Sustainability Report 2021

AngloAmerican

KUMBA IRON ORE LIMITED

Kumba's history

General view of an 860 haul truck in the Sishen pit

Kumba is a supplier of high-quality iron ore (64.1% average Fe) to the global steel industry. We operate primarily in South Africa, with mining operations in the Northern Cape, a head office in Centurion, Gauteng, and a port operation in Saldanha Bay, Western Cape.

Our purpose is to "re-imagine mining to improve people's lives", using innovative thinking, enabling technologies and collaborative partnerships to shape an industry that is safer, more sustainable, and better harmonised with the needs of our host communities and society.

1931

Iscor's first mine established at Thabazimbi in the Limpopo province

1942

Open-pit operations commenced at Thabazimbi

1953

Sishen, our flagship operation, established in the Northern Cape province

1976

The South African government invested in the infrastructure to enable the export of iron ore from Sishen via the Sishen-Saldanha rail link and port facility

This opened up a new era of growth for the iron ore business

1989

Iscor is privatised

2001

Iscor unbundled into two separate companies, namely Kumba Resources and Iscor

2002

Sishen achieved ISO 14001 Environmental Management and OHSAS 18001 Health and Safety system certifications

2006

Unbundling of Kumba Resources' iron ore assets and the re-listing of Kumba Resources as Exxaro Resources and a new company, Kumba Iron Ore, fully empowered with black economic empowerment (BEE) ownership of 26%

2008

Sishen Jig plant formally opened in November 2008

Construction started on Kolomela

2011

Kolomela, first ore produced five months ahead of schedule and within budget

Maturity of the first phase of Envision (broad-based employee share ownership scheme) with 6,209 employees each receiving R576,045 (pre-tax)

2012

Unprotected strike at Sishen in the fourth quarter of 2012

2013

Finalisation of the new supply agreement with ArcelorMittal SA

Ultra-high density media separation (UHDMS) pilot plant commissioned at Sishen in the fourth quarter of 2013

Approval of the Dingleton relocation project

2014

Kumba granted the mining right for the rail properties at Sishen

47% decline in iron ore prices during the year

2015

Further 42% decline in iron ore prices – revised strategy from volume (increasing waste and production tonnes) to a value based (cash-generating) strategy

Dividends suspended and restructuring of head office and support services at the mines

Slope failure at Thabazimbi; board approves closure of the mine

Kumba achieved A-listing on the Climate Disclosure Project (CDP) Climate Change and Water programmes

2016

Sishen 21.4% residual mining right awarded to SIOC

Agreement reached to transfer ownership of Thabazimbi to ArcelorMittal SA

Restructuring of Sishen and significant reconfiguration of the Sishen pit

Bottoming out of the iron ore price

Maturity of Envision II; paid R75,000 per employee (after tax) in dividends; no capital pay-out due to decline in Kumba share price

2017

Kumba best performing share on the Johannesburg Stock Exchange (JSE)

Reinstated dividends

Introduced three transformation horizons to enhance our competitive position

Kolomela achieved ISO 14001 Environmental Management and OHSAS 18001 Health and Safety system certifications

2018

Approved the Tswelelopele strategy with three horizons

Transfer of Thabazimbi, including employees, assets and liabilities as well as the mining rights to ArcelorMittal SA, effective 1 November 2018

Kolomela mining right amended to include Heuningkranz prospecting right

2019

Zandrivierspoort – expiry of prospecting rights in Limpopo, the strategic focus remains in Northern Cape

2020

Covid-19 pandemic impacts not only Kumba but the entire world. Our *WeCare* response programme was implemented as a comprehensive set of risk-based prevention and control measures

Approved the Kapstevel South project

Kumba delivers strong financial performance in a buoyant commodity market, but production volumes impacted by Covid-19 restrictions

2021

Kumba remained fatality-free for more than five years, supported by our elimination of fatalities (EOF) framework

UHDMS project approved – optimal value will be achieved through life-of-mine extension and increasing product quality

Kumba awarded first place in the Sunday Times Top 100 Companies (generated shareholder returns that outperformed their listed peers)

Resettlement of Dingleton community (which began in 2014) successfully concluded

Navigating our 2021 reports
Our integrated reporting suite comprises the following reports:

All information for the year ended 31 December 2021

Integrated report (IR)
A succinct review of our strategy and business model, operating context, governance and operational performance, targeted primarily at current and prospective investors.

Sustainability report (SR)
Reviews our approach to managing our significant environmental, social and governance (ESG) impacts and addressing those sustainability issues of interest to a broad range of stakeholders.

Annual financial statements (AFS)*
Detailed analysis of our financial results, with audited financial statements, prepared in accordance with International Financial Reporting Standards (IFRS).

Ore Reserve (and Saleable Product) and Mineral Resource report (ORMR)*
Reported in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC Code – 2016 edition).

* Published on 22 February 2022.

Online
Each of these reports, with additional updated information, is available on our website:
→ www.angloamericankumba.com
→ **More specific information can be found with our** page referencing throughout this report.

