

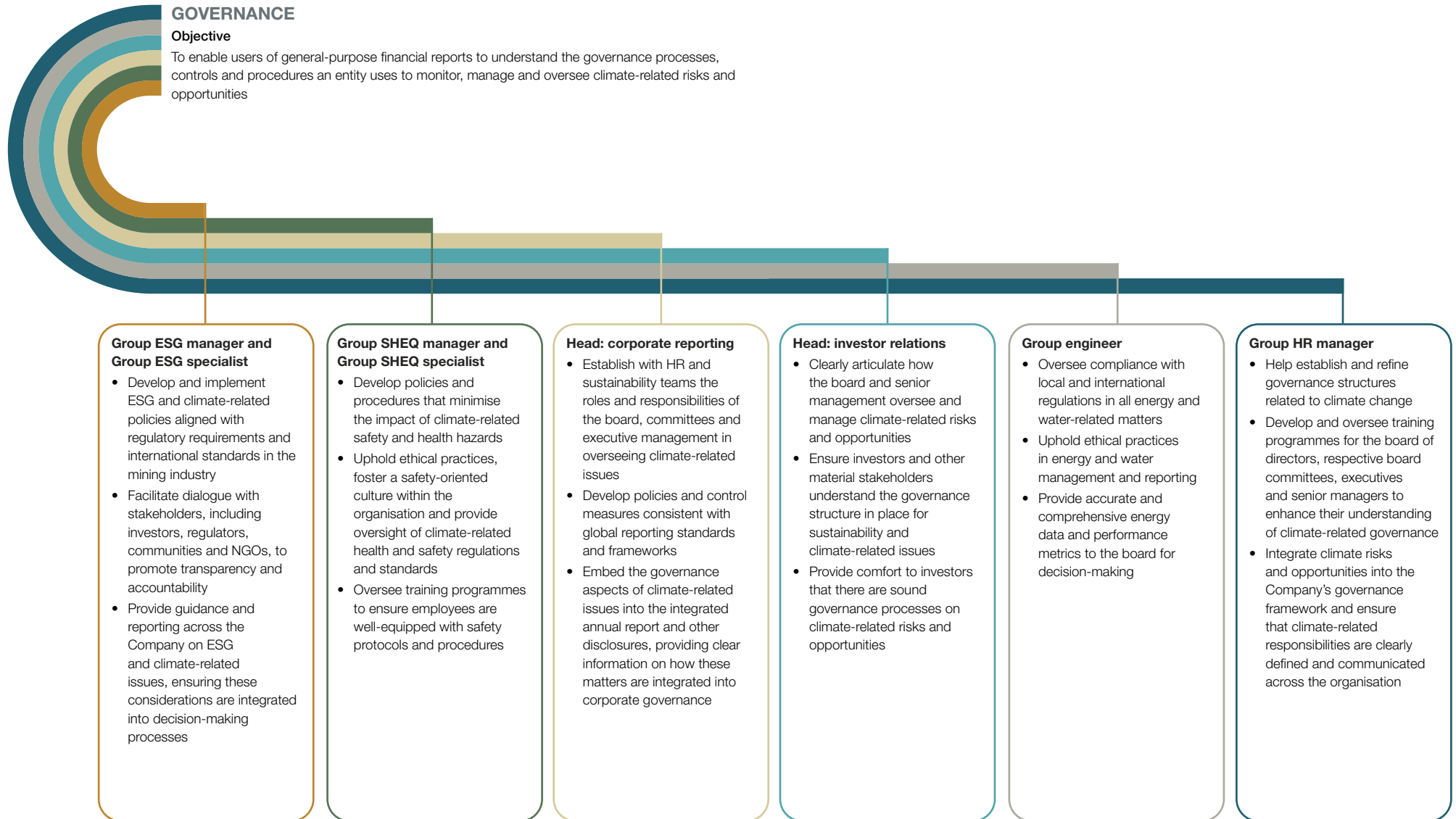
#### Executive: South African surface operations

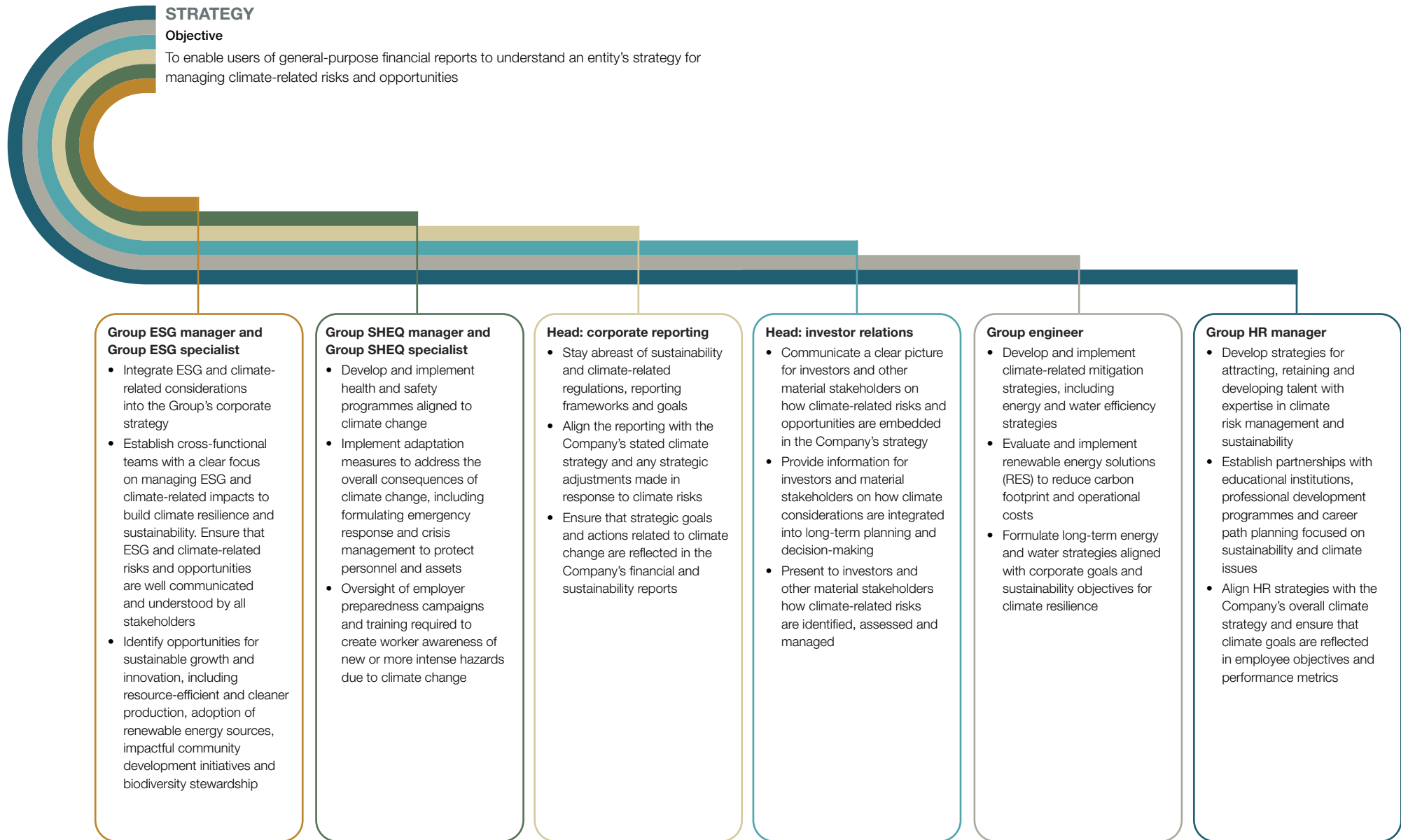
- Publicly disclose and provide access to information about the TSFs to support public accountability
- Respect the rights of project-affected people and meaningfully engage them at all phases of the TSF's life cycle, including closure
- Engage with stakeholders, such as local communities, regulatory bodies, non-governmental organisations (NGOs) and investors to communicate the Company's approach to responsible TSF management. This involves fostering constructive relationships, addressing stakeholder concerns and integrating feedback into operational practices

#### Executive: South African underground operations

- Oversee the development and implementation of strategies to engage with local communities affected by underground mining activities, addressing climate-related concerns, promoting socio-economic development and the JET Framework

3 Group managers, specialists and heads





**RISK MANAGEMENT**

**Objective**

To enable users of general-purpose financial reports to understand an entity's processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process

**Group ESG manager and Group ESG specialist**

- Integrate ESG and climate-related considerations into risk management
- Manage climate-related risks associated with mining operations by incorporating sustainability strategies, including biodiversity conservation, resource (energy, water and waste) efficiency and management
- Develop and implement a climate change adaptation and resilience strategy, incorporating principles of the Just Energy Transition

**Group SHEQ manager and Group SHEQ specialist**

- Monitor occupational health surveillance of systematic collection, analysis and interpretation of health data, as well as integrated hazard recognition and response, specific to climate change
- Conduct thorough climate-related risk assessments to identify, evaluate and mitigate health and safety risks across all operations
- Manage occupational health programmes to address workplace-related illnesses and exposures

**Head: corporate reporting**

- Manage risks and opportunities associated with changes in sustainability and climate-related regulations, reporting frameworks and goals
- Clearly outline the processes used to identify, assess and manage climate-related risks, including information on how processes are integrated into the broader risk management framework and the effectiveness of risk mitigation measures
- Include detailed reports on climate-related risk assessments and their outcomes, specifically covering the nature and scope of the Company's climate risks and the steps taken to manage them

**Head: investor relations**

- Present to investors and other material stakeholders the methodologies used for evaluating climate risks and how climate-related risks are integrated into the overall risk management framework
- Share insights into how the Company plans to mitigate climate-related risks, including any specific actions or investments being made to address these risks

**Group engineer**

- Assess risks associated with energy and water security and alleviate dependencies through mitigation strategies that diversify the supply of energy and water
- Assess and mitigate environmental impacts associated with energy and water consumption and associated emissions
- Manage energy and water costs and forecast associated expenditures to mitigate financial risks

**Group HR manager**

- Develop risk mitigation strategies that incorporate climate risk considerations into workforce planning and operational processes
- Contribute to the development of resilience plans that address how human capital can support the Company's response to climate-related disruptions
- Develop risk mitigation strategies that incorporate climate-related considerations into workforce planning and operational processes, including contingency plans ensuring a skilled workforce readiness to adapt to changing climate conditions

**METRICS AND TARGETS**

**Objective**

To enable users of general-purpose financial reports to understand an entity's performance regarding its climate-related risks and opportunities, including progress towards any climate-related targets it has set and any targets it must meet by law or regulation

**Group ESG manager and Group ESG specialist**

- Define and communicate Group sustainability and climate-related material topics and KPIs that are aligned with local and international regulations, reporting frameworks and global goals
- Ensure that metrics and targets reflect the principles of accountability, transparency, consistency and credibility, and that they enhance global comparability and reporting quality
- Continuously improve on monitoring and reporting of metrics and targets through collaboration with all divisions along the value chain

**Group SHEQ manager and Group SHEQ specialist**

- Provide accurate and comprehensive health and safety data and metrics for decision-making and transparency
- Report on health and safety metrics aligned with climate change disclosure guidelines
- Ensure compliance with international and local reporting standards in health and safety metrics, incidents and related disclosures

**Head: corporate reporting**

- Disclose relevant metrics and KPIs used to measure and track climate-related performance
- Help set clear climate-related targets and provide updates on progress towards these targets
- Continuously improve reporting on the achievement of set goals and any changes or updates to targets based on new information or changing conditions
- Ensure compliance with international reporting standards in reporting energy and water consumption, efficiency improvements and related disclosures

**Head: investor relations**

- Clearly outline any targets set by the Company for reducing climate-related impacts and the Company's strategy for achieving sustainability goals
- Communicate climate-related metrics and targets, and KPIs related to GHG emissions, energy and water consumption, and other relevant climate metrics advocated by investors and other material stakeholders
- Keep investors and other material stakeholders updated on progress towards targets and any adjustments made in response to changing circumstances

**Group engineer**

- Provide input on energy and water-related risks and opportunities as per the guidelines provided by international reporting frameworks
- Set and monitor performance on metrics and targets aligned with climate reporting guidelines for energy and water performance (IFRS S2 (14)(a)(v))
- Ensure compliance with international reporting standards when acquiring data for reporting energy and water consumption, efficiency improvements and related disclosures

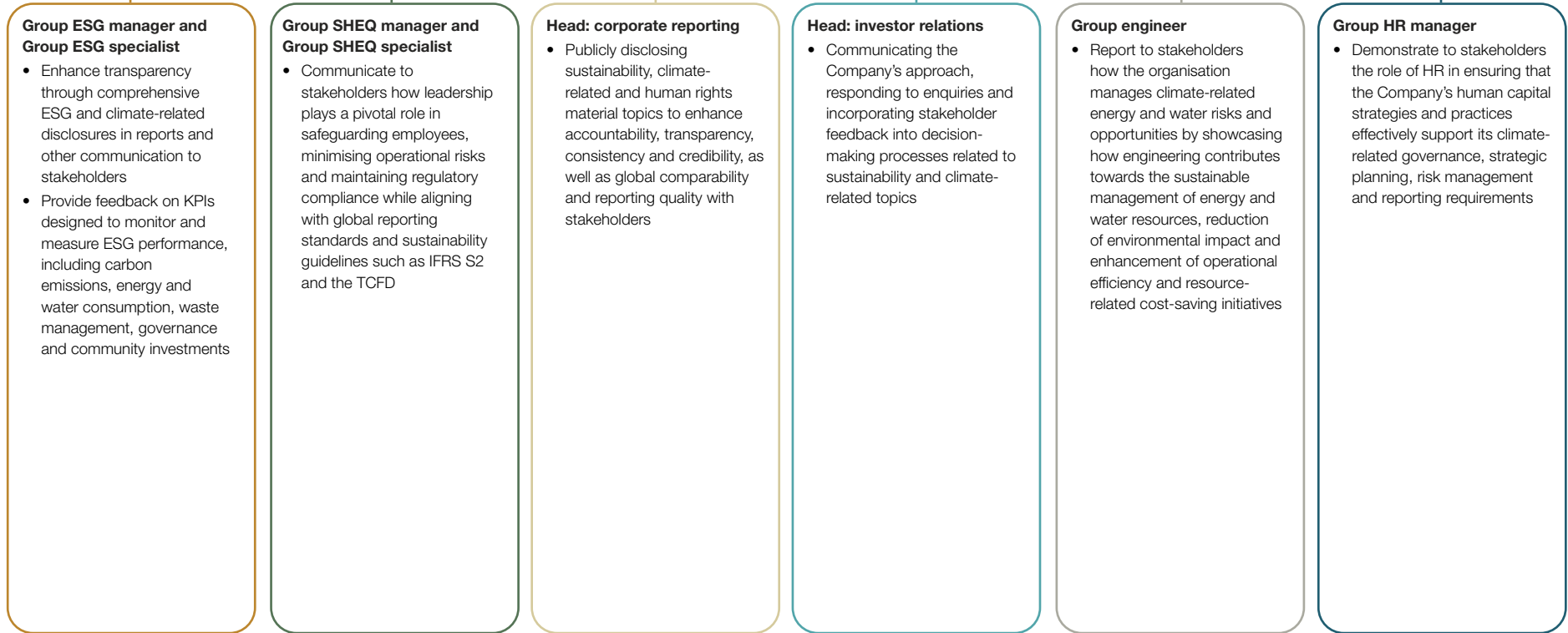
**Group HR manager**

- Develop and track HR-related metrics on employee engagement in sustainability initiatives, training completion rates and the attainment of climate-related performance goals
- Collaborate with the finance and sustainability teams to ensure that HR-related climate metrics are accurately reported in line with the requirements of climate reporting frameworks
- Provide data and insights on how the workforce is supporting the Company's climate-related goals and contributing to disclosures on metrics and targets

**STAKEHOLDER MANAGEMENT**

**Objective**

Stakeholder engagement refers to the policies, processes and practices by which an organisation interacts with those it may impact, including various activities and approaches throughout the life cycle of operations. The spectrum of stakeholder engagement includes communication strategies, information disclosures, inclusive consultation and participation processes, negotiations and partnerships



## GOVERNANCE continued

Specific examples of where the board's climate change mitigation strategy has provided oversight on climate change-related matters include delegating to the social and ethics committee and Exco the powers to evaluate, monitor and report on the following:

- Approval of audits and assessments relating to energy, water and waste
- Ongoing compliance with the requirements of the approved green loan to facilitate the implementation of resource efficiency projects
- Assessed existing TSFs against the Global Industry Standard on Tailings Management (GISTM) using various internal audits and studies
- Classification of certain Pan African TSFs as high-impact TSFs due to their proximity to local communities and watercourses
- Appointed an independent tailings review board (ITRB) to conduct a formal audit, as recommended, to comply with the GISTM principles.

