

# OUR RISKS AND OPPORTUNITIES

The board assumes responsibility for the governance of risk and is supported by the audit and risk committee. The safety, health, environment, quality and community (SHEQC) committee, which oversees and provides feedback to the board on safety, health, environment and community related matters, complements the audit and risk committee.

## RISK MANAGEMENT APPROACH AND PROCESS

Pan African has an established risk management process which is dynamic and designed to adapt to changes in the risk profile of the Group over time. Our risk management is based on a structured and systematic process which takes into account risks that arise from operational matters or events outside of our control.

### RISKS AND OPPORTUNITIES ARE MANAGED ON FOUR TIERS



#### Board

The board oversees the Group's risk management process and is guided by its committees, own experience, internal risk assessments and reviews of risk reports. The tone, risk management culture and risk appetite are set and overseen by the board. Each year, the board reviews the Group's risk appetite for ongoing relevance in relation to the Group's strategy. The board monitors the effectiveness of the Group's risk management process and the implementation of risk mitigating strategies against key risk indicators



#### Board committees

The audit and risk committee supports the board and is complemented by the SHEQC committee, the social and ethics committee and the remuneration committee (Remco) which oversee and provide feedback to the board



#### Executive management

Management at operational levels implement and monitor day-to-day compliance with the Group's risk management process. Risk awareness and a culture of safety are embedded in day-to-day operations



#### Employees

We continually reinforce the message that managing risk is the responsibility of everyone at Pan African



**OUR TOP RISKS**

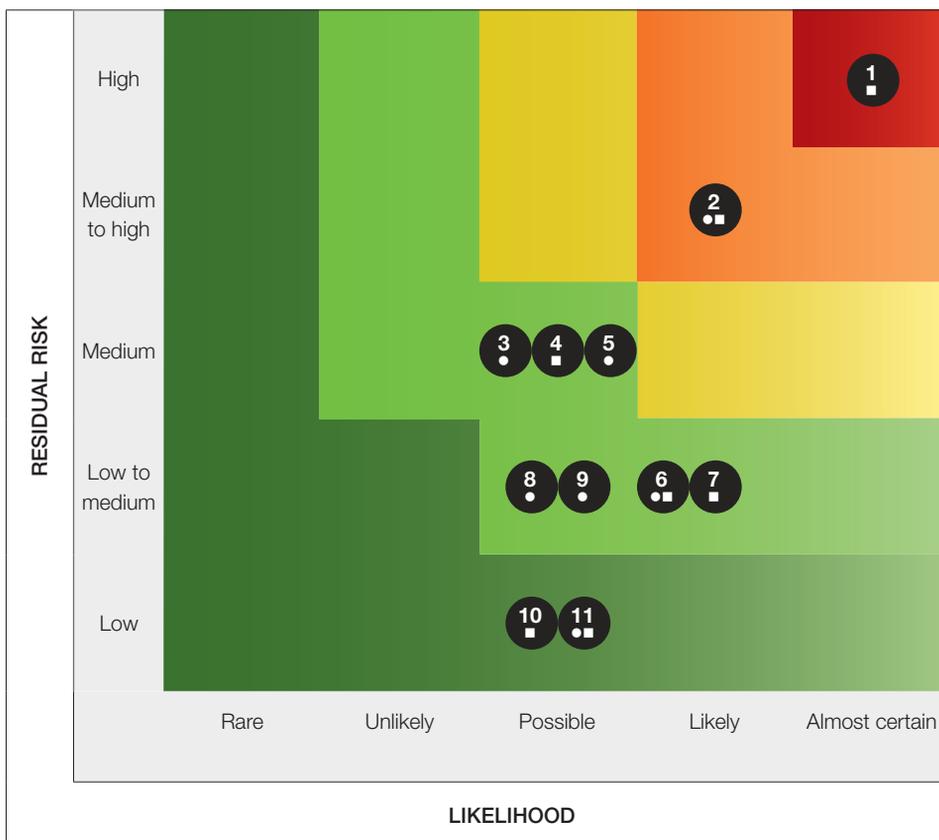
We identified the top risks that pose a potential threat to the execution of our business strategy and assessed these risks based on the likelihood of the risk occurring, its potential impact and severity. We determined the residual risk after taking our mitigating actions into account.