Social channels

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« *Botshelo Mmolawa, a farmhand from the Gamagara hydroponic farm project, situated 10 km outside of Kathu. This is a community agricultural project initiated by Sishen. The farm grows vegetables such as cucumbers, spinach and tomatoes, which are supplied to local supermarkets.*

Contents

Introduction
1 Approach to reporting
2 About this report
3 Our value impact
4 The United Nations Sustainable Development Goals

Our approach
10 Who we are
12 Social, Ethics and Transformation Committee Chairperson review
16 Business model
18 Chief Executive's review
20 Measuring performance
21 Embedding sustainability
24 Governance and management approach
32 Stakeholder engagement

Our people
38 Safety, health and wellbeing
56 Workforce culture and capability

Building social capital
66 Upholding high social standards
69 Making a positive social contribution

Managing environmental impacts
82 Healthy environment
83 Environmental management
87 Climate change and energy management
93 Water
98 Mine closure, rehabilitation and biodiversity
103 Air quality
105 Mineral residue management
108 Non-mineral waste management

Appendices
111 Performance tables
118 Socio-economic and transformation indicators
119 Summary GRI table
124 Independent Auditor's assurance report
127 Selected reporting criteria for sustainability assurance
129 Glossary of icons, terms and acronyms
IBC Administration

Directors' responsibility

The Kumba Board, supported by the Audit Committee, has overall accountability for this report. It delegated the responsibility to oversee the reporting process to its Social, Ethics and Transformation Committee, which was assisted by a steering committee comprising executive managers and a dedicated reporting team. The Board collectively reviewed the content of this report and confirms that it believes this Sustainability report 2021 addresses our material issues, and is a balanced and appropriate presentation of the sustainability performance of the group. The Kumba Board approved this report on 16 March 2022.

Buyelwa Sonjica
Chairperson: Social, Ethics and Transformation Committee

External benchmarking and accreditation acknowledging our commitments and transparent reporting

FTSE4Good

FTSE Russell confirms that Kumba has been independently assessed according to the FTSE4Good criteria, with an ESG rating of 4.4 out of 5, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong ESG practices.

MSCI ESG RATINGS AA

Kumba Iron Ore Limited received a rating of AA (on a scale of AAA-CCC/in the MSCI ESG rating assessment.

→ For more information visit www.msci.com/esg-ratingsv

Excellence in Integrated Reporting Awards 2021 EY

Kumba was awarded third place (with honours) in a survey of integrated reports form South Africa's top 100 JSE-listed companies.

Corporate ESG Performance Prime ISS ESG

Awarded to companies that meet specific minimum requirements in corporate ratings and achieve the best ESG scores among their sector peers.

→ For more information visit www.issgovernance.com/esg/ratings/corporate-rating/

Performance summary

Since May 2016		Total recordable case frequency rate		Lost-time injury frequency rate	
Fatality-free	2020: zero fatalities	0.80	2020: 1.74	0.32	2020: 0.80
Level 3 to 5 environmental incidents for five consecutive years		**Women in management**		**Historically disadvantaged South Africans in management positions**	
Zero	2020: None	29%	2020: 27%	75%	2020: 72%
Spent on direct social investment		**Spent on procurement from HDSA businesses**		**Decrease in GHG intensity**	
R257.5m	2020: R263.6m	R10.3bn	2020: R9.8bn	0.024	2020: 0.025

△ positive trend ▽ negative trend ◇ neutral trend

When visiting Kumba Iron Ore the following rules apply:

- Reverse parking is compulsory
- No talking and texting on cellphone while walking
- Use of handrails is compulsory
- Firearms are not permitted
- Complete the Monitor Myself form on the Engage App

About this report

Purpose and scope of this report

This report seeks to provide our key stakeholders – namely our shareholders, employees, local communities, non-governmental organisations (NGOs), investment community, customers, business partners, suppliers and government – with a transparent account of how we addressed the most material sustainability issues the Company faced during 2021. The scope of this report covers our Sishen and Kolomela operations, corporate office in Centurion, the Saldanha port and our marketing activities in London and Singapore, for the period 1 January to 31 December 2021.

Our sustainability reporting criteria have been compiled in accordance with the GRI's sustainability reporting standards and their mining sector supplement. Our reporting is also aligned with the AA1000 stakeholder engagement standard, the sustainable development principles and reporting framework of the International Council on Mining and Metals (ICMM), and the principles of the United Nations Global Compact. In addition, we have published an IR, AFS, and ORMR report. The reporting process for all our reports has been guided by the principles and requirements contained in IFRS, the Value Reporting Foundation's Integrated Reporting Framework, the GRIs Standards, the King Code on Corporate Governance™ 2016 (King IV), the JSE Listings Requirements, and the Companies Act No 71 of 2008, as amended (Companies Act).

We use a combined assurance model to provide us with assurance obtained from management and from internal and external assurance providers.

→ **Nexia SAB&T (Nexia) has provided independent assurance over selected sustainability key performance indicators. Nexia's assurance statement is provided** on page 124.

Please address any queries or comments on this report to Bheki Masondo (email: bheki.masondo@angloamerican.com).