### MANAGEMENT'S ROLE

The Group ESG manager and ESG specialist oversee climate-related matters, including monitoring, reporting and compliance, through a collaborative approach with general managers and senior managers in all operations. We have adopted this approach because of the systemic nature of climate change risks. Climate-related risks and opportunities must be addressed inclusively and collaboratively.

The Pan African sustainability management team is also responsible for developing and reviewing the content of sustainability reports, including this climate change report, and ensuring alignment with regulatory disclosure requirements prior to their review by the executive and the board.

The board has delegated the responsibility for developing and implementing stakeholder engagement programmes relating to

sustainability matters, including climate change, to the social and ethics, SHEQ and audit and risk committees.

### CAPACITATION AND TRAINING

We have strengthened our skills and capacity to respond to climate change impacts. A cross-functional committee comprising climate resilience champions at the operations has been established. The committee is responsible for identifying, assessing, prioritising, monitoring and elevating climate-related risks and opportunities for the board of directors, board committees and the executive committee (Exco). Meeting regularly, the climate change and energy management cross-functional committee will utilise the outputs from the climate change risks and opportunities assessment and the capacity building and scenario analysis report to manage climate-related risks and opportunities using a well-defined methodology supported by scientific data.



**Overview of Barberton Mines' BLOX<sup>®</sup> plant and the BTRP nestled within the Barberton Mountainland**

# STRATEGY

Our strategy is designed to actively respond to the current and projected impacts of climate change on the Group and to meet the increasing demand for disclosure of our approach from primary users of our climate change reports.

## RECOMMENDED DISCLOSURES

- Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term
- Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning
- Describe the resilience of the organisation's strategy, considering different climate-related scenarios, including a 2°C or lower scenario.

We evaluate climate change-related risks and opportunities through the framework provided by the TCFD. We subdivide climate change risks into physical and transition risks. These are explained in more detail below.

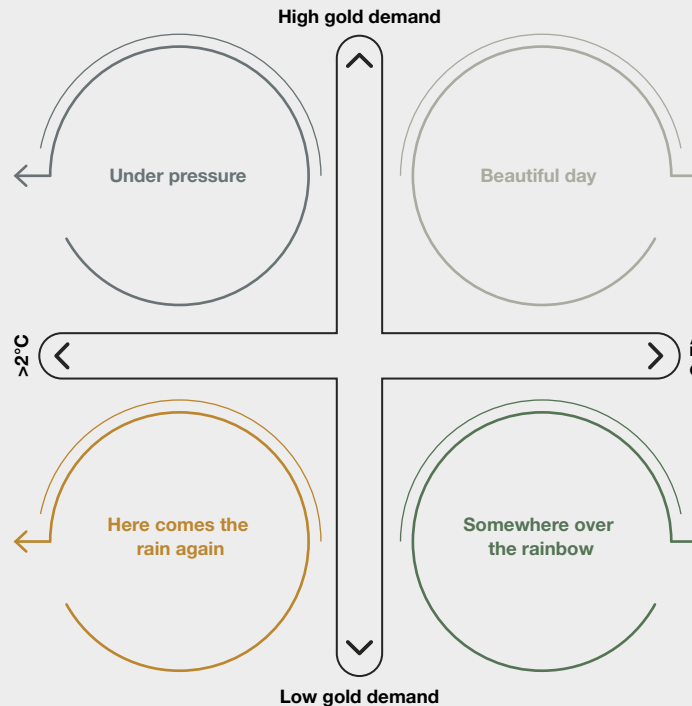
## SCENARIO ANALYSIS

Performing climate change scenario analysis is a crucial TCFD recommendation and a tool for exploring potential future outcomes. In 2023, we initiated and completed a scenario analysis process to strengthen our understanding of climate change risks and opportunities.

Our scenario analysis process included four scenarios, as illustrated in the diagram and explained below.

In this scenario, global efforts to combat climate change have been insufficient, and temperatures are expected to increase to over 2°C by the end of the century. Extreme weather events become more frequent, and more investment capital is diverted to adaptation and resilience measures. Moreover, central banks in many countries are increasing their holdings of gold reserves as a risk mitigation measure, leading to increased gold demand and price. However, global economic growth remains impacted. In South Africa, economic growth remains stagnant, and political stability has declined. Pan African benefits from high gold demand and a favourable exchange rate, but social disruption and extreme weather events negatively impact operations. Overall, investor confidence is neutral.

This scenario represents a pessimistic outlook both globally and for the gold mining sector. Due to insufficient climate change mitigation efforts, global temperature increases are significant, and extreme weather events have become more frequent and severe. Resilience measures are eroded over time. Due to a lack of progress in reducing GHG emissions in South Africa, there is a crucial need for more international funding and policy changes. Without international cooperation, neither renewable energy uptake nor adaptation measures can be funded. While domestic policy and planning do not develop significantly, South African exports, including gold, are increasingly subject to carbon border adjustment mechanisms (CBAM) and boycotts. Investor confidence is low, and extreme weather events, social unrest and a shortage of critical skills regularly disrupt operations. It is clear that international cooperation is key to addressing these challenges.

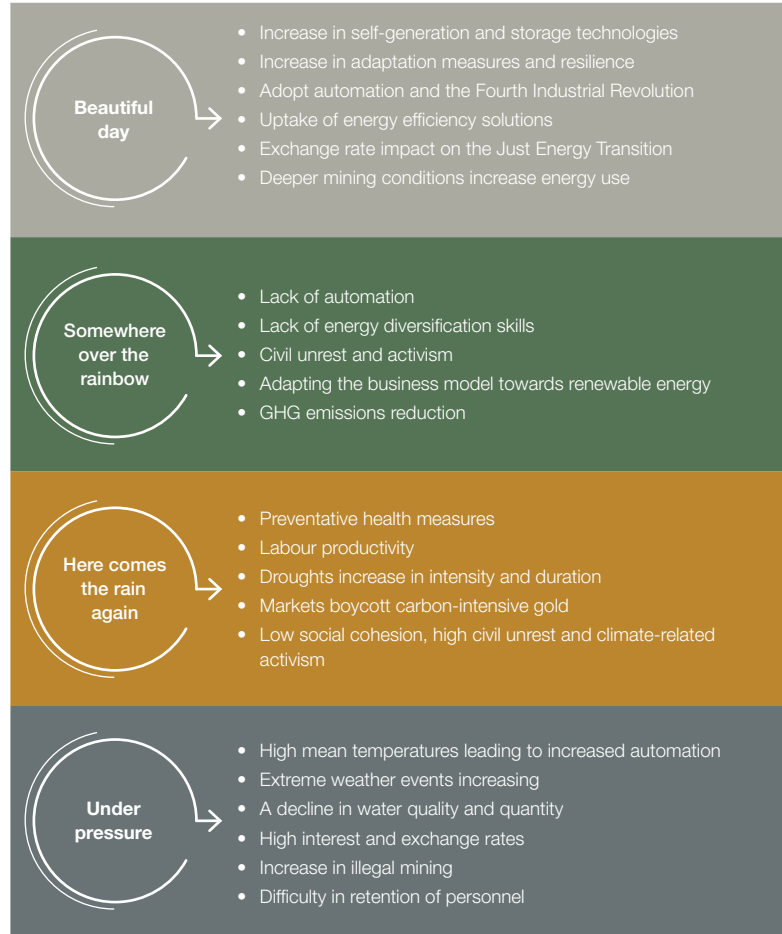


This scenario presents a promising future for the world and the gold mining sector. With substantial global action and effective GHG emissions control, the projection is for global warming to be less than 2°C by the end of this century. South Africa's climate change legislation has broadened in scope and rigour, leading to well-planned national GHG mitigation efforts. The implementation of renewable energy and storage technologies has significantly improved energy security and availability, with the promising growth of green hydrogen. Gold demand is on the rise globally, and investors' sentiments are optimistic.

In this scenario, global efforts to reduce GHG emissions stabilise temperatures below 2°C. South Africa also makes strides in reducing domestic GHG emissions, but economic growth and energy availability remain challenging. A lack of investment in adaptation infrastructure makes water shortages a concern. South African exports remain carbon-intensive in the medium term, with attractive carbon border taxes. Globally, gold demand is low, indicating poor global economic growth. Nevertheless, there is still some foreign capital influx, and investor confidence is increasingly optimistic.

## STRATEGY continued

These scenarios were used to assess climate-related risks over the next 10 years. Various impacts were identified, and the team supporting the scenario analysis process categorised these by financial and other impacts driven by climate-related risks and responses. Some of the critical outcomes for each scenario are highlighted below.



Some issues that were raised as typical across all the scenarios considered include:

- Civil unrest in local communities due to climate impacts will affect Pan African
- Human performance/BIOX® process and the impact of increased temperatures increasing over time
- Energy efficiency as a mechanism for reducing costs and emissions
- Market impacts on carbon-intensive exports
- Water availability and quality decreasing
- A shift to renewable energy and storage is required.

Furthermore, the following high-impact risks were present in fewer scenarios but could potentially have significant impacts:

- Boycotting of carbon-intensive gold producers by international fund managers
- Volatile currency conversions and high interest rates impact our ability to execute the climate change response plans
- Civil unrest and activism, caused by climate-related pressures, such as water availability, would impact Pan African's operations and stakeholder management processes.

The following financial impacts were highlighted:

- To reduce climate risk, increased costs may be incurred for purchasing, for example, energy-efficient equipment, lower carbon generation of electricity, adaptation measures to deal with more intense flooding, etc.
- Additionally, in relation to human productivity and safety, the surface infrastructure may require equipment and buildings to manage temperatures above ground. For underground operations, increased ventilation and cooling equipment may be necessary.



**The BTRP metallurgical plant at Barberton Mines**

**CLIMATE-RELATED RISKS AND OPPORTUNITIES**

According to the World Bank, drought, floods and wildfires are the three most significant drivers of climate-related disasters in South Africa. Changes in the quality and availability of water will be the dominant challenge for the country through the end of the century. We are currently facing rising water demand and increased pollution across shared water resources. Additional water resource capacity is required and must be developed to meet a growing demand for domestic needs.

South Africa's National Climate Change Response Policy advocates for adaptation measures to reduce the impacts of climate change on human health, such as lowering specific criteria pollutants, particulate matter, ozone and sulphur dioxide, developing and strengthening existing public awareness campaigns, developing heat-health action plans, improving biosafety, developing a spatial and temporal health data capture system and integrating food security and sound nutritional policies into all adaptation strategies.

Health impacts are expected to be realised through increasing heat stress, the altered range, seasonality and distribution of vector-borne diseases, including malaria, dengue fever and yellow fever, air pollution and associated respiratory illnesses, communicable diseases such as HIV/Aids, as well as water-borne illnesses such as cholera and diarrheal disease. Healthcare system personnel should receive additional training to be better informed of the relationship between climate change, seasonal variability and health impacts. Building the capacity of the health sector will be instrumental in adequately identifying diseases as they emerge.

As a country, we rely heavily on surface water, with significant dams being the primary source of freshwater. As temperatures rise due to climate change, we can expect that dams will experience substantial decreases in water levels and, therefore, water availability. Our groundwater resources will also be impacted as groundwater levels will decline as a result of increased extraction rates and the intrusion of saltwater in coastal areas. Changes in rainfall patterns will, in some cases, increase rainfall intensity, resulting in flash floods and soil erosion. In other cases, there will be a significant reduction in rainfall, leading to drought conditions.

Energy generation, transmission and expanded use are critical to South Africa's overall development agenda and economic growth. As temperatures increase, electricity infrastructure could come under further pressure due to increased electricity demand for cooling, reduced demand for heating and reduced electricity production from thermal power plants. This infrastructure is already under pressure and potentially may become unavailable. Therefore, securing additional energy and diversifying our energy sources are key to our long-term sustainability.

Time horizon

- Short-term focus (one year)
- Medium-term focus (two to three years)
- Long-term focus (three years or more)

We assessed our specific climate change risks as an organisation, which we expand on as follows:

**Risks**

**Physical climate change risks**

We have identified and assessed our physical climate change risks, which are distinguished and described below as acute or chronic risks.

**Transition climate change risks**

We have identified and assessed our transition risks, which are described below.

**Opportunities**

We have identified several opportunities emanating from our various climate change scenarios. These are described by the TCFD as follows:

- **Resource efficient and cleaner production:** Improving the use of natural resources to be more productive and reduce waste
- **Transitioning towards low-carbon energy systems:** Converting to sustainable energy sources
- **Climate adaptation and resilience:** Improving resilience and implementing adaptation measures to the impacts of climate change.