These risks can have a safety, health, financial, environmental, operational or reputational impact and are also benchmarked against risks identified by our mining peers to ascertain if these risks are industry-specific.

**RESIDUAL RISK RANKING**

2021	2020	Key risks
1	2	Heightened social and political uncertainty and potential instability
2	1	Impact of COVID-19 on operations
3	9	Safety incidents and accidents
4	8	Third-party infrastructure dependency – specifically water and electricity
5	3	Infrastructure dependency and constraints
6	6	Geological variability in the Mineral Resources and Mineral Reserves
7	7	Macroeconomic volatility – specifically the gold price and currency fluctuations
8	10	Strategic capital allocation
9	New	Shortage of adequate and appropriate skills
10	5	Regulatory changes and complexity
11	4	Environmental impact of mining activities

The Group’s top residual risks are reflected on the heat map below.



The risk assessment approach followed by Pan African’s management is a collective effort. The assessment of the identified risks and the effectiveness of the risk mitigating controls is, to a large extent, subjective. Through mitigating actions and controls, the Group endeavours to reduce inherent risks to an acceptable level of residual risk.

**THE IMPACT OF RISK ON OUR STRATEGY**

Each of the risks described in the following pages can have an impact on the Group’s material matters which are an integral part of the Group’s strategic planning and activities. Refer to **page 10** for more on the Group’s strategy.

● Internal  
 ■ External

## OUR RISKS AND OPPORTUNITIES continued

For each of the top residual risks on **page 21**, we list below the mitigating actions we take, and the related opportunities we have identified, and link them to the affected stakeholders (refer to **page 28**), the material matters (refer to **page 19**) that we have recognised and demonstrate which of the capitals the risks can potentially impact:

<b>HEIGHTENED SOCIAL AND POLITICAL UNCERTAINTY AND POTENTIAL INSTABILITY</b>			
2021	2020	Root causes	Mitigating actions taken/opportunities identified
<b>1</b>	2	<ul style="list-style-type: none"> <li>Low levels of economic growth in South Africa (compounded by the COVID-19 pandemic) have worsened the existing challenges of poverty, inequality and unemployment prevalent in our host communities, culminating in social discord and increased social unrest</li> <li>Poor socio-economic conditions in host communities have resulted in increased criminal mining activities, which threaten the safety of our employees and contractors and increase expectations for employment and other socio-economic benefits. Criminality has the potential to cause business disruptions and may result in the Group not achieving its production targets and increasing security-related costs</li> <li>Illegal actions may further damage Group assets and infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Intensified engagement with host communities to understand their concerns and deal decisively with material issues where possible</li> <li>Community liaison managers at the operations regularly engage with community leaders to address community concerns and manage expectations</li> <li>Adherence to SLPs and implementing CSI initiatives which go 'beyond compliance' requirements and contribute to LED</li> <li>Job creation programmes, such as the Blueberries project in Barberton, continue to be rolled out to assist in alleviating local unemployment, which is directly linked to the incidence of illegal mining and other petty crime at our facilities</li> <li>Enhanced security coordination and information management on crime-related matters – including cooperation with relevant law enforcement agencies and prosecution authorities</li> <li>Ongoing monitoring and evaluation of third-party security service provider activities to ensure a high standard of service delivery</li> </ul>
<b>Stakeholders affected</b>  Providers of capital  Customer  Suppliers  Employees and unions  Communities		<b>Outlook</b> The weak economic climate in South Africa (compounded by the pandemic) is expected to continue in the short to medium term, adversely impacting business and investor confidence and further raising host communities' expectations. Crime and corruption are daily realities and concerns and continue to impact our economy and operating environment	
<b>Material matters linked</b>  Execution  Health and safety  Societal/community relationships			
<b>Capitals impacted</b>    			