Our value impact 2021

Delivering shareholder returns

Dividend policy, target payout ratio range of between
50% and 75%
of headline earnings

Since 2018 have returned 95% **of headline earnings to shareholders**

Dividends declared in 2021
R33.2 billion
to owners of Kumba
(2020: R19.6 billion)

and R10.3 billion
to empowerment partners
(2020: R6.4 billion)

Total dividends paid to BEE shareholders since Kumba's inception in 2006
R48.7 billion
(2020: R37.2 billion)

Building communities

R4.1 billion
spent directly on suppliers within host communities
(2020: R3.7 billion)

Local employment

Sishen	Kolomela
78%	80%

employees are from the local communities

R257.5 million
(including R35.3 million on Covid-19) spent on direct social investment

73
community complaints
(2020: 45)

Customers

Product quality – average Fe content %
64.1%

Lump:Fine ratio
69:31

Third-party logistical challenges

Providing employment

Fatality-free
since May 2016

Amount paid to employees (including salaries, benefits, bonuses and share-based payment expenses)
R5.6 billion

More than 75%
of employees and contractors are fully vaccinated and
8%
had been partially vaccinated

Value is:
- Created
- Preserved
- Eroded

Contributing to South Africa

Total tax contribution

R million	2021
Corporate income tax	16,603
Mineral royalties	4,612
Payroll tax	1,387
Skills levy	50
UIF	23
Total	22,675

Northern Cape
Impact catalyst
will facilitate implementation of the shared value strategy and integrated collaborative regional development

Environment

No serious
(level 3 to 5) environmental incidents for the
sixth consecutive year

No water source
or habitat materially negatively affected by our extraction and
use of water

0.99 million tonnes
Greenhouse gas (GHG) emissions (scope 1 and 2)

16,399 hectares
disturbed by mining, processing and mineral waste disposal, since commencement of operations

138.8 hectares
rehabilitated during the year

The United Nations Sustainable Development Goals

Kumba's purpose is to re-imagine mining to improve people's lives, using innovative thinking, enabling technologies and collaborative partnerships to shape an industry that is safer, more sustainable, and better harmonised with the needs of our host communities and society. We are delivering on this purpose through our active engagement in Anglo American's FutureSmartMining™ programme and Sustainable Mining Plan that include ambitious long-term targets aligned with the United Nations Sustainable Development Goals (UNSDGs), relating to three global sustainability pillars: being a trusted corporate leader, building thriving communities, and maintaining a healthy environment. A summary of our activities that contribute to the 12 UNSDGs, that Kumba has an impact on, is provided below.

UNSDG	How Kumba makes a difference		
SDG 1 **End poverty in all its forms everywhere** 	• Provision of thousands of jobs, both direct and indirect, including in communities that otherwise have limited economic opportunities • Localised procurement strategy that supports suppliers within host communities, including substantial spend on HDSA business. During 2021 we spent R4.1 billion with suppliers within our host communities • Supplier development programme to support local small, medium and micro-sized enterprises (SMMEs) and provide advice and support for their business activities • Building capacity in our communities through direct social investment and our collaborative regional development programme. Many of our initiatives are implemented through strategic partnerships with local government, development partners, SIOC-CDT, the Anglo American Chairman's Fund, suppliers, communities and NGOs • Northern Cape Impact Catalyst will facilitate the implementation of shared value strategy and integrated collaborative regional development in our host communities • Anglo American Zimele, empowering host community black entrepreneurs to start or grow businesses. In addition to granting loans, the programme provides mentorship, helps suppliers access new markets and develop skills among young people • Tax payments, including corporate income tax, mineral royalties, value added tax (VAT) on purchases, duties on imports and exports, payroll taxes and dividend withholding taxes		
Reference	**Making a positive social contribution**	**Pages**	**69**
	Stakeholder engagement	**Pages**	**32**
SDG 3 **Ensure healthy lives and promote wellbeing for all at all ages** 	• Sacred covenant code with the families of all our employees to ensure that every employee and contractor at our operations returns home unharmed after every day's work. Our aim is to continually build and instil both a company and industry culture that protects people from harm and improves their health and wellbeing • Emphasis on managing the diverse impacts and implications of the Covid-19 pandemic on employee and host community health and wellbeing, including an extensive Covid-19 vaccination drive • We have well-established wellness initiatives for employees and contractors. Our health programme includes a focus on providing resources to help employees manage personal health risks, including the risk of HIV/Aids, TB and non-communicable diseases • Kumba's World of Wellness (WOW) programme integrates aspects of mental health, physical wellness, recreation and inclusion and consists of three themes: mind (mental wellness), body (physical wellness), and spirit (emotional wellness) • Our community healthcare initiatives continue to improve access to quality medical and healthcare services and to alleviate some of the mounting pressure on health service delivery by government		
Reference	**Employee safety**	**Pages**	**40**
	Employee and community health and wellbeing	**Pages**	**47**