**Physical climate change risks and opportunities**

Acute risk		
Climate-related risk		When
1. Increase in severity of extreme weather events, including storms and floods		●
<b>Response</b> <ul style="list-style-type: none"> <li>• Collaborative R&amp;D into long-range weather forecasting and early warning systems</li> <li>• Flood and mudslide prevention measures, in addition to current measures to deal with increased intensity, at tailings facilities as part of the adaptation plan</li> <li>• Contingency plans, including the availability of input materials and transport considerations</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risks</b> <ul style="list-style-type: none"> <li>• Increase in R&amp;D spending as input into an adaptation plan</li> <li>• Increase in capital expenditure to fund an adaptation plan</li> <li>• Decrease in revenue from disruptions in the value chain, up and downstream</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>• Increase in climate-related know-how through collaboration and networks for better preparedness</li> <li>• Increase in climate resilience related to flooding</li> <li>• Protect revenue from disruptions in the value chain, up and downstream</li> </ul>	

Chronic risks		When
<b>Climate-related risks</b>		
1. Increase in the intensity and duration of droughts		●
<b>Response</b> <ul style="list-style-type: none"> <li>Development of a comprehensive Group adaptation plan, including adaptation measures for both physical and softer issues such as information gathering and stakeholder engagement</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risks</b> <ul style="list-style-type: none"> <li>Increase in capital expenditure to fund an adaptation plan</li> <li>Increase in R&amp;D spend</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in assets due to the adoption of water purification and efficiency technologies</li> <li>Decrease in the costs of purchased water</li> </ul>	
2. Increase in mean temperatures and heatwaves		● ●
<b>Response</b> <ul style="list-style-type: none"> <li>Upgrades and additions to ventilation and cooling systems</li> <li>Enclosure of processes currently open to the atmosphere</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risks</b> <ul style="list-style-type: none"> <li>Increase in capital expenditure to fund the adaptation plan</li> <li>Increase in operational costs, including maintenance</li> <li>Increase in incidents of fatigue, disease and sick leave resulting in reduced productivity</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in climate-resilience assets</li> <li>Health sector collaboration to understand climate-related disease prevention, diagnosis and treatment</li> </ul>	
3. Changes in precipitation patterns adversely impacting water quality		●
<b>Response</b> <ul style="list-style-type: none"> <li>Increase in investment in water treatment plants to improve water consumption, withdrawal and discharge</li> <li>Increase in corrosion control measures</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risks</b> <ul style="list-style-type: none"> <li>Increase in capital expenditure</li> <li>Increase in operational costs, including maintenance</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in climate-resilience assets</li> <li>Innovation in climate-related maintenance techniques</li> </ul>	

Transition climate change risks and opportunities

Social risks		When
<b>Climate-related risks</b>		
1. Civil unrest increases		●
<b>Response</b> <ul style="list-style-type: none"> <li>Increase in social inclusion projects and stakeholder engagement</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risks</b> <ul style="list-style-type: none"> <li>Increase in corporate social investment expenditure</li> <li>Increase in security costs</li> <li>Increase in costs to repair/replace infrastructure due to vandalism</li> <li>Disruption of operations leading to revenue loss</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in social inclusion projects and stakeholder engagement</li> <li>Community well-being and licence to operate sustainably</li> </ul>	
2. Increase in automation due to extreme weather leading to job losses		● ●
<b>Response</b> <ul style="list-style-type: none"> <li>Invest in R&amp;D to understand areas of potential job losses</li> <li>Re- and upskilling of employees into new areas aligned with the Just Energy Transition and low-carbon economy</li> <li>Review of information technology and digital strategies</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risk</b> <ul style="list-style-type: none"> <li>Increase in capital expenditure to fund an adaptation plan</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Sustainable communities and job opportunities</li> <li>Increase in productivity</li> </ul>	

Time horizon

- Short-term focus (one year)
- Medium-term focus (two to three years)
- Long-term focus (three years or more)

Governance and reputation	
Climate-related risks	When
1. Pan African is not perceived as responsive to climate change	●
<b>Response</b> <ul style="list-style-type: none"> <li>Increase engagement with material stakeholders, including shareholders, funders and communities</li> <li>Specify climate-related criteria in procurement policies, processes and procedures</li> </ul>	
<b>Financial and other impacts driven by climate-related risks and responses</b>	
<b>Risks</b> <ul style="list-style-type: none"> <li>Decrease in share price due to negative investor sentiments</li> <li>Increase in litigation and legal costs</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in accountability and transparency</li> <li>Increase in Company valuation</li> <li>Green procurement strategies aligned with the circular economy and industrial symbiosis</li> </ul>
2. Pan African has insufficient or incorrect skills to execute climate change strategies	● ●
<b>Response</b> <ul style="list-style-type: none"> <li>Invest in R&amp;D to understand areas of potential job losses</li> <li>Re- and upskilling of employees into new areas aligned with the Just Energy Transition and low-carbon economy</li> </ul>	
<b>Financial and other impacts driven by climate-related risks and responses</b>	
<b>Risk</b> <ul style="list-style-type: none"> <li>Increase in HR training costs</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Alignment with the JET Framework</li> <li>Employees with improved skills and climate change awareness</li> </ul>
3. Pan African is unable to meet climate-related funding requirements	●
<b>Response</b> <ul style="list-style-type: none"> <li>Increase communication and oversight on climate-related funding targets</li> </ul>	
<b>Financial and other impacts driven by climate-related risks and responses</b>	
<b>Risk</b> <ul style="list-style-type: none"> <li>Increase in funding costs for future growth projects</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in consistency and credibility</li> <li>Improved overall performance and valuation of the Company</li> </ul>

Policy and legislation	
Climate-related risks	When
1. Implementation of the Sector Adaptation Strategy and Plan and the Sectoral Emissions Targets related to South Africa's Climate Change Bill	●
<b>Response</b> <ul style="list-style-type: none"> <li>Build in-house RES and storage capabilities while purchasing certified third-party RES</li> <li>Collaborate to buy or sell offset credits (dependent on emissions cap or budget)</li> <li>Set an internal carbon price to use in investment and procurement decisions</li> </ul>	
<b>Financial and other impacts driven by climate-related risks and responses</b>	
<b>Risk</b> <ul style="list-style-type: none"> <li>Increase in costs to certify carbon intensity and assurance of emissions</li> </ul>	<b>Opportunity</b> <ul style="list-style-type: none"> <li>Increase in the renewable energy mix</li> </ul>
2. Increase in carbon taxes	●
<b>Response</b> <ul style="list-style-type: none"> <li>Build in-house RES and storage capabilities while purchasing certified third-party RES</li> <li>Collaborate to buy or sell offset credits (dependent on emissions cap or budget)</li> <li>Set an internal carbon price to use in investment and procurement decisions</li> </ul>	
<b>Financial and other impacts driven by climate-related risks and responses</b>	
<b>Risk</b> <ul style="list-style-type: none"> <li>Increase in costs from fines or taxes</li> </ul>	<b>Opportunity</b> <ul style="list-style-type: none"> <li>Increase participation in the carbon credits markets</li> </ul>
3. Increase in CBAM negatively impacting gold exports	●
<b>Response</b> <ul style="list-style-type: none"> <li>Build in-house RES and storage capabilities while purchasing certified third-party RES</li> <li>Collaborate to buy or sell offset credits (dependent on emissions cap or budget)</li> <li>Set an internal carbon price to use in investment and procurement decisions</li> </ul>	
<b>Financial and other impacts driven by climate-related risks and responses</b>	
<b>Risk</b> <ul style="list-style-type: none"> <li>Loss of revenue</li> </ul>	<b>Opportunity</b> <ul style="list-style-type: none"> <li>New internal processes for investments and procurement</li> </ul>

# STRATEGY continued

Time horizon

- Short-term focus (one year)
- Medium-term focus (two to three years)
- Long-term focus (three years or more)

Reporting compliance		When
<b>Climate-related risks</b>		
1. Increase in climate-related disclosures from funders and investors		●
<b>Response</b> <ul style="list-style-type: none"> <li>Upskill or acquire resources to deal with compliance</li> <li>Implement corporate governance processes/policies aligned with funder requirements</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risks</b> <ul style="list-style-type: none"> <li>Increase in compliance costs</li> <li>Increase in borrowing costs</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in climate-related resources and skills of the future</li> <li>Increase in oversight and reporting compliance aligned with stakeholders' requirements</li> </ul>	
2. Increase in insurance costs due to lack of climate-related disclosures		● ●
<b>Response</b> <ul style="list-style-type: none"> <li>Increase reporting aligned with international frameworks</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risk</b> <ul style="list-style-type: none"> <li>Increased insurance-related costs</li> </ul>	<b>Opportunity</b> <ul style="list-style-type: none"> <li>Increase in oversight and reporting compliance aligned with stakeholders' requirements</li> </ul>	

Emissions reduction targets		When
<b>Climate-related risks</b>		
1. Implementation of additional RES		● ● ●
<b>Response</b> <ul style="list-style-type: none"> <li>Build in-house RES and storage capabilities while purchasing certified third-party RES</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risk</b> <ul style="list-style-type: none"> <li>Increase in assurance costs</li> </ul>	<b>Opportunity</b> <ul style="list-style-type: none"> <li>Increase in energy security and cost savings</li> </ul>	

Emissions reduction targets <small>continued</small>		When
<b>Climate-related risks</b>		
2. Implementation of energy efficiency interventions		●
<b>Response</b> <ul style="list-style-type: none"> <li>Energy audit to be undertaken to identify priority areas for energy efficiencies</li> <li>Conduct a business case on high head pump storage using the available head in the mine shaft</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risk</b> <ul style="list-style-type: none"> <li>Increase in assurance costs</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in energy security and cost savings</li> <li>Optimal use of available resources</li> </ul>	
3. Setting targets for emissions reductions		●
<b>Response</b> <ul style="list-style-type: none"> <li>Identify opportunities for reduction in emissions</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risk</b> <ul style="list-style-type: none"> <li>Implications on growth</li> </ul>	<b>Opportunity</b> <ul style="list-style-type: none"> <li>Increase in energy efficiency and cost savings</li> </ul>	

Value chain		When
<b>Climate-related risks</b>		
1. Increase in input materials due to lack of supply		● ●
<b>Response</b> <ul style="list-style-type: none"> <li>Introduce a value chain forum to share ideas and lessons learnt and look for areas of synergy</li> <li>Conduct studies to determine the carbon intensity of the gold sold along the value chain in preparation for the CBAM</li> </ul>		
<b>Financial and other impacts driven by climate-related risks and responses</b>		
<b>Risks</b> <ul style="list-style-type: none"> <li>Increase in input costs</li> <li>Increase in R&amp;D costs</li> </ul>	<b>Opportunities</b> <ul style="list-style-type: none"> <li>Increase in climate-related supplier engagement and inclusive procurement while exploring green procurement strategies</li> <li>Increase in value chain efficiencies including building energy efficiency as a criterion for procurement</li> </ul>	

## STRATEGY continued

The opportunities we have recognised align with our strategic goals, which encompass our dedication to decarbonisation, the adoption of green energy and the pursuit of long-term environmental sustainability. Additionally, we strive to reduce our dependence on external providers for drinking water. The strategic endeavours we have actively engaged in include the following:

Initiatives	Direct impact	Financial impact
<b>Evander Mines' 9.975MWac solar plant</b>	153,402tCO <sub>2</sub> e savings over the first 10 years	<ul style="list-style-type: none"> <li>Savings of US\$4.4 million since the plant was commissioned in May 2023</li> </ul>
<b>Barberton Mines' 8.75MWac solar plant facility (planned)</b>	Between 14ktCO <sub>2</sub> e and 15ktCO <sub>2</sub> e per annum of carbon dioxide emissions reductions	<ul style="list-style-type: none"> <li>Cost savings of ZAR26 million in year one before averaging ZAR40 million a year in cost savings over the life of the plant</li> <li>Expected to provide 15% of Barberton Mines' energy requirements</li> <li>Expected cost savings of approximately US\$2.4 million at current Eskom tariffs</li> </ul>
<b>Evander Mines' water treatment plant</b>	Reduced water consumption from Rand Water by 45.6% to 747.5ML for the 2024 financial year	<ul style="list-style-type: none"> <li>Realised cost savings of approximately US\$0.5 million for the 2024 financial year</li> </ul>

<sup>1</sup> Rand amounts converted at an exchange rate of US\$/ZAR:18.00.

## IMPACTFUL COLLABORATIONS

We have collaborated with the National Cleaner Production Centre of South Africa (NCPC-SA), hosted by the Council for Scientific and Industrial Research, on behalf of the Department of Trade, Industry and Competition. The NCPC-SA is a member of the United Nations Industrial Development Organisation and the United Nations Environmental Programme's Global Network for Resource Efficient and Cleaner Production and is leading the African Roundtable on Sustainable Consumption and Production. The partnership aims to assist Pan African in lowering costs through energy, water, materials consumption and waste management efficiencies, including facilitating our participation in the circular economy through the industrial symbiosis programme.

Our initial engagement activities have focused on partnerships to build our internal knowledge and identify climate risks and opportunities. From now on, our stakeholder engagement efforts will be more focused on community and supplier engagement, development and accredited training.



**Evander Mines'  
3ML per day  
water treatment plant**

# RISK MANAGEMENT

Pan African has a comprehensive risk management framework in place. As with our broader ESG priorities, climate risks will increasingly be integrated into our risk management programme. The risk management process includes a clear disclosure strategy. Our approach to defining and managing climate risks has evolved.

## RECOMMENDED DISCLOSURES

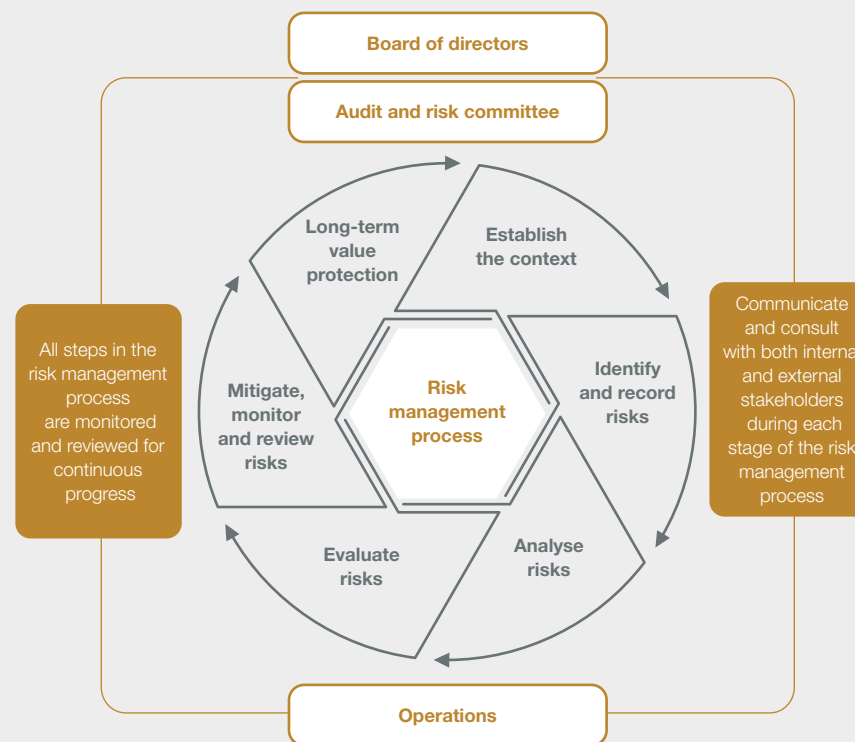
- Describe the organisation's processes for identifying and assessing climate-related risks
- Describe the organisation's processes for managing climate-related risks
- Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.