<b>IMPACT OF COVID-19 ON OPERATIONS</b>			
2021	2020	Root cause	Mitigating actions taken/opportunities identified
<b>2</b>	1	<ul style="list-style-type: none"> <li>The COVID-19 pandemic is causing economic, social and political disruption and impacting the health and wellness of our employees and surrounding communities, resulting in interruption to our operations</li> </ul>	<ul style="list-style-type: none"> <li>Implemented standard operating procedures (SOPs) to assist in preventing the transmission of COVID-19 across the Group which includes addressing the following:               <ul style="list-style-type: none"> <li>Education and communication on the prevention of COVID-19</li> <li>Active measures to prevent the spread of COVID-19 at all operations</li> <li>Dealing with both confirmed and suspected cases of COVID-19 infections, including isolation and quarantine protocols and wellness of employees during this period</li> <li>Monitoring and reporting on the spread of COVID-19 and its impact on the operations</li> <li>The phased reintegration and screening of returning employees</li> </ul> </li> <li>Proactively procured personal protective equipment and screening equipment to prevent the spread of COVID-19 – all employees, contractors and visitors at the operations are required to wear face masks at all times and have their body temperatures screened upon entry and exit to the operations and plants</li> </ul>
<b>Stakeholders affected</b>  Providers of capital  Employees and unions  Communities  Collaboration partners		<b>Outlook</b> The second and third waves of COVID-19 impacted South Africa in December 2020 and July 2021, respectively. Virus mutations may result in further restrictions on movement and economic activities. The government's vaccination strategy is being rolled out and gained momentum during 2021, which should contribute to containing the virus and minimising disruption of operations	
<b>Material matters linked</b>  Execution  Health and safety  Regulatory compliance  Societal/community relationships			
<b>Capitals impacted</b>  			

Residual risk



SAFETY INCIDENTS AND ACCIDENTS			
2021	2020	Root cause	Mitigating actions taken/opportunities identified
3	9	<ul style="list-style-type: none"> <li>There are inherent safety risks associated with mining activities. A continually changing operating environment and mining conditions can heighten this risk</li> </ul>	<ul style="list-style-type: none"> <li>Safety standards and procedures are in place and subject to independent compliance reviews by regulators and safety experts</li> <li>Technical and engineering experts ensure compliance with operational safety standards</li> <li>Daily, monthly and quarterly health and safety compliance and awareness inspections are conducted by operational health and safety representatives with accurate records being maintained</li> <li>Training for emergencies has been conducted with appointed emergency service providers present at each operational site</li> <li>New safety initiatives and awareness programmes are regularly introduced</li> </ul>
<b>Stakeholders affected</b> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Employees and unions</li> <li>Government and regulatory bodies</li> </ul>		<b>Outlook</b> Continue enhancing safety through the combined efforts of management and staff, in pursuit of our ultimate goal of zero harm	
<b>Material matters linked</b> <ul style="list-style-type: none"> <li>Culture</li> <li>Health and safety</li> <li>Skills shortage</li> <li>Regulatory compliance</li> </ul>			
<b>Capital impacted</b> 			

THIRD-PARTY INFRASTRUCTURE DEPENDENCY – SPECIFICALLY WATER AND ELECTRICITY			
2021	2020	Root cause	Mitigating actions taken/opportunities identified
4	8	<ul style="list-style-type: none"> <li>Mining operations rely on electricity, water and services provided by local government. Extended interruptions in these services threaten the sustainability of our operations, especially production levels and the health and safety of our employees and contractors</li> </ul>	<ul style="list-style-type: none"> <li>Commenced the construction of the solar photovoltaic renewable energy plant at Evander Mines</li> <li>Completing a feasibility study for the installation of a similar plant at Barberton Mines, with the intent of reducing reliance on Eskom for power</li> <li>Maintaining a constructive working relationship with Eskom, which enables the Group to proactively manage power curtailments</li> <li>Regular meetings are held with Eskom to ensure stable power supply to the Group's mines</li> <li>Alternative power sources such as standby generators to support critical infrastructure and equipment</li> <li>A feasibility study on a water retreatment plant was completed at Evander Mines' operations</li> <li>Water recycling at operations</li> </ul>
<b>Stakeholders affected</b> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Customer</li> <li>Suppliers</li> <li>Employees and unions</li> </ul>		<b>Outlook</b> Continue strengthening the relationship with Eskom and continue expanding the Group's renewable energy capacity in the short to medium term	
<b>Material matters linked</b> <ul style="list-style-type: none"> <li>Execution</li> <li>Cost of production</li> <li>Availability of reliable infrastructure</li> <li>Climate change</li> </ul>			
<b>Capitals impacted</b> 			