UNSDG	How Kumba makes a difference		
SDG 4 **Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all** 4 QUALITY EDUCATION	• Ambitious education programme that aims to ensure that schools in our host communities perform among the top 30% of state schools by 2025 (stretch goal) and in the top 20% by 2030 • Anglo American South Africa Education programme aimed at students in early-childhood-development sites and primary and secondary schools local to Sishen and Kolomela. Targets for 2023 include ensuring that 90% of five-year-old children are school-ready and ensuring a 65% pass rate in matric mathematics • Internal training and development interventions focus on providing skills training for our employees and also include learnerships, leadership development, mentorships and career progression plans • Develop technical talent for the Company through our graduate development programme offering degree and diploma graduates the opportunity to obtain training and work experience during a fixed-term contract with the Company to cover bursary debt		
Reference	**Making a positive social contribution**	**Pages**	**69**
	Stakeholder engagement	**Pages**	**32**
	Workforce culture and capability	**Pages**	**56**
SDG 5 **Achieve gender equality and empower all women** 5 GENDER EQUALITY	• Women-in-mining (WIM) strategy and plan to promote the integration of women in the workplace, especially in core functions. A WIM steering committee oversees performance against objectives. Capacity building is critical, and we aim to ensure at least 30% women representation in our talent pipeline programmes. We are working towards a target to achieve 33% representation of women at management levels by 2023 • Gender-sensitive work environment. Interventions aimed at combatting sexual and gender-based violence (GBV) and harassment at work, at home, in our schools and our communities, supported by our zero-tolerance policy on bullying, harassment and victimisation		
Reference	**Workforce culture and capability**	**Pages**	**56**
SDG 6 **Ensure availability and sustainable management of water and sanitation for all** 6 CLEAN WATER AND SANITATION	• Take all reasonable steps to ensure that we do not degrade water quality or compromise the access rights of other users. Water management site plans include provision for water security, water-use efficiencies, tailings water-recovery projects and a mine dewatering strategy, stormwater management, and discharge management, complemented by a monitoring programme • In improving access to clean water in water-scarce host communities, Kumba provides 17 billion litres of water to the Sedibeng Water Board and the Gamagara Municipality; Kolomela artificially recharges clean mine water to the underground aquifers that its operations traverse		
Reference	**Water**	**Pages**	**93**
SDG 8 **Promote sustained inclusive and sustainable economic growth, full productive employment and decent work for all** 8 DECENT WORK AND ECONOMIC GROWTH	• We employ 6,146 permanent employees 4,486 contractors and 658 learnerships at our operations and head office. We are committed to providing a safe, inclusive and healthy working environment, to promoting employee training and development, ensuring fair labour practices, and to promoting local employment opportunities • Committed to the Youth Employment Services (YES) Programme, to stimulate demand-side job creation. Every year we will place more than 20 previously disadvantaged, unemployed youth from local communities into 12-month work experience and training opportunities in the Company • Kumba's total tax contribution of R22.7 billion and the contribution we make to government and our local host communities is critical to foster economic growth in South Africa • Since Kumba's inception we have paid R48.7 billion in dividends to our empowerment partners and returned R33.2 billion in dividends to the shareholders of Kumba during 2021 • Investment in enterprise and supplier development		
Reference	**Making a positive social contribution**	**Pages**	**69**
	Workforce culture and capability	**Pages**	**56**
	Chief Financial Officer review	**Pages**	**IR 96**

The United Nations Sustainable Development Goals continued

UNSDG	How Kumba makes a difference		
SDG 9 **Promote industry innovation and resilient infrastructure** 	• Technology strategy to accelerate the adoption of appropriate technologies at our operations to improve safety and reduce costs • Work closely with Transnet to ensure that the rail and port infrastructure can support Kumba and the users of the IOEC to deliver products to its customers • With our commitment to FutureSmart Mining™. Our vision is to create a truly smart, connected mine, transforming vast quantities of data into predictive intelligence with the ultimate aim of creating a self-learning operation that offers new levels of safety, stability and predictability. We are integrating new technologies to enable safe mining by removing people from harm's way, and to more precisely target metals and minerals with less waste, water and energy		
Reference	**Strategy**	**Pages**	**IR 54**
	Strategic focus areas	**Pages**	**IR 92**
SDG 12 **Ensure responsible consumption and production** 	• Our zero waste to landfill (ZW2L) drive forms part of broader efforts to develop our contribution to a circular economy • Implementation of the UN's Globally Harmonized System of Classification and Labelling of Chemicals, and the EU's Registration, Evaluation, Authorisation and Restriction of Chemicals as well as variants emerging in other jurisdictions • Provide assurance that Kumba is a reputable and responsible iron ore producer through ethical production		
Reference	**Mineral residue management and non-mineral waste**	**Pages**	**105**
	Product stewardship	**Pages**	**86**
SDG 13 **Take urgent action to combat climate change and its impact** 	• Adhere to Anglo American's climate change policy; focus on driving energy and carbon savings throughout our business, and building internal agility and resilience to climate change • Implement our roadmap for achieving group goals of 30% reduction in energy intensity and GHG emissions by 2030 (baseline 2016) and carbon neutrality by 2040 • Ambition to realise zero scope 2 emissions by 2030 through the implementation of large scale renewable projects, with the ambition to be carbon neutral (scope 1 and 2 in 2040) though the implementation of alternative energies and fuels to displace diesel • To address scope 3 emissions we continue to focus on increasing our premium product offering and working with key partners on developing products and technologies that could further reduce scope 3		
Reference	**Climate change and energy management**	**Pages**	**87**
SDG 15 **Protect, restore and promote sustainable use of terrestrial ecosystems** 	• Manage 83,402 hectares of land and 2,500 hectares are set aside for biodiversity offsets • Integrate mine closure planning with land rehabilitation, promoting biodiversity and conservation, and using our non-operational land to benefit the mine and surrounding communities • Kumba is committed to a net positive impact (NPI) target that requires us to leave the biodiversity of an area in a better state than when we arrived. Going beyond a simple "no net loss" principle, requires a deep understanding of our operating ecosystem and a very deliberate land management strategy. Our NPI commitment applies to significant biodiversity features impacted by activities. These can include threatened species, natural habitats, features supporting important ecological processes and/ or ecosystem services essential to the wellbeing of society. Our operations are in areas of higher biodiversity value, increasing our responsibility to contribute to its protection and conservation		
Reference	**Mine closure, rehabilitation and biodiversity**	**Pages**	**98**