We have a robust and comprehensive risk management framework in place in which we incorporate climate change risks.

Our risk management approach follows a well-structured and systematic process encompassing internal operational risks and external factors beyond our control. Risk management remains the responsibility of the board of directors. Through our risk management process, we have identified top risks that potentially threaten the execution of our business strategy. Aligned with our broader ESG priorities, we are progressively integrating climate risks into our risk management programme. This involves developing a clear disclosure strategy as part of our risk management process. Our approach to identifying and managing climate-related risks is undergoing significant enhancements as we grapple with addressing the nuances associated with climate change risk management and associated resource mobilisation.

## OUR RISK MANAGEMENT PROCESS

We use a structured and systematic risk management process to identify, assess and address uncertainties, protect stakeholder value and promote long-term sustainability. This process considers risks from strategic, operational and external sources. Our risks and opportunities are managed on four tiers: the board, the board committees, executive management and employees.



## RISK MANAGEMENT continued

Physical climate change-related risks are primarily assessed as part of SHEQ risk assessments and consolidated into the business risk register. Transition risks, especially with regard to emerging regulations and policy, are evaluated specifically regarding potential financial impacts. The relative significance of climate change risks, compared to other risks, is assessed on a risk-based approach using our SHEQ risk methodology. Presently, climate change-related risks are managed at an operational level. However, we are in the process of integrating climate change into our business strategy, as discussed in the previous section.

In our effort to ensure the successful execution of our business strategy, we have conducted a comprehensive analysis of the critical risks that could potentially hinder its implementation. During this assessment, we evaluated these risks based on their likelihood of occurring, the speed at which they might manifest and the potential impact they could have on our operations. By doing so, we were able to determine the residual risk remaining after implementing our mitigating measures.

The following table further describes the overall responsibilities and oversight of the risk management duties across the board.

### RISK MANAGEMENT OVERSIGHT

- 1 Board**  
The Pan African board oversees the risk management process, drawing upon its committees, expertise, internal assessments and risk reports.
- 2 Board committees**  
The board receives support from various committees, including the audit and risk committee, the SHEQ committee, the social and ethics committee and the remuneration committee.
- 3 Executive management**  
Executives at Pan African are tasked with the governance and responsibility to build climate resilience in their respective portfolios.
- 4 Management**  
Mandated by the board of directors and executives, management's role comprises implementing the climate change strategy and managing climate-related risks and opportunities day to day through structured practices of identification, assessment, prioritisation, monitoring and reporting.
- 5 Employees**  
Risk management within Pan African is the responsibility of all employees.

We are developing a climate-related transition plan based on our recent climate change risks and opportunities assessment and the capacity building and scenario analysis report. The steps that will be taken to address individual climate-related risks are described in the strategy section of this report.


We will investigate developing various strategies and plans in the future. These include mitigation and adaptation strategies, cognisant that this requires incorporating climate-related strategies into our budgeting process at the corporate and operations levels. Contingency and business continuity planning should also be updated to include climate change considerations.

Moreover, we have identified the need to strengthen the organisation's skills, knowledge and capacity to build resilience against climate change. To this end, we have already started and plan to continue climate change-related training within the organisation.

Where applicable, climate-related risks and opportunities will be incorporated into our Group risk management frameworks as appropriate for monitoring and management.

**The regional Elikhulu TSF at Evander Mines which will contain all the future underground and Elikhulu processed residues**

# METRICS AND TARGETS

Pan African has disclosed its ESG performance consistently in its previous  integrated annual reports, using the report as its primary platform to reach its stakeholders. The extent of our disclosure has broadened over time.

## RECOMMENDED DISCLOSURES

- Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process
- Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions and the related risks
- Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Our approach to measuring and managing climate-related risks and opportunities is in line with the GHG Protocols recommended by leading reporting frameworks such as the GRI, TCFD and IFRS S2. We also consider other relevant metrics that are material to our operations, including water and waste management.

We continue to meet our mandatory GHG emissions reporting regulations and comply with the Carbon Tax Act, 15 of 2019, in South Africa. Moreover, we recognise the importance of aligning our climate-related metrics with the JET Framework's principles of (1) distributive justice fostering equitable sharing of climate-related risks and opportunities, (2) restorative justice to improve impacted ecosystems while redressing historical damage caused by climate-related events, and (3) procedural justice seeking to empower and support labour groups and host communities impacted by climate change.

This entails balancing the imperative of reducing carbon emissions with the potential impact on employment, particularly in communities heavily dependent on fossil fuel-intensive sectors such as mining, energy generation, water, biodiversity and health. We are committed to developing long-term green energy jobs and supporting affected communities throughout our transition to the low-carbon economy. In making sure we are aligned with the principles of the JET Framework, we are also synchronising local goals with international SDGs through climate action (Goal 13) and the support of sustainable cities and communities (Goal 11).

## ENERGY TARGETS

We have several focus areas for our energy performance that we monitor, measure and disclose publicly, as detailed below.

### Energy capital expenditure

While not a formal target, we monitor our energy capital expenditure to ensure that we maintain a cost-effective approach when evaluating projects. However, this practice speaks to the IFRS S2 strategy disclosure on financial position and performance and cash flows related to investments and disposal plans associated with managing climate-related risks and opportunities.

Our capital expenditure on energy projects during the reporting period was allocated to the construction of our second solar facility at Fairview Mine in Barberton. The Pan African board approved US\$12.7 million for the engineering, procurement and construction (EPC) agreement. To date, there have not been any material claims or cost overruns in respect of the EPC agreement. However, some legacy mining waste material was identified on-site and had to be replaced with competent soil from a nearby area. The cost was offset by the gold content of the historical material recovered in the Barberton Mines metallurgical circuit.

In the 2024 financial year, we invested US\$10.3 million (2023: US\$2.3 million) in Barberton Mines' Fairview solar plant, bringing our total capital expenditure for the year to US\$172.4 million (2023: US\$113.0 million).

The following energy efficiency projects were implemented in the 2024 financial year:

- Fan clipping was identified as a key energy-saving initiative at our underground operations, implemented through the installation of guide vane controllers. Another project focused on energy efficiency involved fan excitation, which was achieved by installing excitation systems to reduce starting currents
- Pump load shifting was also implemented, utilising surge capacity to store water during high-peak electricity hours when rates are higher. This strategy optimises energy usage and reduces costs.

Additionally, power factor correction was addressed by installing capacitor banks to improve the power factor, minimise reactive power and mitigate Eskom penalties. These projects collectively enhance energy efficiency and contribute to cost savings while aligning with sustainable practices.

In the 2024 financial year, we invested US\$0.5 million (2023: US\$1.9 million) on energy efficiency solutions at Evander Mines.

### Energy savings

We do not have a target regarding energy savings. However, we discuss energy infrastructure and efficiency initiatives that have resulted in energy savings below.

Our energy savings are highlighted below for the period under review:

- Renewable energy from solar plants amounted to an estimated US\$2.2 million (2023: US\$1.9 million) in savings
- Energy efficiency initiatives amounted to an estimated US\$0.3 million (2023: US\$0.1 million) in savings.

Our energy efficiency projects also culminated in 3.0GWh savings associated with averted carbon emissions of 2.8ktCO<sub>2</sub>e/MWh. We are also planning to engage the South African Energy Development Initiative on the section 12L tax incentive designed to encourage organisations for energy efficiency projects. The initiative offers a deduction from taxable income, amounting to ZAR0.95 per kilowatt-hour of verified energy savings. This initiative not only supports the national agenda to combat climate change but also enhances South Africa's energy supply security.

## METRICS AND TARGETS continued

### Contributing towards the Just Energy Transition

Our Fairview solar photovoltaic (PV) phase one impact report outlines the employment impact of the project. Specifically, the project employed a total of 235 workers, with 190 unskilled workers from the local communities in roles such as construction labour and 45 skilled workers in roles such as engineering and project management, during the construction phase. While the nature of renewable energy projects means that the workforce decreases after construction, we were able to retain 11 workers to continue operating and maintaining the solar plant operations.

During the construction phase, we made a significant contribution to the local Barberton economy by paying a total of US\$0.4 million in salaries over six months during the construction phase. This not only stimulated the local economy but also provided some employment opportunities.

While the procurement of large renewable energy projects is often based on a global value chain, we are committed to procuring local content. This approach not only supports the JET Framework and skills transfer but also ensures that the benefits of these projects are impactful at a local level. As a result, 67.7% of the total spend was local South African content, equivalent to an estimated spend of US\$9.2 million on local suppliers.

### Renewable energy

As part of our commitment to increasing the percentage of renewable energy in our overall energy mix, we have committed to achieving a 15% renewable energy mix by 2027 in accordance with our sustainability-linked bond finance framework. However, our ambitious target is 39% by 2030 and 50% by 2050, conditional on a material expansion of our renewable energy initiatives and decarbonisation strategy.

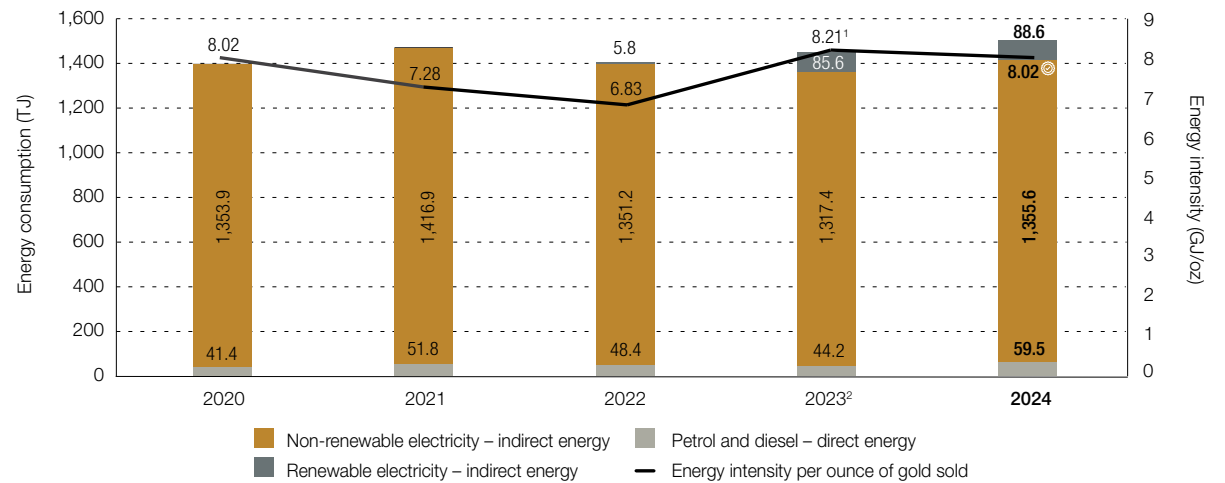
KPI	2024	2023
Renewable energy (%) = (solar PV (MWh))/ (total electricity consumption (MWh))	Target: 7% Performance: 6.1%	Target: 5% Performance: 6.1%

For the reporting period, we achieved a renewable energy mix of 6.1% instead of the intended 7%. This is attributed to delays in the construction of our Fairview solar plant and an increase in our GHG boundary. However, the Fairview solar plant started generating electricity in August 2024, and we are on track to meeting our future renewable energy targets.

### Total energy consumption and energy intensity

We do not have a target regarding total energy consumption. As a growing entity, we do not aim to reduce our total energy consumption. Instead, we are focused on ensuring that we maintain sustainable energy efficiency ratios while lowering our energy intensity ratios.

#### Energy consumption



The Group's energy consumption increased by approximately 3.9%, primarily due to an increase in petrol and diesel consumption as a result of including the MTR project into our reporting boundary. We are pleased that our energy intensity<sup>1</sup> per ounce of gold sold has reduced over the year by 2.3% due to our 4.9% production increase.

<sup>1</sup> Historically, the Group recognised revenue on delivery of gold to Rand Refinery. However, the Group established that control does not pass to the customer on delivery but rather on settlement. As such, revenue and associated intensities have been restated to reflect only gold sales that have been settled at the reporting date, as opposed to gold delivered to Rand Refinery.

<sup>2</sup> The energy intensity only includes assets that produce ounces, including Barberton Mines and Evander Mines which account for 98.6% of Group's energy consumption.

**Aerial view of Evander Mines'  
9.975MWac solar plant**

# METRICS AND TARGETS continued

## CARBON TARGETS

In accordance with the TCFD requirements, we report and base our emissions calculations on the GHG Protocol Corporate Accounting and Reporting Standard. Furthermore, we provide our emissions for the past five financial years to show a trend analysis.

### Scope 1 and Scope 2 emissions

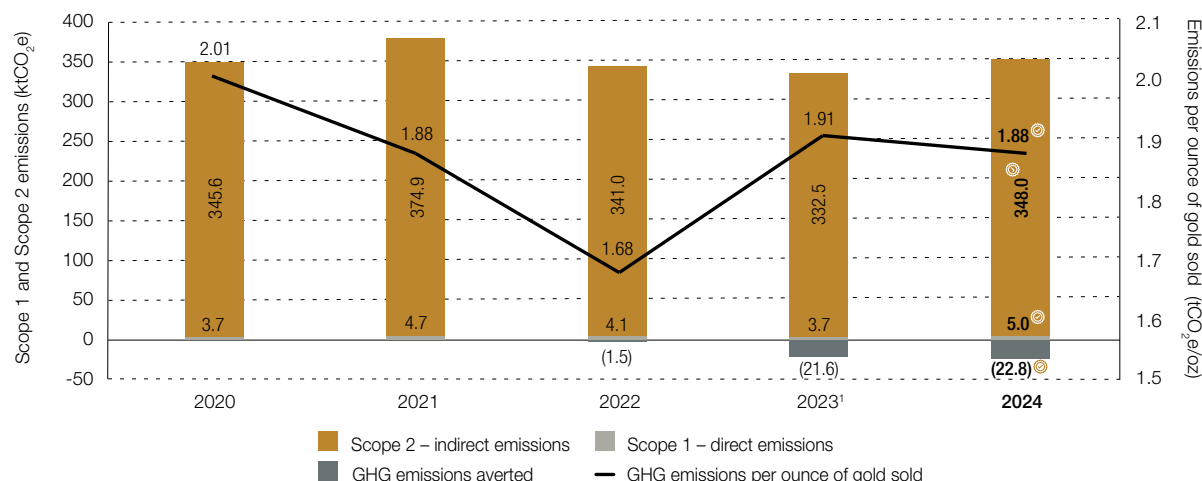
Our Scope 1 and Scope 2 emissions have increased by 35.1% and 4.7%, respectively.