INFRASTRUCTURE DEPENDENCY AND CONSTRAINTS	
2021	2020
5	3
<p><b>Stakeholders affected</b></p> <ul style="list-style-type: none"> <li> Providers of capital</li> <li> Customer</li> <li> Suppliers</li> <li> Employees and unions</li> </ul> <p><b>Material matters linked</b></p> <ul style="list-style-type: none"> <li> Value-accretive growth</li> <li> Cost of production</li> <li> Health and safety</li> </ul> <p><b>Capitals impacted</b></p> 	<p><b>Root causes</b></p> <ul style="list-style-type: none"> <li>• Breakdowns or failures in mining infrastructure have the potential to threaten the safety of employees and disrupt production, and may lead to injuries and expensive and time-consuming repairs</li> <li>• A tailings dam failure may have adverse financial and reputational consequences and may threaten the safety of employees and surrounding communities</li> </ul> <p><b>Mitigating actions taken/opportunities identified</b></p> <ul style="list-style-type: none"> <li>• The appointment of an executive responsible for the Group's TSFs reporting to the chief executive officer and the board, as recommended by the Global Industry Standard on Tailings Management (GISTM)</li> <li>• A GISTM gap audit was initiated and is currently being finalised with actionable outcomes</li> <li>• Third-party contractors have been appointed to design, build and operate the Group's TSFs, in cooperation with the Group's executive management</li> <li>• Tailings and dam management is overseen by an appointed competent person at each of the Group's TSF sites to ensure compliance with legislation and with the Group's internal code of practice</li> <li>• An independent tailings review board is also due to be appointed, as recommended by the GISTM</li> <li>• Regular inspections and meetings are held between mine management, third-party TSF operators and the appointed competent persons tasked with monitoring and compliance</li> <li>• Active management of the engineering risk management process at all operations</li> <li>• Ongoing capital expenditure and maintenance of infrastructure to proactively address infrastructure concerns</li> <li>• Prioritised capital expenditure to upgrade the steel infrastructure at the Kinross plant and both the 7 and 8 Shafts at Evander Mines</li> <li>• The prioritisation and allocation of capital expenditure is based on the Group's investment criteria, which include thorough risk assessments</li> <li>• Critical safety and engineering equipment is supported by alternative power sources that are regularly serviced and maintained</li> <li>• Improved infrastructural capacity at Barberton Mines following construction of the Fairview Mine subvertical shaft and shaft infrastructure at Sheba Mine and New Consort Mine in the next years</li> <li>• Infrastructure replacement with improved technology, improving both safety and operating costs</li> </ul> <p><b>Outlook</b></p> <p>Focused capital expenditure on the expansion and maintenance of the Group's infrastructure. The Group is in the process of creating an independent tailings review board</p>

Residual risk



**GEOLOGICAL VARIABILITY IN THE MINERAL RESOURCES AND MINERAL RESERVES**

2021	2020		
6	6	<p><b>Root cause</b></p> <ul style="list-style-type: none"> <li>The inherent risk in the estimation of Mineral Resources and Mineral Reserves, compounded by the geological complexity of the orebodies at the Group's operations, specifically the hydrothermal lode gold deposits in the Barberton Greenstone Belt, as well as the resulting mine plan and scheduling, may result in production targets not being met in the short to medium term</li> </ul>	<p><b>Mitigating actions taken/opportunities identified</b></p> <ul style="list-style-type: none"> <li>Modifying factors, as defined in the Mineral Reserves conversion, are based on actual modifying factors achieved over the preceding three years, which support the Group's mine planning and forecast production</li> <li>The Group's mining operations have consistently extracted gold deposits from the same orebodies with the same infrastructure over many years, providing confidence in its predictive ability, notwithstanding the geological complexity of these orebodies</li> <li>Achieved additional mining flexibility through establishing a fourth working platform in the high-grade Main Reef Complex (MRC) orebody and a third platform on the high-grade Rossiter Reef</li> <li>As part of the Group's geological risk mitigation strategy, an independent exploration Mineral Resources and Mineral Reserves conversion audit was undertaken</li> </ul>
<p><b>Stakeholders affected</b></p> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Customer</li> </ul> <p><b>Material matters linked</b></p> <ul style="list-style-type: none"> <li>Value-accretive growth</li> <li>Cost of production</li> <li>Geological complexity and predictability</li> <li>Environmental impact</li> </ul> <p><b>Capitals impacted</b></p> <ul style="list-style-type: none"> <li>Financial capital</li> <li>Human capital</li> <li>Natural capital</li> </ul>		<p><b>Outlook</b></p> <p>Geological complexity inherently holds opportunities for exploration and delineation of additional ore deposits. This is evident in the rich project pipeline offered by the Group's active exploration and mining rights</p>	