UNSDG	How Kumba makes a difference		
SDG 16 Peace, justice and strong institutions	• We respect human rights, provide access to information, support representative decision-making, work to avoid company-community conflict and carefully managing our security approaches to ensure they decrease rather than increase the likelihood of conflict • Commit to transparency across the scope of our activities that impact society, from transparency of mineral revenues and payments to transparency in commitments made to local communities		
Reference	Stakeholder engagement	Pages	32
	Governance and management approach	Pages	24
	Workforce culture and capability	Pages	56
SDG 17 Strengthen the means of implementation and revitalise the global partnership for sustainable development	• Public-private partnerships: We believe in partnering and working collaboratively towards the achievement of the SDG goals at the local, national and global levels and with all our stakeholders		
Reference	Stakeholder engagement	Pages	32
	Governance and management approach	Pages	24

The Sishen rehabilitation nursery was established to cultivate indigenous tree seedlings for planting in rehabilitated mine areas. Pictured here is environmental officer, Jabulani Dlongo.

Our approach

We seek to provide our key stakeholders with a transparent view on how key sustainability issues were addressed during 2021.

Material matters discussed in this section

- Review from the Setco Chairperson and Chief Executive
- Measuring our performance for the year and against our targets
- Our governance and management approach
- Engagement with stakeholders

In pit dumping. Waste material mined from the Western expansion in the Sishen pit is hauled and dumped in the mined-out areas of the pit.

Who we are

Listed on the JSE Limited since 2006

Our purpose	Our vision
Re-imagining mining to improve people's lives	To be a successful and sustainable African supplier of quality iron ore to global and local markets while delivering superior value to our stakeholders

At a glance

Production		Export sales		Customers in South Africa, China, Japan, Korea and EU/ MENA/Americas region
40.9 Mt	(2020: 37.6 Mt)	40.2 Mt	(2020: 40.0 Mt)	

Our values

Safety
We give our all to eliminating injuries because we value life and are unconditional about safety, health and wellbeing at work and at home.

Care and respect
We believe in humanity and therefore show care and respect for all people and will not turn a blind eye to what is wrong.

Accountability
We own our decisions, actions and performance, and are empowered to make choices and learn from our experiences.

Being a partner of choice

Building lasting beneficial relationships is core to success. We are a significant employer in the region in which we operate, and we work with communities and local governments to create lasting positive change.

As at the end of 2021 we had 11,290 people in employment, comprising

6,146
permanent employees,

4,486
contractors and

658
learnerships.

What we do

We mined and produced high-grade iron ore. Export ore, with a Lump:Fine ratio of 69:31 is shipped to customers across the globe from a port in Saldanha Bay. We also have a marketing office in Singapore, integrated with Anglo American marketing, and one in London, wholly owned by Kumba. In total, 100% of our product is exported. The revenue generated from these sales is used to grow and sustain the business, which shares its success with various stakeholders.

→ To learn more about our operations see pages 108 to 110 of the IR.

Our ambition

- **Eliminate fatal incidents and serious injuries through a culture of zero harm**
- **Enhance product premium by ≥ US$2/tonne, above Lump and Fe premium and contain C1 unit costs below US$41/tonne**
- **Sustainably extend the life of our Northern Cape operations to 2040**
- **Become the employer of choice, through a high-performance culture driven by healthy employees**

Kumba is a supplier of high-quality iron ore (64.1% average Fe) to the global steel industry. We operate primarily in South Africa, with mining operations in the Northern Cape, a head office in Centurion, Gauteng, and a port operation in Saldanha Bay, Western Cape.

Our purpose is to "re-imagine mining to improve people's lives", using innovative thinking, enabling technologies and collaborative partnerships to shape an industry that is safer, more sustainable, and better harmonised with the needs of our host communities and society.

Total tonnes mined*		Domestic sales		Employees	
261.4 Mt	(2020: 256.3 Mt)	0.1 Mt	(2020: 0.3 Mt)	11,290	(2020: 11,392)

* Including waste mined.