Our significant increase in Scope 1 emissions is primarily due to bringing the MTR project, the Sudan exploration and the Barberton Blueberries project into our emissions boundary. When it comes to diesel consumption and associated direct emissions, the MTR project now ranks second to Barberton Mines. The MTR project is not just about the present, but also about a sustainable future in gold mining and uplifting our host communities. We are anticipating an increase in electricity and fuel consumption for the 2025 financial year, when the MTR project becomes operational. However, we are planning to mitigate this climate-related risk with a 20MW solar PV facility at the MTR project operations, ensuring the long-term sustainability of our project.

Our carbon intensity<sup>1</sup> per ounce of gold sold was down 1.6%, primarily due to the increase in gold production. This improvement occurred despite a 1.7% increase in the grid emission factor used for estimating GHG emissions due to a 7.0% decrease in Eskom's generated energy, even though renewable energy generated by independent power producers (IPPs) was up by 12.4%.

<sup>1</sup> The carbon intensity only includes assets that produce ounces, including Barberton Mines and Evander Mines which account for 98.4% of the Group's total emissions.

### GHG emissions and carbon intensity



<sup>1</sup> Historically, the Group recognised revenue on delivery of gold to Rand Refinery. However, the Group established that control does not pass to the customer on delivery but rather on settlement. As such, revenue and associated intensities have been restated to reflect only gold sales that have been settled at the reporting date, as opposed to gold delivered to Rand Refinery.

### Scope 3 emissions

We have undertaken work to enhance our Scope 3 reporting to ensure that the figures are aligned with the requirements for both the reporting and target-setting standards. This work consisted of a workshop with finance and procurement personnel on establishing significant criteria for including Scope 3 emissions. The results are being used to assess which Scope 3 emission categories are material to Pan African's operations.

The emissions assessment considers both the GHG Protocol Corporate Accounting and Reporting Standard and the requirements for Scope 3 under the Science Based Targets initiative's (SBTi) target-setting standard. Additionally, the International Organisation for Standardisation (ISO) standards on reducing GHGs and identifying value chain emissions were reviewed.

As part of this exercise, a questionnaire was sent to our suppliers in order to establish the emissions associated with the products or services procured from them. A workshop with material suppliers will be conducted to ensure a collaborative and inclusive process. Moreover, climate-related supplier assessments will be incorporated into our procurement practices to develop a greener procurement strategy.

Following the outcome of this assessment, the outstanding emission sources will be calculated, and an emissions reduction target aligned with the SBTi's or ISO criteria will be recommended. In addition, any current emissions reduction plans will be reviewed in the context of the emissions reduction target.

The following criteria were identified during the workshop:

- Magnitude
- Level of influence
- Climate-related risk
- Stakeholders
- Sector guidance
- Outsourcing.

The following Scope 3 emissions sources have already been calculated internally:

- Fuel combustion by contractors
- Production of (1) fuel consumed by our operations, (2) material supplies purchased and (3) purchased machinery and vehicles
- Emissions from the disposal of waste from operations
- Business travel emissions
- Employee commuting
- Transport of gold to the processing plant.

An assessment of Scope 3 emissions and any additional relevant sources is ongoing.

### Climate-related energy security opportunities

Pan African has been proactively building climate resilience through a range of mitigation strategies, demonstrating a strong commitment to sustainable mining practices. Our approach has been well-received by financial institutions through increased invitations to collaborate on financing green projects. The Evander Mines and Barberton Mines solar plants were funded through a green loan facility of ZAR350 million established in June 2024, which also includes an accordion option for future funding needs. This surge in interest from financiers to engage Pan African in the financing of green infrastructure projects is a clear indication of our increasing influence and relevance in the industry as a mining company that strives for sustainability and climate resilience aligned with future focused mining practices.

## METRICS AND TARGETS continued

### WATER TARGETS

We have not set formal water targets, but we monitor our water consumption very closely. Effective management of this vital resource is a critical area of focus for us to ensure the sustainability of our operations and maintain our social licence to operate. In this regard, we remain committed to responsible and sustainable water use, which is embedded in our water management policy and water use licences, which focus on efficient water use through reuse and recycling.

### Water capital expenditure

Understanding water consumption patterns is crucial to our water-related conservation and efficiency strategies. To this end, we have implemented an advanced automated water management system throughout our operations. This system, a testament to our commitment to water monitoring and conservation, is a significant step towards better managing

our water footprint and will enable the Company to implement water-related strategies based on robust automated information.

The capital expenditure for the 2024 financial year amounted to US\$0.1 million.

### Water savings

For the 2024 financial year, a 45.6% reduction in water consumption from Rand Water resulted in significant water expenditure savings of US\$0.5 million. This milestone brings our treated water to 8.1% of total water consumption, demonstrating the financial benefits of our sustainability efforts and giving stakeholders a reason to be optimistic about our future initiatives.

### Contributing towards the Just Energy Transition

Evander Mines' water treatment plant continues to reduce our water requirements from third parties and

municipalities. Thus, we are making water available for non-mining-related uses in a water-stressed country.

Furthermore, our commitment to alleviating water pressures was demonstrated by our willingness to assist the municipality in supplying potable water to local communities during periods of water shortages experienced in this reporting year.

### Water consumption and management

According to the IPCC, water security is a multi-dimensional concept that encompasses more than water availability. It is about ensuring water is available in sufficient quantity and quality and accessible in an acceptable form.

Therefore, it signifies the availability and accessibility of adequate clean water to sustainably support a population's livelihoods, health, socio-economic development and political stability.

This implies that climate-related water scarcity can trigger systemic risks along the above-mentioned continuum ordinarily preserved by water security.

Climate change is increasingly becoming a significant contributor to water scarcity globally. This is in addition to socio-economic water stressors such as population growth and consumption patterns. Moreover, water-related climate risks are more pronounced in certain areas, including South Africa, being more susceptible than others. Therefore, climate-related water scarcity is a risk for water-intensive operations.


Climate change has direct and indirect impacts on water security, which can influence the availability and accessibility of water during critical seasons.

- Direct effects like extended periods of dry spells and droughts can impact the overall availability of water, potentially increasing the concentration of contaminants. Other extremes, such as

heavy precipitation, storms and flooding, can also distress water quality by increasing runoff and washing pollutants into water bodies, thus making the water unsuitable for certain operational activities and unsafe for drinking.

- The indirect effects include impacts on infrastructure for the provision and recovery of water resources and disruptions of the water-energy nexus, which can affect safe access to adequate water resources, both in terms of quality and quantity.

Climate change is projected to increase the variability of rain spatially and temporally, making impacts on water quality increasingly likely. Higher temperatures also contribute to deteriorating water quality by reducing oxygen levels. Therefore, we recognise that water security can be enhanced through water efficiency, which is correlated to energy efficiency and the reduction of associated emissions.



**Return water dam at Elikhulu for reuse in the processing facility**

## METRICS AND TARGETS continued

### Total water withdrawal

Pan African is committed to using and managing water sustainably to reduce our water footprint. Along our value chain, we use water in mining, crushing and processing, smelting, refining, tailings remining and management. Therefore, water is a significant part of our daily operations, and water security is crucial, especially as a water-scarce country during the era of climate change.

The Group's operations draw water from various sources, such as underground and surface water resources, including third-party or municipality water.

Water is withdrawn during dewatering and mining processes for our underground operations. Dewatering is necessary for the continuation of safe mining practices. However, because it is water-intensive, poor management could lead to withdrawal associated with a drop in the water table of the withdrawn aquifer.

Water from rivers or third-party water is used in processing plants since underground water has high total dissolved solids concentration. Water from rivers is also used for secondary activities within the operation, such as drinking water and general office use.

Our total water withdrawal decreased by 10.3% during the period under review, primarily due to our efforts in water efficiency, recycling and a significant reduction in third-party water consumption. Our newly implemented automated water management system has improved how we monitor and manage water as a shared resource. This system is essential for understanding our water consumption patterns and implementing strategies related to water conservation and efficiency at our operations.

### Water reuse

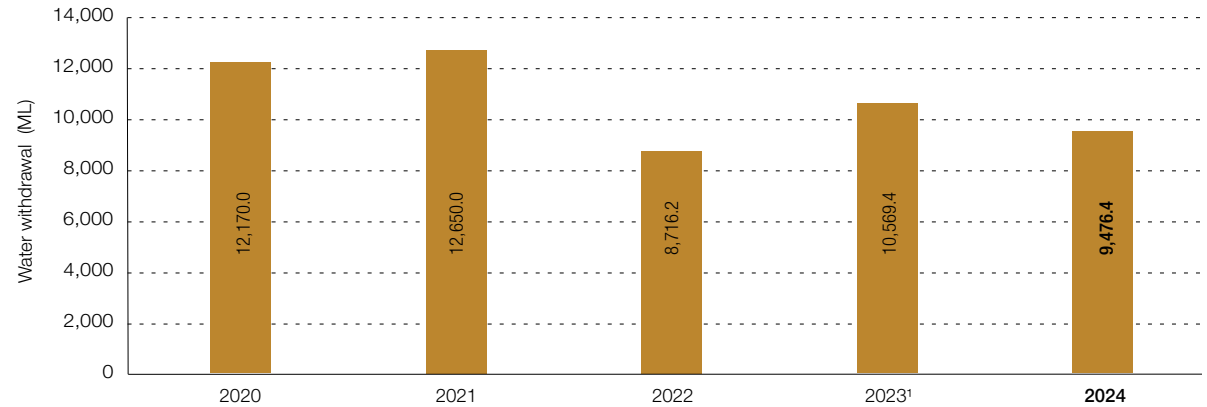
Pan African is committed to sustainable practices. Currently, TSFs are being remined using hydro-mining. The water used in this activity is process water from either the return water dams or underground dewatering. Reusing water ensures that the amount of water abstracted from rivers is kept at a minimum, demonstrating our dedication to water conservation.

### Total water discharge

As per the GRI water and effluents standard, water discharge is defined as the sum of effluents, used water and unused water released to surface, groundwater, seawater or a third party for which the organisation has no further use over the reporting period.

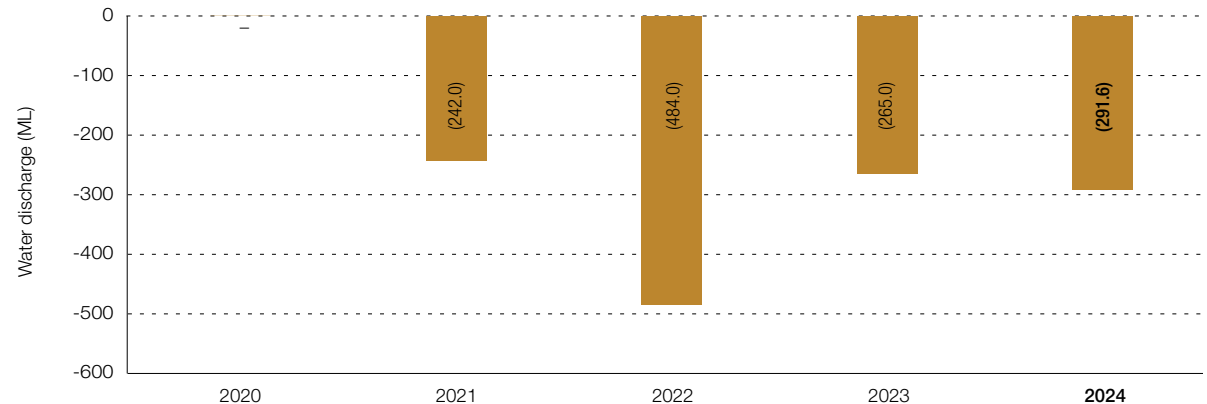
Our water discharge increased by 10.0% over the past year due to increased dewatering, leading to excess surface water that could not be reused in our operations.

### Total water withdrawal



<sup>1</sup> Prior reporting period water consumption figures have been restated to include water withdrawal from third-party private sources and the Barberton Blueberries project.

### Total water discharge

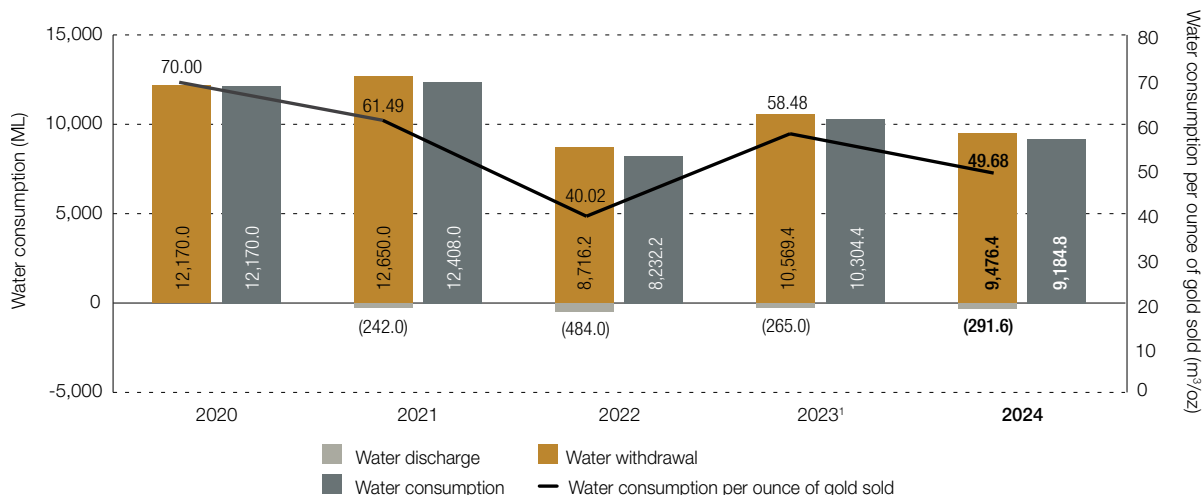


## METRICS AND TARGETS continued

### Total water consumption

Total water consumption comprises the sum of total water withdrawal minus water discharge. Our operations only withdraw water from underground and surface resources, including water from third parties or municipalities.

### Total water consumption



<sup>1</sup> Historically, the Group recognised revenue on delivery of gold to Rand Refinery. However, the Group established that control does not pass to the customer on delivery but rather on settlement. As such, revenue and associated intensities have been restated to reflect only gold sales that have been settled at the reporting date, as opposed to gold delivered to Rand Refinery.

Our overall water consumption and water intensity per ounce of gold sold decreased by 10.9% and 16.3%, respectively, during the period under review.

### Climate-related water security opportunities

We are continuously exploring opportunities to enhance our sustainability efforts. One possibility is decreasing the amount of water utilised while increasing good-quality water discharge. This can be achieved through a combination of interventions, including water treatment plants, water-saving strategies and collaborations on water as a shared resource to inform the water resource strategies employed by the Group.

We are optimistic about the positive impact these measures can have on our water management practices.