**MACROECONOMIC VOLATILITY – SPECIFICALLY THE GOLD PRICE AND CURRENCY FLUCTUATIONS**

2021	2020		
7	7	<p><b>Root cause</b></p> <ul style="list-style-type: none"> <li>Volatility in macroeconomic variables such as commodity prices and exchange rates affects cash flow generation. The Group's gold revenue is earned in US\$, whereas costs are incurred in rand, resulting in a currency mismatch</li> </ul>	<p><b>Mitigating actions taken/opportunities identified</b></p> <ul style="list-style-type: none"> <li>The Group resolved not to hedge the gold price or foreign exchange rate unless it is to mitigate transactional risk, protect cash flows at times of significant capital expenditure or to comply with specific debt requirements</li> <li>Financial risk management through strategic currency and commodity price hedging when appropriate and within predetermined limitations, to decrease volatility in the Group's cash flows</li> <li>Hedging strategies are aligned to the Group's financial risk management policies to ensure that derivative risk remains within board-approved limits</li> <li>Gold market indicators and trends are constantly monitored to provide robust market insights and support agile decision-making</li> <li>Continual focus on cost management and production efficiency improvements to protect margins and improve cash flow</li> </ul>
<p><b>Stakeholders affected</b></p> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Customer</li> <li>Suppliers</li> <li>Government and regulatory bodies</li> </ul> <p><b>Material matters linked</b></p> <ul style="list-style-type: none"> <li>Execution</li> <li>Value-accretive growth</li> <li>Cost of production</li> <li>Culture</li> </ul> <p><b>Capital impacted</b></p> <ul style="list-style-type: none"> <li>Financial capital</li> </ul>		<p><b>Outlook</b></p> <p>Although the gold price remains within a reasonable range, a shift in market drivers or supply can create uncertainty around the longer-term sustainability of current prices. The US\$/ZAR exchange rate is anticipated to remain volatile due to its sensitivity to global markets and macroeconomic challenges in South Africa</p>	

## OUR RISKS AND OPPORTUNITIES continued

2021		2020		STRATEGIC CAPITAL ALLOCATION	
8	10	<b>Root cause</b>	<ul style="list-style-type: none"> <li>Poor capital allocation decisions result in suboptimal returns, adversely impacting stakeholder value creation</li> </ul>		
<b>Stakeholders affected</b> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Government and regulatory bodies</li> </ul>		<b>Mitigating actions taken/opportunities identified</b>	<ul style="list-style-type: none"> <li>All significant capital allocation decisions are subject to rigorous analysis and predefined risk-adjusted return parameters to ensure disciplined capital allocations</li> <li>Potential new investments that fail to project a minimum return of 15% per annum on equity after adjusting for project-specific and sovereign risks are rejected</li> <li>In addition to the return requirement, any significant capital investment is assessed to ensure that it falls within the Group's execution capability</li> </ul>		
<b>Material matters linked</b> <ul style="list-style-type: none"> <li>Execution</li> <li>Value-accretive growth</li> <li>Cost of production</li> </ul>		<b>Outlook</b>	Continually assessing our capital expenditure programmes to reduce reliance on debt funding and to maximise the value of our assets and returns to our shareholders		
<b>Capitals impacted</b> <ul style="list-style-type: none"> <li>LOI</li> <li>Hand icon</li> <li>Lightbulb icon</li> </ul>					

2021		2020		SHORTAGE OF ADEQUATE AND APPROPRIATE SKILLS	
9	New	<b>Root cause</b>	<ul style="list-style-type: none"> <li>Loss of key employees and a shortage of employees with specialised skills may impede our ability to meet production targets and contain cost of production</li> </ul>		
<b>Stakeholders affected</b> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Employees and unions</li> </ul>		<b>Mitigating actions taken/opportunities identified</b>	<ul style="list-style-type: none"> <li>Career progression, succession planning and talent management are prioritised to ensure consistent flow of talent with the current focus being on critical operational roles</li> <li>Training programmes are in place for identified required skills</li> <li>We provide competitive and incentive-focused remuneration packages to attract and retain sought-after skills</li> </ul>		
<b>Material matters linked</b> <ul style="list-style-type: none"> <li>Execution</li> <li>Cost of production</li> <li>Skills shortage</li> </ul>		<b>Outlook</b>	Maintaining a strong focus on talent management and succession planning while highlighting skills requirements and identifying, developing and recruiting for critical roles		
<b>Capitals impacted</b> <ul style="list-style-type: none"> <li>Hand icon</li> <li>Lightbulb icon</li> </ul>					