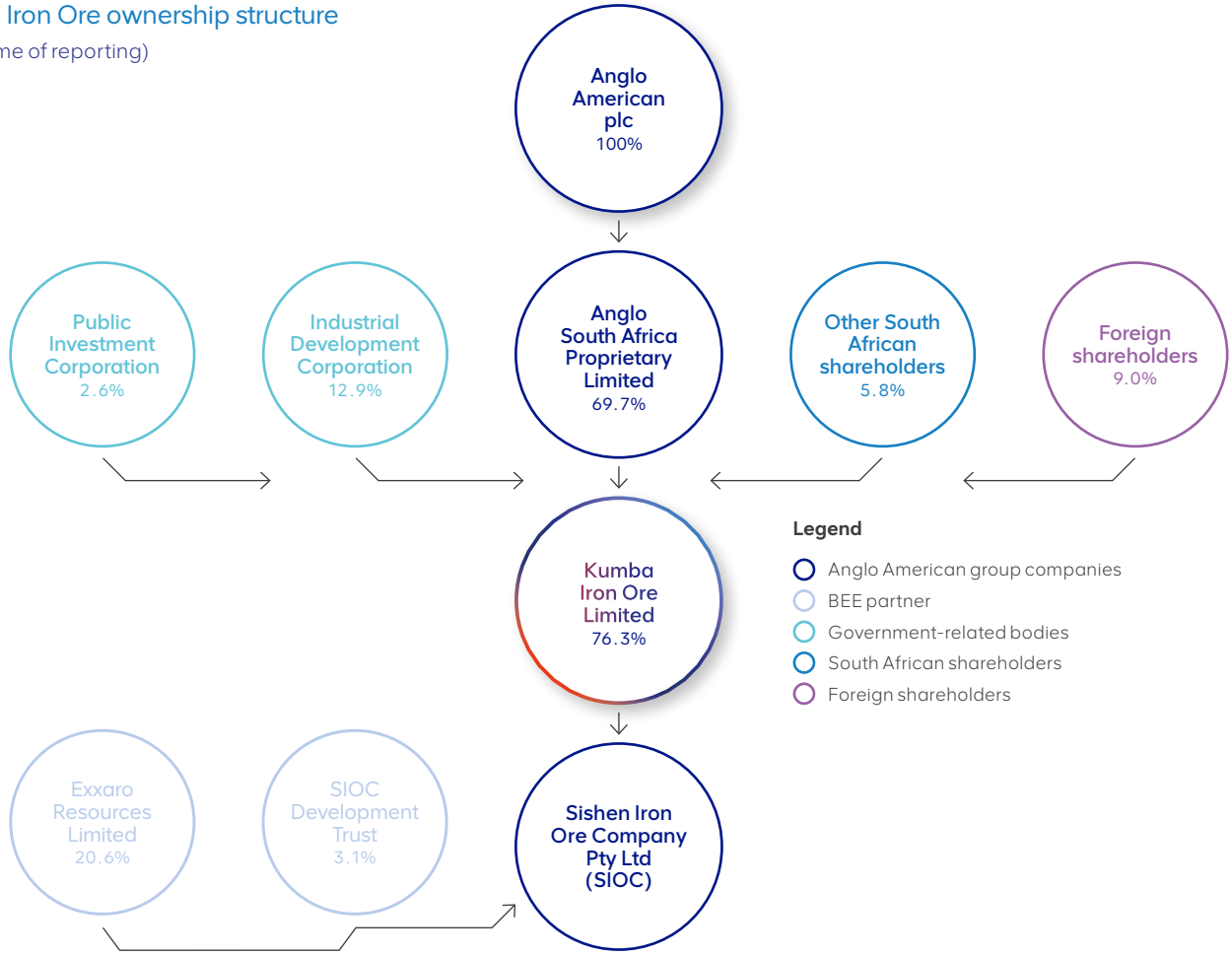
Integrity
We always act honestly, fairly, ethically and transparently.

Innovation
We challenge assumptions, seek other perspectives and pursue innovative opportunities to transform our business.

Collaboration
We collaborate with colleagues and stakeholders towards a common purpose and to achieve exceptional outcomes.

Kumba Iron Ore ownership structure

(at the time of reporting)



Social, Ethics and Transformation Committee Chairperson's review

Buyelwa Sonjica
Chairperson: Setco

Re-imagining mining to

It gives me pleasure to introduce Kumba's annual sustainability report and to present the Social, Ethics and Transformation Committee (Setco) review. I welcome this opportunity to share some reflections on Kumba's performance in addressing our material impacts on society and the environment during 2021.

Resilience and dedication

The Covid-19 pandemic has intensified the investment community's focus on environmental, social and governance (ESG) issues, specifically within the extractive sector. Despite the ongoing challenges we have faced during the pandemic, Kumba has maintained a strong operational and ESG performance, as once again recognised in global rankings by leading agencies.

Kumba's agility and resilience in responding to Covid-19-related challenges is a testament to the quality of our people and the group culture. Exceptional leadership from our executives and in the workplace has supported a sense of shared responsibility and accountability across the workforce for our collective wellbeing. Importantly, we have learned many lessons, informing our response to the successive waves of infections experienced and strengthening our approach to managing future risks, including potential further pandemics in the future.

The pandemic has accelerated Kumba's journey into a more digitalised, connected world of work. Technological innovation and digitalisation, working hand in hand with our three sustainability pillars, are helping us achieve some of our most important objectives: keeping people out of harm's way; reducing energy and water usage; and giving our people the skills and opportunities necessary to thrive in our challenging world.

I believe we are well placed to meet the increasing expectations of our stakeholders and to ensure we continue to harness our assets and capabilities to fulfil our purpose and ambition to re-imagine mining to improve people's lives.

Safety

Nothing is more vital than ensuring that every person who works for and with Kumba returns home safely at the end of every day. I am very proud of our achievements in this area.