### Water treatment plants

Our strategic focus on water treatment plants ensures that more treated water is discharged, minimising our consumption and evaporation rates. It is important to note that water treatment plants ensure water discharge at acceptable quality, in line with our water use licence and the resource quality objectives set by the Department of Water and Sanitation. This not only minimises environmental pollution and reputational risk but also positions us to effectively manage climate-related extreme weather events. We see investing in water treatment plants as a climate-related opportunity that can mitigate water security risks. More importantly, it enables us to discharge water into streams or for third-party use in a responsible and sustainable manner. Furthermore, the use of treated water in our processing plants contributes to our sustainability efforts by reducing our withdrawal from rivers and third-party water.

### Water-saving strategies

According to the water balance calculation, significant water sinks or losses are unaccounted for. However, leaks are suspected in this regard. It would therefore be prudent to assess the current infrastructure to analyse where upgrades are required to eliminate leakages and optimise water efficiencies. Leaks cause significant water loss, calling for transforming employees' attitudes towards efficient water use and conservation, ensuring water infrastructure is maintained and attending to reported leaks. The culture of water efficiency must be fostered. Top-down and bottom-up targeted training interventions are crucial for water efficiency practices, but the onus lies on leaders and managers to champion the necessary paradigm shift in behaviour.

### Collaborations on water as a shared resource

The Group has partnered with the NCPC-SA to assist the organisation in reducing water consumption, wastewater generation and management in lowering costs through the Industrial Water Efficiency (IWE) Project. In preparation for the IWE Project, the NCPC-SA has conducted and successfully concluded a due diligence process at Evander Mines and Barberton Mines, a crucial and thorough step before commencing with the IWE Project.

Through the IWE Project, the NCPC-SA will embark on a transformative water efficiency journey with Pan African to enhance its industrial water use and adoption of best practices, reducing water consumption and improving water performance, effluent quality and potential savings opportunities for the organisation. In addition, the IWE will assist Pan African in improving its

environmental performance and reducing its water footprint.

A collaborative water management strategy should encompass the following components<sup>1</sup>:

- Accounting for the available resources
- Collaboration within the organisation to determine priorities and allocations
- Codifying the agreed priorities and allocation into policy and standard operating practices
- Delegating the implementation of agreed practices to the appropriate role players
- Engineering to create the necessary infrastructure to deliver the mandates of the water management strategy
- Employing continuous feedback loop systems to ensure progress and subsequent review of the water management strategy.

### WASTE TARGETS

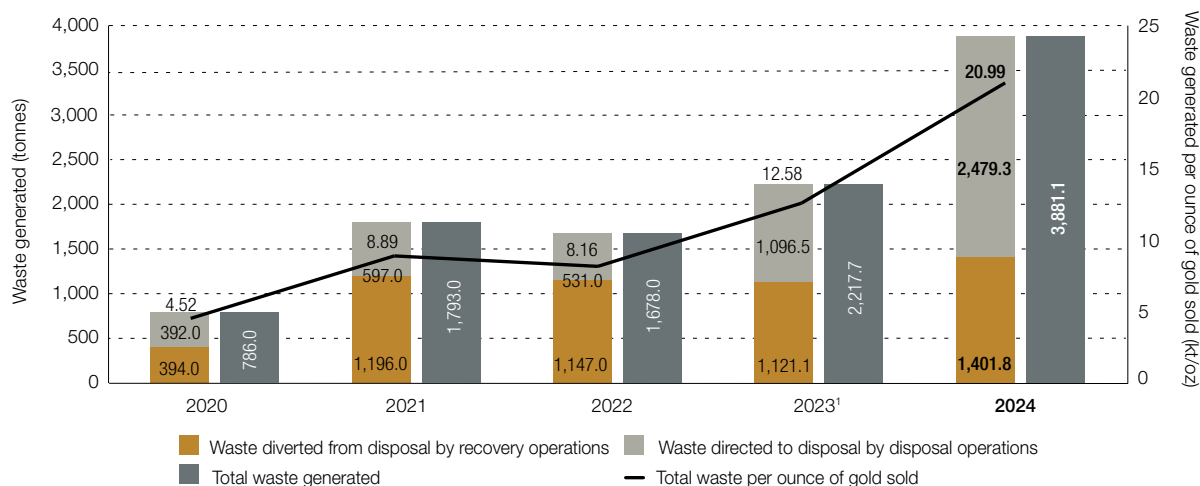
Our mining operations generate waste rock as well as hazardous and non-hazardous waste materials. By responsibly managing these waste streams, we minimise our impact on human health and the environment. We have yet to set formal waste targets, but we monitor our waste consumption very closely. Effective management of waste is a critical area of focus for us to ensure we uphold environmental standards, maintain our social licence to operate and prevent incurring fines and sanctions that will negatively impact our financial performance and reputation.

<sup>1</sup> Chris Perry (2013) ABCDE+F: a framework for thinking about water resources management, *Water International*, 38:1, 95-107, DOI: 10.1080/02508060.2013.754618.

## METRICS AND TARGETS continued

### Total waste generated

Our total waste generated, which includes waste diverted from disposal by recovery operations and waste directed to disposal by disposal operations, saw a significant increase in the reporting period. This was primarily due to an irregular surge at Evander Mines, attributed to the construction of new change houses and the removal of underground waste. However, our concerted efforts to align with the GRI waste standard have significantly improved our waste reporting quality and global comparability.



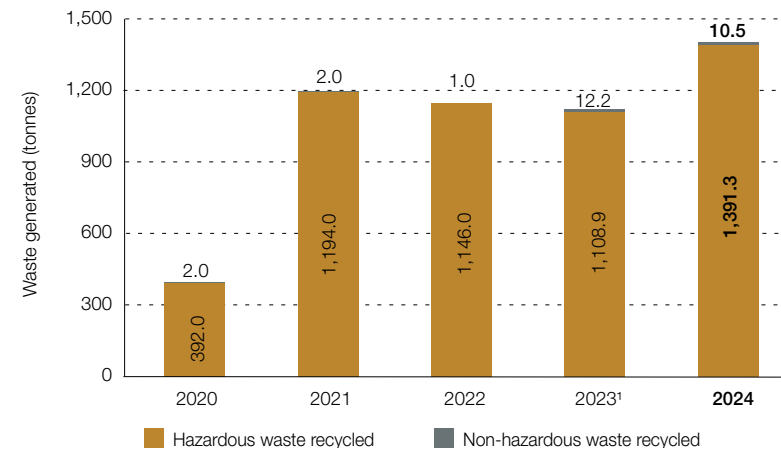
<sup>1</sup> Historically, the Group recognised revenue on delivery of gold to Rand Refinery. However, the Group established that control does not pass to the customer on delivery but rather on settlement. As such, revenue and associated intensities have been restated to reflect only gold sales that have been settled at the reporting date, as opposed to gold delivered to Rand Refinery.

### Total waste diverted from disposal

The waste directed to disposal by recovery operations has increased by 25.0%. This significant increase is due to our alignment with the GRI waste standard, which requires us to categorise waste types at the source appropriately. Before adopting the standard, we conducted training sessions with environmental departments on sustainable waste management processes. We also worked closely with the NCP-C-SA on a waste audit and potential participation in their industrial symbiosis programme towards our circular economy waste vision. This collaboration in our sustainability journey underscores the value of our employees and host communities, who now play an integral role in our waste disposal efforts, particularly in the disposal of used oil.

Our assets are gradually yet effectively adopting greener waste approaches, which must complement green procurement strategies.

### Waste diverted from disposal by recovery operations

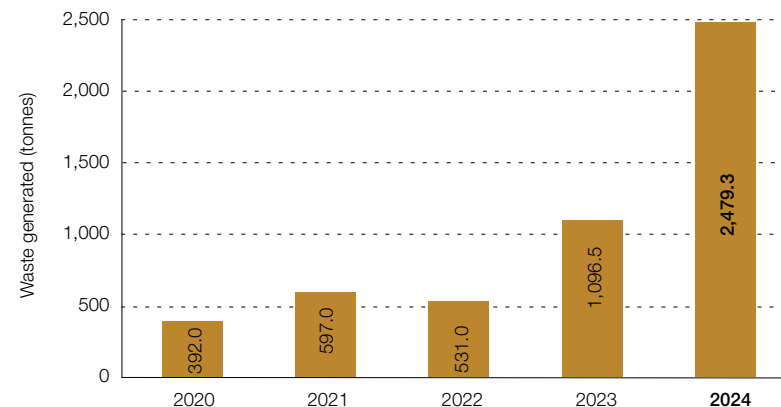


<sup>1</sup> Prior reporting period waste consumption figures have been restated to align with GRI waste standards.

### Total waste directed to disposal

The waste directed to disposal increased significantly in the 2024 financial year. This was due to Evander Mines' construction of the new change house and the removal of underground general waste at 8 Shaft.

### Waste directed to disposal by disposal operations



## METRICS AND TARGETS continued

Compliant with the GISTM

● Yes

● No

### TSF management

Mining operations produce substantial quantities of tailings residue, which are collected and stored in designated areas, primarily in TSFs, to manage mineral residues effectively. However, if not handled with proper care, these deposits can pose considerable safety and environmental hazards that may have adverse effects on the surrounding environment and nearby communities. We take great care in managing our TSFs to ensure the highest level of safety and environmental compliance. To achieve this, we have entrusted the design, construction and operation of our TSFs to specialised third-party contractors. These contractors possess the expertise and experience needed to handle these critical facilities with utmost precision.

During the year, our focus has been on assessing our alignment with the GISTM.

The GISTM aims to ensure the safe management of TSFs throughout their life cycle, including closure and post-closure, to minimise harm to people and the environment.

The GISTM comprises 15 principles for TSF management, including respecting the rights of project-affected people, using an interdisciplinary knowledge base and designing robust plans to minimise risk.

The standard emphasises the importance of monitoring systems, establishing policies and accountabilities and appointing an Engineer of Record (EoR) who plays a crucial role in the design, construction, management and oversight of TSFs. Moreover, it highlights the need for a robust quality and risk management system, an organisational culture that

promotes learning and communication, and processes for reporting concerns and addressing emergencies. Concerns that can be reported include potential safety hazards, environmental risks or any other issues that may affect the TSFs' operation. These concerns are addressed through a structured process that involves investigation, risk assessment and appropriate action.

Additionally, the GISTM underscores the importance of public disclosure and providing access to information about the tailings facility, ensuring public accountability and keeping stakeholders informed and involved. We recognise that our stakeholders are integral to our operations, and their involvement is crucial. Communication is vital to managing our TSFs, which is why we promote a learning culture through education, cross-functional collaboration and reporting mechanisms. Since April 2023, formal engagements with operational teams, including contractors, have been regularly conducted, resulting in detailed risk reports crucial to managing TSFs. However, we are still working on a regular engagement strategy with external stakeholders in host communities, which includes stakeholder awareness workshops. This is essential to communicate the risks associated with TSFs and to foster public accountability, a value we hold in high regard.

Since the GISTM's launch in August 2020, Pan African has completed the following actions:

- Assessed existing TSFs against the GISTM using various internal audits and studies
- Classified certain Pan African TSFs as high-impact TSFs due to their proximity to local communities and watercourses

- Appointed an ITRB to conduct a formal audit as recommended to comply with principles 2, 4, 5, 6, 7, 8, 10 and 15
- Appointment of a Pan African accountable executive and responsible tailings facilities engineer (RTFE).

The ITRB's role is pivotal in providing independent review and oversight of various aspects of the planning, design, construction, operation, maintenance, monitoring, performance, risk management and governance systems of tailings facilities. Through periodic and systematic reviews, the ITRB assesses the TSF's safety and effectiveness, ensuring compliance with established standards and best practices.

Furthermore, they review the design basis report, conduct alternatives analysis and assess the frequency of the dam safety review. Their recommendations and findings play a significant role in improving the TSFs' overall management and performance, instilling confidence in our stakeholders.

### High-level audit findings

Notably, no high-risk outstanding items from the audit review put Pan African's TSFs at risk of failure. Nevertheless, in the interim, Pan African has decided to pursue principle 4.7 of the GISTM, which states that existing TSFs shall conform with requirements under principle 4, except for those aspects where the EoR, with review by the ITRB or a senior independent technical reviewer, determines that the upgrade of an existing tailings facility is not viable or cannot be retroactively applied. This is the case for Pan African.

Therefore, according to principle 4.7, the accountable executive shall approve and document the implementation of measures to reduce the probability and consequences of a tailings facility failure to reduce the risk to a level as low as reasonably practicable (ALARP).

This is applicable to Pan African because most of our TSFs were constructed before the GISTM existed. Thus, they did not comply with all the requirements of principle 4 of the GISTM.

The most significant impact relates to the construction methodology. According to the GISTM, several Pan African TSFs would require buttressing to eliminate the risk of a dam breach. However, the level of risk related to TSF failures within Pan African is acceptable, as expertly assessed by the accountable executive for tailings, the EoR and RTFE.

Accordingly, Geotheta, the Group's TSF EoR, was commissioned to complete an ALARP assessment of the Pan African TSFs to fully grasp the contextual assessment and expectations of applying this principle accordingly. Additionally, our accountable executive applied adaptive management (referred to in GISTM principles 3.1, 3.4 and 5.3) for having all of Pan African's TSFs raised from the minimum freeboard to the legal freeboard plus an additional 20% due to recent rain patterns experienced. As a result, the following TSFs are now compliant with the GISTM's principle 4.

### TSFs compliant with the GISTM

TSF name	Geographical location	GISTM compliance prior to application of principle 4.7	GISTM compliance post conducting ALARP studies
Bramber TSF	Barberton (BTRP)	●	●
Bramber Extension TSF			
Camelot TSF	Barberton (Sheba Mine)	●	●
Segalla TSF	Barberton (Consort Mine)	●	●
Elikhulu TSF	Evander	●	●
Winkelhaak TSF	Evander	●	●

Progress on compliance with the 15 principles of the GISTM is summarised in the table on **page 45**.