2021		2020		REGULATORY CHANGES AND COMPLEXITY	
10	5	<b>Root causes</b>	<ul style="list-style-type: none"> <li>There has been an increase in changes to legislation related to a variety of activities across the business value chain, including the nature of mining rights, transformation, health and safety and environmental performance</li> <li>Uncertainty related to the potential for the state to expropriate land without compensation is a continuing concern</li> <li>Regulatory changes which lead to an uncertain investment environment adversely impacts the Group's ability to raise capital for the Group's funding requirements and growth aspirations</li> </ul>		
<b>Stakeholders affected</b> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Communities</li> <li>Government and regulatory bodies</li> </ul>		<b>Mitigating actions taken/opportunities identified</b>	<ul style="list-style-type: none"> <li>Monitoring regulatory developments and ensuring readiness to comply with new legislation</li> <li>Engaging with industry representative bodies and regulators to influence proposed legislation</li> <li>Seeking independent legal advice on proposed regulatory changes to manage the potential consequences thereof</li> <li>Engagement with senior government officials to ease restrictions on the permitting process for the mining industry</li> </ul>		
<b>Material matter linked</b> <ul style="list-style-type: none"> <li>Regulatory compliance</li> </ul>		<b>Outlook</b>	Anticipating continued regulatory pressure and further policy developments on a range of business-related activities		
<b>Capital impacted</b> <ul style="list-style-type: none"> <li>LOI</li> </ul>					

Residual risk



**ENVIRONMENTAL IMPACT OF MINING ACTIVITIES**

2021	2020		
11	4		
<p><b>Stakeholders affected</b></p> <ul style="list-style-type: none"> <li>Providers of capital</li> <li>Communities</li> <li>Government and regulatory bodies</li> <li>The environment</li> </ul> <p><b>Material matters linked</b></p> <ul style="list-style-type: none"> <li>Climate change</li> <li>Environmental impact</li> </ul> <p><b>Capitals impacted</b></p>		<p><b>Root cause</b></p> <ul style="list-style-type: none"> <li>Environmental damage due to pollution (including cyanide), tailings dam failure or residue pipeline breakages and spillages may adversely impact the Group's reputation and result in an adverse financial impact</li> </ul>	<p><b>Mitigating actions taken/opportunities identified</b></p> <ul style="list-style-type: none"> <li>The environmental impact of our mining operations is closely monitored and managed in accordance with environmental management plans, with annual reports submitted to the Department of Mineral Resources and Energy (DMRE)</li> <li>Rehabilitation closure liabilities are fully funded, which enables the Group to mitigate and rehabilitate most of the environmental effects of mining. The impact of the National Environmental Management Act will also be considered in determining the rehabilitation closure liabilities for the next financial year</li> <li>The Group conducts ongoing rehabilitation where possible</li> <li>Continuous monitoring by means of environmental damage detection systems</li> <li>Barberton Mines' cyanide detoxification plant and water treatment processes comply with cyanide disposal guidelines reducing weak acid dissociable cyanide residue levels to less than 50ppm</li> <li>All cyanide is transported by a certified and approved hazardous substances service provider</li> <li>The Group works with nature conservation authorities in Barberton to minimise the adverse impact of its mining operations on the environment</li> <li>Specific action plans are in place to deal with flooding and spillage incidents</li> <li>Monitoring the rate of rise of active TSFs and the structural integrity of the TSFs by independent advisers</li> <li>The design of TSFs provides for zones of influence in the event of a breach of integrity</li> <li>Regular environmental campaigns are hosted to reinforce environmental awareness</li> <li>Residue pipelines are patrolled to mitigate the risk of damage due to theft and vandalism. Throughput and pressure of these pipelines are monitored to mitigate the risk and impact of ruptured pipes and spillages</li> </ul>
		<p><b>Outlook</b></p> <p>We remain committed to conducting our business operations in a manner that results in minimal environmental harm</p>	