We have built a strong safety culture, ensuring over five years of fatality-free production. The ongoing implementation of our comprehensive EOF framework continues to have a positive knock-on effect in preventing injuries. Mindful of the ongoing Covid-19-related physical and psychological impacts on our workforce, we have focused on driving the right safety mindset and behaviours and supporting mental wellbeing, as we strive to embed a culture of collective accountability and refusing to do unsafe work.

In prioritising safety, another focus is our commitment to demonstrating leadership in managing mineral residue facilities safely. To this end, we are implementing plans to achieve compliance with the requirements of the International Council on Mining and Metals (ICMM) supported global Industry Standard on Tailings Management (GISTM). This process will be supported by a group tailings management policy, which is being finalised.

Health and wellbeing

The Covid-19 pandemic remains the foremost health challenge facing our employees and their families and communities. We have maintained comprehensive response plans, including an extensive Covid-19 vaccination drive across our workforce and working with government to promote and facilitate uptake in communities. Sadly, 29 employees at our operations died of Covid-19 in 2021. Our 95% recovery rate from infections was well above the national average.

While our emphasis this year has been on mitigating Covid-19 infections, we have remained steadfast in our efforts to ensure no new cases of occupational disease because of exposure to health hazards at our operations, and to positively influence the health and wellbeing of our employees through a proactive, integrated, holistic approach to managing workplace and personal health.

For a consecutive year there were no new cases of occupational disease. In managing the principal non-occupational health risks facing our employees – pulmonary tuberculosis (TB) and the associated HIV co-infection – levels of both have been kept under control, with improvements in most performance indicators.

Setco has paid particular attention to our progress in supporting the mental health of employees, dependants and health workers, recognising the added stress and challenges created by the pandemic.

Valuing our workforce

Our people are instrumental to how we live up to our purpose in everything we do. We strive to create safe, inclusive and diverse working environments that encourage high-performance, accountability, care and innovation. I am very pleased with the continuous progress we have made in creating our desired culture and leadership behaviours.

During 2021, we undertook an organisational restructure, with due care, aimed at creating a future-fit organisation to effectively and efficiently deliver on our strategic ambitions. About 1,620 employees were impacted. Most were redeployed to positions at other sites, with a number of valuable employee movements and promotions enabled in the process. Through various other job-loss avoidance measures, we ensured that forced job losses were minimised as far as possible.

Setco has been closely monitoring Kumba's campaigns to tackle bullying, harassment and gender-based violence (GBV). It is concerning that such incidents are reported at our operations. Strengthening our efforts to combat GBV, this year we partnered with a leading consulting company to co-create GBV interventions within Kumba and our communities.

While we have improved our workforce diversity profile, notably at senior management and top management level, we are maintaining targeted initiatives to advance diversity and improve female representation across the business, specifically in core disciplines, as well as greater representation of disabled employees.

Kumba has improved its approach to supporting optimal accommodation and living conditions for our employees and their families. We consulted broadly with stakeholders and developed a new Company housing strategy and policy aimed primarily at facilitating and incentivising home ownership. The phased roll-out began in January 2022.

Reinforcing our social development commitments

Covid-19 has amplified the social challenges faced by our mine host communities, and in turn, the expectations for our operations to deliver greater socio-economic benefits, particularly employment, procurement, and skills development opportunities.

improve people's lives

I am especially proud of the increase in Kumba's expenditure with suppliers within host communities, which totalled R4.1 billion in 2021, up from R3.7 billion in 2020. About 300 host community suppliers are actively conducting business with Kumba. We uphold strong policies and measures to mitigate the risk of misappropriation of spend allocated to benefit the youth and communities. In advancing procurement opportunities, a highlight this year was the industry first awarding of a R1.6 billion mining contract to a new black-owned and community-based joint venture, to mine iron ore at Kolomela.

Investing in sustained recovery from Covid-19 impacts, Kumba has invested R129 million through interventions to facilitate economic revitalisation in host communities, focusing on employment, education and infrastructure repair programmes.

As we advance towards achieving the socio-economic development targets set in our Sustainable Mining Plans (SMPs), various health, education and livelihood programmes are at different stages of implementation. This year we have been developing strategies to accelerate our impact. In advancing our collaborative regional development agenda, this year saw the launch of the Impact Catalyst cross–sectoral development platform to facilitate the implementation of the Northern Cape shared value strategy.

We are proud of our world-class Dingleton resettlement project in the suburb Siyathemba, which will help extend Sishen's life-of-mine. In ensuring the successful completion of the project, an abiding principle has been to resettle the people impacted, in a better environment than they were before. Kumba continues to monitor and strengthen relations with the community at Siyathemba, where there remains a risk of unrest,

Social, Ethics and Transformation Committee Chairperson's review continued

with demands largely related to employment opportunities and accommodation for renters. We respond to concerns raised, for example, tackling unemployment levels through skills development initiatives as part of our social and labour plans. In seeking a long-term solution for people who had rented in Dingleton, Setco extensively reviewed the proposed donation of Siyathemba flats and vacant and serviced stands to the Gamagara local municipality, which has been approved.