# METRICS AND TARGETS continued

Compliant with the GISTM

Yes

Partially

No

## Progress report on compliance with the GISTM

Principles	GISTM recommendations	ITRB required	Compliant	Comments
1	Respect the rights of project-affected people and meaningfully engage them at all phases of the tailings facility life cycle, including closure			Evander Mines, the MTR project and Barberton Mines have various interactions ongoing within the communities independently and not necessarily aligned with GISTM outcomes, which could be seen as compliance individually – a uniform alignment plan needs to be created with all the role players to present a uniform goal aligned to the GISTM
2	Develop and maintain an interdisciplinary knowledge base to support safe tailings management throughout the tailings facility life cycle, including closure			This will include the 3.1 appointees, including metallurgical managers, plant managers, chief safety officers, environmental officers, deposition manager (Elikhulu), operational manager (Elikhulu), the accountable executive, the RTFE, EoR, ITRB, operators Stefannuti Stocks and Intasol, operator management, operator safety officers and technical teams and additional small and medium-sized enterprises when required
3	Use all elements of the knowledge base – social, environmental, local economic and technical – to inform decisions throughout the tailings facility life cycle, including closure			
4	Develop plans and design criteria for the tailings facility to minimise risk for all phases of its life cycle, including closure and post-closure			Full compliance upon pursuing principle 4.7 and conducting ALARP studies
5	Develop a robust design that integrates the knowledge base and minimises the risk of failure to people and the environment for all phases of the tailings facility life cycle, including closure and post-closure			
6	Plan, build and operate the tailings facility to manage risk at all phases of its life cycle, including closure and post-closure			
7	Design, implement and operate monitoring systems to manage risk at all phases of the facility life cycle, including closure			
8	Establish policies, systems and accountabilities to support the safety and integrity of the tailings facility			Each TSF is managed by site-specific systems – Group policies to be created as per the ITRB report
9	Appoint and empower an EoR			
10	Establish and implement review levels as part of a strong quality and risk management system for all phases of the tailings facility life cycle, including closure			
11	Develop an organisational culture that promotes learning, communication and early problem recognition			
12	Establish a process for reporting and addressing concerns and implement whistle-blower protections			
13	Prepare for emergency response to tailings facility failures			Full comprehensive emergency response and trigger plans for Evander Mines and Barberton Mines in draft stage – review meetings set up and ongoing
14	Prepare for long-term recovery in the event of a catastrophic failure			
15	Publicly disclose and provide access to information about the TSFs to support public accountability			Information being reviewed for public disclosure

### Stakeholder engagement

During the 2024 financial year, a group of stakeholders contacted Pan African, expressing concerns about the conditions and dangers posed by illegal encroachment by settlers and the proximity to communities of Pan African's newly acquired dormant TSFs forming part of the Soweto Cluster. In response, Pan African commissioned formal site visits, and our EoR conducted stability studies detailing the stability of the dormant TSFs. The studies resulted in a demonstration that there is no imminent danger posed to the surrounding communities close to any of the Soweto Cluster TSFs, providing reassurance about the safety of the communities. However, given many years of neglect under previous ownerships, significant stormwater damage has occurred, resulting in flows of residues into the surrounding water bodies.

Subsequently, Pan African has compiled and commenced a remedial rehabilitation action plan within a specified schedule to remediate and protect the TSFs from future stormwater damage and potential rain outflows. Pan African reaffirms its commitment to transparency and continuous improvement. We extend an invitation to stakeholders to engage through structured channels in ongoing robust dialogue about the state of our TSFs, ensuring stakeholders are always informed and part of our journey.

We are making progress on the Soweto Cluster rehabilitation. The diagram delineates plans that we will be executing in our 2025 financial year, which include:

- Collaboration with advocacy groups and conservation NGOs
- Continuous community education and partnerships on the dangers of encroaching on TSFs and preventing social activities and livestock onto TSFs
- Cleaning and reinstating the original solutions trench
- Construction of a berm to deflect stormwater into the trench
- Reconstruction of paddock walls.



# ONGOING PROGRESS AND FUTURE ENDEAVOURS

In our maiden climate change report, published in the 2023 financial year, we committed to aligning our internal structures with the recommendations of the TCFD on climate-related governance, strategy, risk management and metrics and targets, particularly at the operations level. In the past year, we have adopted a climate change implementation strategy based on our report, which covers climate-related risks and opportunities, capacity building and scenario analysis.

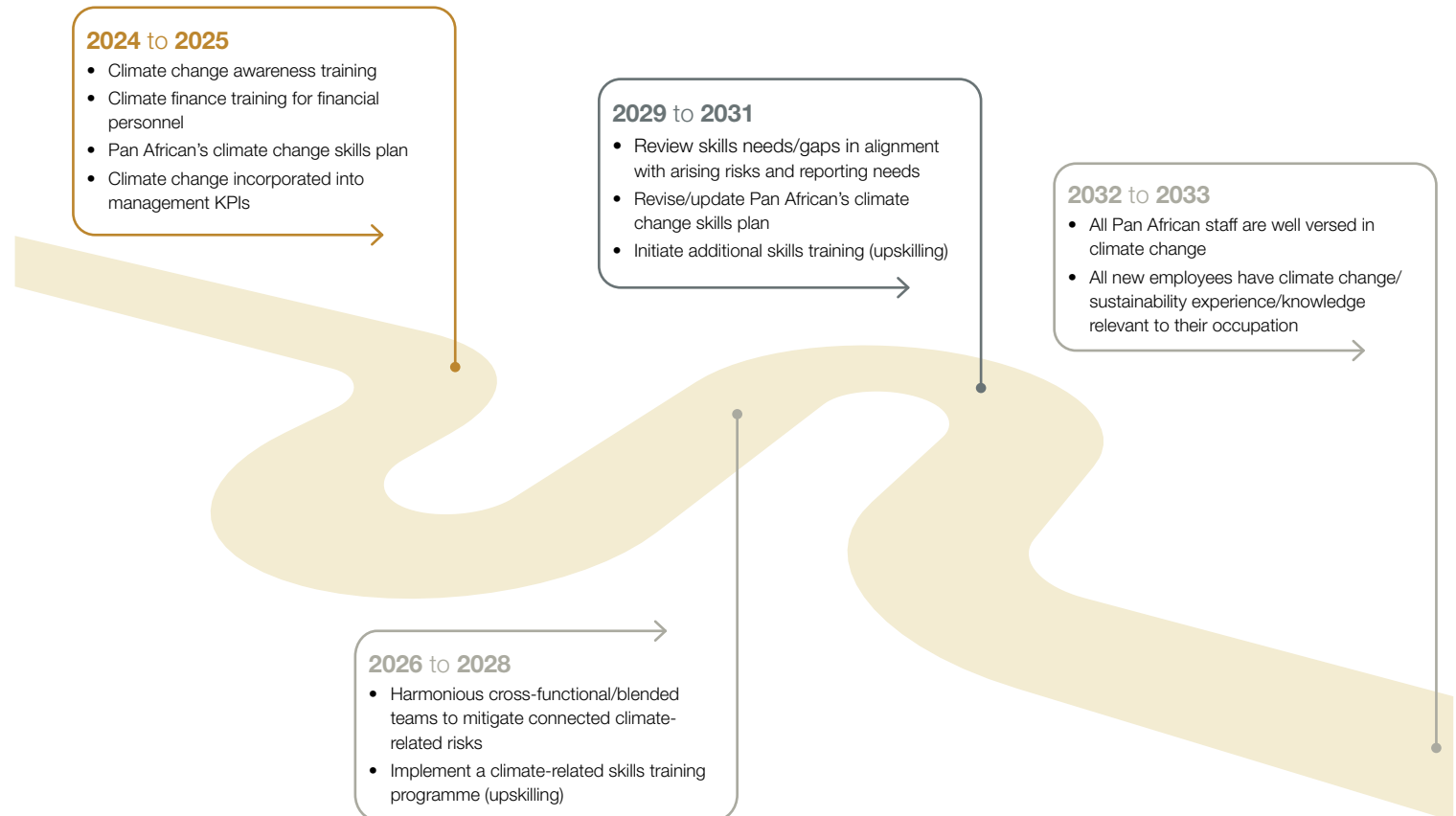
We have yet to integrate climate-related risks and opportunities fully into our operational strategy and core risk management framework. However, we are working on the necessary change management and paradigm shift in behaviour at various leadership levels to truly incorporate climate-related risks and opportunities in our core values and culture. This approach is intended to seamlessly integrate climate-related risks and opportunities at operations, where the main focus is primarily safe production and environmental compliance.

We have also been assessing the practicalities of transitioning to GRI 14: *Mining Sector 2024* and the new IFRS S2: *Climate-related Disclosures*, which we anticipate adopting in our 2025 financial year reporting.

Achieving our climate resilience ambitions through change management practices at operations while adapting to changing reporting requirements is only possible with the prerequisite budget allocations for mobilising resources identified in our climate-related skills roadmap, which details various training initiatives needed up to 2033, as shown alongside.

We are exposed to various climate change-related risks, primarily around sourcing funding for mitigation and adaptation strategies for climate resilience, the energy-water nexus and the supply chain and operations management, including dealing with physical and transition climate-related risks. However, we already have initiatives underway, and our scenario analysis exercise has helped identify new areas of R&D, policies to be implemented and risks, both positive and negative, to be managed. Implementation and tracking of the risk controls and further work must now be undertaken. This is an ongoing process as the risks are alive and constantly evolving as the context changes and additional information becomes available.

## Pan African's climate-related future skills roadmap



# METHODOLOGIES

## METHODOLOGY FOR CALCULATING TOTAL ENERGY CONSUMPTION WITHIN THE ORGANISATION

### Energy consumption from diesel and petrol

The following formula is applied to convert stationary and mobile combusted diesel or petrol to **Terajoules** using country-specific net calorific values (NCVs) or the energy content of fuel when combusted.

$$\text{Fuel Combustion Energy (TJ)} = \text{fuel } (\ell) \times \frac{\text{NCV} \times \text{Density}_{\text{fuel}} \left( \frac{\text{TJ}}{\ell} \right)}{1,000}$$

- Country-specific NCVs for diesel and petrol are **0.0430TJ** and **0.0443TJ** per metric tonne, respectively
- Country-specific densities for diesel and petrol are **0.8255kg** and **0.7405kg** per litre, respectively.

### Energy consumption from electricity

The following formula is applied to convert stationary and mobile combusted diesel or petrol to **Terajoules** using the power formula (kWh = 3,600kJ).

$$\text{Electricity Energy (TJ)} = \text{electricity consumed (kWh)} \times 3,600 \left( \frac{\text{TJ}}{\text{kWh}} \right)$$

The sum of energy from **diesel**, **petrol** and **electricity** is the **total energy consumption within the organisation** as defined by the GRI<sup>1</sup> 302: Energy (2016) standard.

## METHODOLOGY FOR CALCULATING TOTAL GHG EMISSIONS PRODUCED WITHIN THE ORGANISATION

### Direct (Scope 1) GHG emissions from consumption of diesel, petrol and explosives

The following formula is applied to convert energy from stationary and mobile combusted diesel or petrol to GHG emissions using **country-specific emissions factors**<sup>2</sup> for carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O).

$$\text{Stationary or Mobile GHG Emissions} \left( \frac{\text{tCO}_2}{\text{TJ}}, \frac{\text{tCH}_4}{\text{TJ}}, \frac{\text{tN}_2\text{O}}{\text{TJ}} \right) =$$

$$\text{Stationary or Mobile Fuel Combustion Energy (TJ)} \times \text{emission factor} \left( \frac{\text{tCO}_2}{\text{TJ}}, \frac{\text{tCH}_4}{\text{TJ}}, \frac{\text{tN}_2\text{O}}{\text{TJ}} \right)$$

<sup>1</sup> Global Reporting Initiative.

<sup>2</sup> Department of Forestry, Fisheries and the Environment **methodological guidelines for quantification of greenhouse gas emissions (2022)** and the **technical guidelines for monitoring, reporting and verification of greenhouse gas emissions by industry (2017)**.

- Country-specific emission factors of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O for **stationary diesel** are **74.1tCO<sub>2</sub>**, **0.003tCH<sub>4</sub>** and **0.0006tN<sub>2</sub>O**
- Country-specific emission factors of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O for **mobile diesel** are **74.1tCO<sub>2</sub>**, **0.00415tCH<sub>4</sub>** and **0.0286tN<sub>2</sub>O**
- Country-specific emission factors of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O for **mobile and stationary petrol** are **69.3tCO<sub>2</sub>**, **0.0035tCH<sub>4</sub>** and **0.0057tN<sub>2</sub>O**.

To convert to metric tonnes of carbon dioxide equivalent (CO<sub>2</sub>e), resulting in CO<sub>2</sub>e values for CH<sub>4</sub> and N<sub>2</sub>O, the emissions for CH<sub>4</sub> and N<sub>2</sub>O are multiplied by their respective one-hundred-year global warming potential (GWP) as shown below:

GLOBAL WARMING POTENTIAL (GWP). IPCC 3rd Assessment Report 2001 (Chapter 6, page 388)				
Gas	Symbol	Radiative efficiency	Lifetime (year)	100 years
Methane	CH <sub>4</sub>	0.000370	12	23
Nitrous Oxide	N <sub>2</sub> O	0.003100	114	296

The GHG emissions from explosives are calculated using a GHG emission factor of 0.17tCO<sub>2</sub>e/tonne product sourced from the Australian Government's Department of Climate Change's National Greenhouse Accounts (NGA) Factors (2008). The South African guidelines do not have emission factors for explosives.

### Indirect (Scope 2) GHG emissions from consumption of fossil fuel electricity

The following formula is applied to convert energy from fossil fuel electricity consumption to **Terajoules** using the following grid emissions factor.

$$\text{Electricity Emissions (tCO}_2\text{e)} = \text{Electricity Energy (TJ)} \times \text{EFG} \left( \frac{\text{tCO}_2\text{e}}{\text{MWh}} \right)$$

$$= \text{Electricity Energy (TJ)} \times \text{EFG} \left( \frac{\text{tCO}_2\text{e}}{3,600\text{MJ}} \right)$$

$$= \text{Electricity Energy (10}^9\text{)} \left( \frac{\text{tCO}_2\text{e}}{3.6} \right)$$

$$= \text{Electricity Energy} \left( \frac{\text{ktCO}_2\text{e}}{3.6} \right)$$

Eskom's grid factor or the emission factor at generation (EFG) is estimated using the following formula in accordance with **Appendix A** of the GHG Protocol: Corporate Accounting and Reporting Standard:

$$\text{EFG} = \frac{\text{EM}}{(\text{PE} - \text{OC} + \text{IPPs} + \text{IP})} = \left( \frac{\text{tCO}_2\text{e}}{\text{MWh}} \right)$$

Where:

EM = Eskom's emissions

PE = Eskom's produced electricity

OC = Eskom's consumption

IPPs = Independent power producers (IPPs) generation

IP = International purchases

## METHODOLOGIES continued

The grid factor for reporting Scope 2 GHG emissions is **0.92417389183**tCO<sub>2</sub>e/MWh. A summary is provided below.

**Table 1: EFG calculated in accordance with Appendix A of the GHG Protocol**

Description	SA GRID EMISSION FACTOR (March 2023)					Sources (March-23)	Methodology
	Units	FYE23	FYE24	Variance			
South Africa – Grid	tCO <sub>2</sub> e/MWh	0.90855	0.92417	1.7%		GHG Protocol: Appendix A	EFG factor calculated in accordance with GHG Protocol Appendix A
Eskom emissions	ktCO <sub>2</sub> e	207,626	198,879	(4.2%)		Eskom IAR page 130	
Electricity produced by Eskom	GWh	205,688	191,307	(7.0%)		Eskom IAR page 158	
Eskom's own consumption	GWh	6,434	5,504	(14.5%)		Eskom IAR page 170	
IPP generation (Eskom's energy purchases)	GWh	15,972	17,957	12.4%		Eskom IAR page108	
International sales (energy imports)	GWh	13,298	11,437	(14.0%)		Eskom IAR page 108	
Eskom sales	GWh	198,281	188,401	(5.0%)		Eskom IAR page158	
EFC	tCO <sub>2</sub> e/MWh	1.047	1.056	0.8%		GHG Protocol: Appendix A	EFC factor calculated in accordance with GHG Protocol Appendix A

The sum of Scope 1 and Scope 2 GHG emissions from **diesel, petrol, explosives** and **electricity** is the **total GHG emissions within the organisation** in accordance with the GRI 305: Emission (2016) standard.

### METHODOLOGY FOR CALCULATING GHG AVERTED BY THE ORGANISATION

GHG emissions averted refer to the GHG emissions from total indirect energy or energy from renewable and non-renewable electricity minus GHG emissions from indirect energy or energy from non-renewable electricity.

GHG emissions averted from non-renewable energy are theoretical and comprise averted Scope 2 GHG emissions since these would be GHG emissions based on energy consumption in the absence of renewable energy.

*GHG emissions averted (ktCO<sub>2</sub>e) = Scope 2 GHG emissions (renewable electricity (ktCO<sub>2</sub>e))*

The GHG emissions averted computation excludes life cycle emissions associated with renewable electricity generation.

### METHODOLOGY FOR CALCULATING ENERGY AND CARBON INTENSITIES OF THE ORGANISATION

- **Energy intensity** adheres to the guidance provided by the GRI 302 disclosure 302 – 3 as delineated below.

$$\frac{\text{Total energy consumption within the organisation (electricity and fuels)}}{\text{Gold sold}} = \left( \frac{\text{GJ}}{\text{oz}} \right)$$

- **GHG emissions intensity** adheres to the guidance provided by the GRI 305 disclosure 305 – 4.

$$\frac{\text{Total Scope 1 and 2 emissions}}{\text{Gold sold}} = \left( \frac{\text{tCO}_2\text{e}}{\text{oz}} \right)$$

#### Metric (SI) prefixes

**Table 2: Source: International Recommendation of Energy Statistics**

Factor	Name	Symbol	Factor	Name	Symbol
10 <sup>1</sup>	deca	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	c
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	M	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	T	10 <sup>-12</sup>	pico	p
10 <sup>15</sup>	peta	P	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	E	10 <sup>-18</sup>	atto	a
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	z
10 <sup>24</sup>	yotta	Y	10 <sup>-24</sup>	yocto	y

# KEY PERFORMANCE INDICATORS

Sustainability KPIs	Units	Definitions of KPIs
Non-renewable electricity consumption	GWh	<b>Non-renewable electricity consumption</b> refers to the organisation's use of electricity or any energy carrier produced from non-renewable or finite resources, including fossil fuels (coal and natural gas) and nuclear.
Renewable electricity consumption	GWh	<b>Renewable electricity consumption</b> refers to the organisation's use of electricity or any energy carrier produced from renewable or infinite resources, including solar, wind, water (hydro), biomass and waste.
Diesel consumption	ML	<b>Diesel consumption</b> refers to the organisation's use of diesel fuel in mobile and stationary applications designed to combust diesel for energy generation.
Energy consumption	TJ	<b>Energy consumption</b> refers to renewable and non-renewable fuels combusted by the organisation's leased or owned equipment plus electricity purchased from Eskom and self-generated electricity, less electricity sold to third parties.  The energy consumption reported includes fuels (diesel and petrol) and electricity (renewable and non-renewable).
Energy intensity (energy consumed per ounce of gold sold)	GJ/oz	<b>Energy intensity</b> expresses the amount of energy used or consumed per unit of product, activity or the specific metric an organisation chooses.  Energy intensity (GJ/oz) = energy consumption (GJ) ÷ gold sold (oz)
GHG emissions Scope 1	ktCO <sub>2</sub> e	<b>Scope 1 GHG emissions</b> refer to the Company-owned or leased <b>stationary equipment</b> that combusts fossil fuels (liquid, gaseous or solid) for electricity, steam or heat generation or waste stream material, including combustion from Company-owned or leased <b>off-road and on-road mobile (transportation)</b> sources as well as process and fugitive emissions.  The reported Scope 1 GHG emissions include emissions from the combustion of diesel, petrol and explosives.

Sustainability KPIs	Units	Definitions of KPIs
GHG emissions Scope 2	ktCO <sub>2</sub> e	<b>Scope 2 GHG emissions</b> refer to indirect emissions attributable to purchased electricity, heat or steam.  The reported Scope 2 GHG emissions comprise electricity purchased from Eskom, the South African energy utility.
GHG emissions per ounce of gold sold	tCO <sub>2</sub> e/oz	GHG emissions intensity expresses the amount of GHG emitted per unit of product sold, activity or any specific metric an organisation chooses.  GHG emissions intensity (tCO <sub>2</sub> e/oz) = Scope 1 and 2 GHG emissions (CO <sub>2</sub> e) ÷ gold sold (oz)
GHG emissions averted	ktCO <sub>2</sub> e	GHG emissions averted refer to the GHG emissions from total indirect energy or energy from renewable and non-renewable electricity minus GHG emissions from indirect energy or energy from non-renewable electricity.  GHG emissions averted from non-renewable energy are theoretical and comprise averted Scope 2 GHG emissions since these would be GHG emissions based on energy consumption in the absence of renewable energy. This computation excludes life cycle emissions associated with renewable electricity generation.  GHG emissions averted (ktCO <sub>2</sub> e) = Scope 2 GHG emissions (renewable electricity (ktCO <sub>2</sub> e) + non-renewable electricity (ktCO <sub>2</sub> e)) – Scope 2 GHG emissions (non-renewable electricity (ktCO <sub>2</sub> e))
Renewable energy as a percentage of total electricity consumed	%	<b>Total electricity consumption</b> includes non-renewable electricity purchased from Eskom plus renewable electricity generated (solar PV).  Renewable energy as a % of total electricity consumed (%) = Renewable electricity consumption (MWh) ÷ total electricity (non-renewable and renewable) consumption (MWh).

# SUSTAINABILITY REPORTING BOUNDARY

Scope

● Included

● Excluded

Selected sustainability information	Unit of measurement	Barberton Mines	Evander Mines	MTR project	Pan African Resources Minerals DMCC and Pan African Resources Minerals Co Limited	Barberton Blue	Pan African Resources Management Services Company Proprietary Limited	Reason for exclusion
Non-renewable electricity consumption	GWh	●	●	●	●	●	●	
Renewable electricity consumption	GWh	●	●	●	●	●	●	
Diesel consumption	ML	●	●	●	●	●	●	
Energy consumption	TJ	●	●	●	●	●	●	
Energy intensity (energy consumed per ounce of gold sold)	GJ/oz	●	●	●	●	●	●	The KPI depends on the ounces of gold sold, the excluded entities are not gold producing operations
GHG emissions Scope 1	ktCO <sub>2</sub> e	●	●	●	●	●	●	
GHG emissions Scope 2	ktCO <sub>2</sub> e	●	●	●	●	●	●	
GHG emissions per ounce of gold sold	tCO <sub>2</sub> e/oz	●	●	●	●	●	●	The KPI depends on the ounces of gold sold, the excluded entities are not gold producing operations
GHG emissions averted	ktCO <sub>2</sub> e	●	●	●	●	●	●	
Renewable energy as a percentage of total energy consumed	%	●	●	●	●	●	●	
Land rehabilitation (project level – MTR project)	%	●	●	●	●	●	●	The KPI linked specifically to the MTR project
Employment equity – historically disadvantaged persons (HDPs)	%	●	●	●	●	●	●	The KPI is aligned with the Mining Charter III and excludes entities not associated to mining
Percentage of women in mining	%	●	●	●	●	●	●	The KPI is aligned with the Mining Charter III and excludes entities not associated to mining
Total recordable injury frequency rate	Rate per million man hours	●	●	●	●	●	●	The KPI is aligned with the Mine Health and Safety Act and excludes entities not associated to mining
Percentage of the total mining goods procurement spend on South African manufactured goods from 50% + 1 vote HDP-owned and controlled companies	%	●	●	●	●	●	●	The KPI aligned with the Mining Charter III and the procurement of mining goods, which currently includes only gold mining operations
Percentage of the total services procurement spend on South African companies that are 50% + 1 vote HDP-owned and controlled companies	%	●	●	●	●	●	●	The KPI related to Mining Charter III and the procurement of mining services, which currently includes only gold mining operations

# GLOSSARY

## TERMS AND ABBREVIATIONS USED IN THIS REPORT

%	Parts per hundred/percentage
°C	Degrees Celsius
A2X	The A2X Market is a licensed stock exchange authorised to provide a secondary listing venue for companies and is regulated by the Financial Sector Conduct Authority and the South African Reserve Bank's Prudential Authority, in terms of the Financial Markets Act, 19 of 2012
ADR	American Depository Receipt programme through the Bank of New York Mellon
AIM	AIM Market, the London Stock Exchange's international market for smaller growing companies
AISC	All-in sustaining costs
ALARP	As low as reasonably practicable
Barberton Mines	Barberton Mines Proprietary Limited
BIOX®	Biological Oxidation (BIOX®) gold extraction process developed at Barberton Mines. It is an environmentally friendly process of releasing gold from the sulphide that surrounds it by using bacteria
BTRP	Barberton Tailings Retreatment Plant, a gold recovery tailings plant owned by Barberton Mines, which reached steady-state production in June 2013
CBAM	Carbon border adjustment mechanisms
EFC	Emission factor at consumption
EFG	Emission factor at generation
Eilkhulu	Eilkhulu Tailings Retreatment Plant
EoR	Engineer of Record
EPC	Engineering, procurement and construction
ESG	Environmental, social and governance
Eskom	Electricity Supply Commission, South African electricity supplier
Evander Mines	Evander Gold Mines Limited and Evander Gold Mining Proprietary Limited
Exco	Executive committee of Pan African Resources
g/t	Grammes/tonne
GDP	Gross domestic product

GHG	Greenhouse gas
GISTM	Global Industry Standard on Tailings Management
GJ	Gigajoule
GWh	Gigawatt hour
GWP	Global warming potential
GRI	Global Reporting Initiative
HR	Human resources
IAR	Integrated annual report
IFRS S1	<i>General Requirements for Disclosure of Sustainability-related Financial Information</i>
IFRS S2	<i>Climate-related Disclosures</i>
IPCC	Intergovernmental Panel on Climate Change
IPP	Independent power producer
ISO	International Organisation for Standardisation
ITRB	Independent tailings review board
IWE	Industrial Water Efficiency
JET Framework	Just Energy Transition Framework
JSE	JSE Limited incorporating the Johannesburg Securities Exchange, the main bourse in South Africa
King IV™	King IV Report on Corporate Governance for South Africa, 2016™
Kg	Kilogramme
kj	Kilojoule
kWhl	Kilowatt hour
Koz	Thousand ounces
KPI	Key performance indicator
kt	Kilotonne
ktCO <sub>2</sub> e	Kilotonne carbon dioxide equivalent
ℓ	Litre
m <sup>3</sup>	Cubic metre
MJ	Megajoule
ML	Megalitre
Mogale Gold	Mogale Gold Proprietary Limited
Moz	Megaounce

MSC	Mintails SA Soweto Cluster Proprietary Limited
Mt	Megatonne
MTR project	The Mogale Tailings Retreatment project is located in the Mogale district. A plant is being constructed to process gold tailings deposited onto the Mogale Gold and MSC TSFs
MW	Megawatt
MWac	Megawatt alternating current
MWh	Megawatt hour
NCPC-SA	National Cleaner Production Centre of South Africa
NGO	Non-governmental organisation
oz	Ounce
Pan African	Holding company – Pan African Resources PLC
PV	Photovoltaic
PwC Inc.	PricewaterhouseCoopers Inc.
R&D	Research and development
RES	Renewable energy solutions
RTFE	Responsible tailings facility engineer
SA	South Africa
SAMREC Code	South African Code for Reporting of Mineral Resources and Mineral Reserves (2016 edition)
SBTi	Science Based Targets initiative
SHEQ	Safety, health, environment and quality
t	Tonne
TCFD	Task Force on Climate-related Disclosures
tCO <sub>2</sub> e	Tonne carbon dioxide equivalent
the Group or the Company or Pan African Resources	Pan African Resources PLC, listed on the London Stock Exchange's Alternative Investment Market and on the JSE in the 'Gold Mining' sector
TJ	Terajoule
TSF	Tailings storage facility
UN SDGs	United Nations Sustainable Development Goals
US\$	United States dollar
ZAR	South African rand

# CORPORATE INFORMATION

## CORPORATE OFFICE

The Firs Building  
2nd Floor, Office 204  
Corner Cradock and Biermann Avenues  
Rosebank, Johannesburg  
South Africa  
Office: +27 (0) 11 243 2900  
Email: info@paf.co.za

## REGISTERED OFFICE

107 Cheapside, 2nd Floor  
London EC2V 6DN  
United Kingdom  
Office: +44 (0) 20 3869 0706

## CHIEF EXECUTIVE OFFICER

**Cobus Loots**  
Office: +27 (0) 11 243 2900

## FINANCIAL DIRECTOR AND DEBT OFFICER

**Deon Louw**  
Office: +27 (0) 11 243 2900

## COMPANY SECRETARY

Jane Kirton  
**St James's Corporate Services Limited**  
Office: +44 (0) 20 3869 0706

## JSE SPONSOR AND JSE DEBT SPONSOR

Ciska Kloppers  
**Questco Corporate Advisory Proprietary Limited**  
Office: +27 (0) 11 011 9200

## NOMINATED ADVISER AND JOINT BROKER

Ross Allister/Georgia Langoulant  
**Peel Hunt LLP**  
Office: +44 (0) 20 7418 8900

## JOINT BROKERS

Thomas Rider/Nick Macann  
**BMO Capital Markets Limited**  
Office: +44 (0) 20 7236 1010

Matthew Armit/Jennifer Lee  
**Joh. Berenberg, Gossler & Co KG**  
Office: +44 (0) 20 3207 7800

## HEAD: INVESTOR RELATIONS

**Hethen Hira**  
Office: +27 (0) 11 243 2900  
Email: hhira@paf.co.za

## GROUP ESG MANAGER

**Barry Naicker**  
Office: +27 (0) 11 243 2900  
Email: barry@paf.co.za



**Evander Mines' Elikhulu plant's infrastructure**

# CONCLUSION

This report provides a comprehensive overview of our ongoing initiatives to align with the recommendations of the TCFD.

Our report for the 2024 financial year reflects our commitment to transparency, resilience and sustainable economic practices. Through rigorous assessment and disclosure of climate-related risks and opportunities, we have provided stakeholders with valuable insights into our strategic approach towards addressing climate change. By incorporating the recommendations of the TCFD, we have enhanced our understanding of the potential impacts on our business and set a foundation for informed decision-making.

As we continue to navigate the challenges and opportunities posed by climate change, we remain dedicated to proactive measures that promote long-term value creation, environmental stewardship and a sustainable future for all.



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