This year Setco also reviewed and promoted the subsequent Board approval of an updated Kumba stakeholder engagement policy and strategy. These guide our approach to building healthy stakeholder relations, to maintain our licence to operate and uphold Kumba's reputation as a good corporate citizen and trusted partner of choice.

Responsible environmental stewardship

Kumba has maintained a good performance across key areas of responsible environmental stewardship, with no significant incidents (level 3 to 5) reported since 2015. Our improved reporting of environmental high-potential hazards has supported a further reduction in level 1 incidents, from 139 in 2020 to 97 in 2021. Environmental management systems certified against ISO 14001:2015 guide our continuous improvement, and we continue to identify, develop, and implement data-driven solutions to protect the environment.

Our vision is to maintain a healthy environment, where we not only minimise impact, but also deliver positive and lasting environmental outcomes in the areas in which we operate. We are innovating to transform the environmental footprint of our business as we work towards achieving stretch goals set in three key areas – climate change, biodiversity, and water use. In contributing to a low-carbon world, the high-quality iron ore we produce supports efficient steelmaking now, thereby reducing our scope 3 emissions, as well as facilitating the future transition of the sector to lower carbon methods. Kumba's progress towards delivering on climate change ambitions is discussed in the review by my colleague, Chief Executive Mpumi Zikalala (page 18).

In managing the land we disturb, we have made good progress with rehabilitation, achieving all reshaping, seeding and growth medium targets. In recognition of our leadership in biodiversity mainstreaming, Kumba proudly received the top score in the Endangered Wildlife Trust's annual biodiversity performance ratings.

Appreciation

In this report, you will learn more about the issues I have touched on, and many more. I encourage you to share your views with us in terms of Kumba's performance and the quality of disclosure. Frank feedback from stakeholders is essential to foster greater accountability and helps us deliver more effectively, as we strive for ESG excellence.

On behalf of Setco, I extend our deep appreciation to Themba Mkhwanazi for his transformative leadership and enormous contribution while at the helm of the Company over the last five years. We wish him every success in his new role as Chief Executive of Anglo American's global bulk commodities business, and value his ongoing contribution as a non-executive director of the Kumba Board. We extend a special welcome to Mpumi Zikalala, who took over as Chief Executive of Kumba at the start of 2022, joining the small group of women Chief Executives in the mining industry. Mpumi brings over 20 years of mining experience and younger energy to the senior leadership team. We look forward to Mpumi's leadership in advancing the strategic and operational aspirations of Kumba.

I also thank my Board colleagues on the Committee, the management team and all employees for their resilience and commitment during these challenging times, as we work towards delivering on Kumba's sustainability commitments.

Buyelwa Sonjica
Chairperson: Social, Ethics and Transformation Committee

16 March 2022

Delivering on climate change ambitions

As part of the Anglo American group, Kumba is committed to be part of the global response to climate change. This is best for the long-term sustainability of our business and the right thing for society. We have a critical role to play in providing the materials needed for a cleaner, greener and more sustainable world.

→ **A more detailed review of our performance in terms of each of these climate change ambitions is provided** on pages 80 to 110 of this report.

Our vision for carbon-neutral mining by 2040

50%	**reduction in the use of freshwater use by 2030**
30%	**reduction targets for energy use and GHG emissions (against 2016 baselines) by 2030**
Conservation of biodiversity by ensuring	**a net positive impact on biodiversity by 2030**
Zero scope 2 emissions	**across our operations by 2030**
Maximising our premium product* offering by 2024,	**which reduces scope 3 emissions**
2040 ambition	**carbon – neutrality (scope 1 and 2) across all our operations**

* Utilising high iron ore content products in blast furnace steelmaking can realise a 2.5% reduction in carbon emissions for every 1% increase in iron ore grade.

Business model

Our value proposition

World-class assets
Benefit of strong prices, while we grow value through operational excellence, while improving cost efficiencies and achieving full value for our premium product.

Capabilities
Integrated marketing and operations team to focus on developing markets outside of China and leadership to ensure safe and sustainable business, support thriving communities, and remain a trusted corporate leader.

Life-of-mine extensions
Utilising UHDMS technology, construction of Kapstevel South and development of the Heuningkranz and Ploegfontein orebodies.

Sustainable returns
A resilient balance sheet, disciplined capital allocation, with attractive, sustainable shareholder returns.

Our value chain activities

→ For more information see page 18 of the IR

Exploration
Identifying potential new resources, primarily in the Northern Cape

Mining
Extracting iron ore in the Northern Cape

Beneficiation
Improving the final product quality, using DMS, Jig technology and UHDMS

Blending and outbound logistics
Producing and transporting niche products

Shipping, marketing and selling
Servicing markets in South Africa and globally

Sustainability and ESG
Contributing to sustainable development and managing ESG impacts across all stages of the value chain

Key resources

→ For more information on capital inputs see pages 20 to 27 of the IR

- Access to natural resources (including iron ore, land, energy and water)
- Prospecting and mining rights
- Regulatory permits and licences
- Social licence to operate
- Financial capital
- Infrastructure and support services, including especially rail and port services
- Technical, commercial and managerial skills and experience
- Exploration, mining and processing technology and techniques
- Reliable, cost efficient and representative supplier base
- High levels of customer satisfaction and loyal customer base
- Positive engagement with industry peers
- Strong reputation

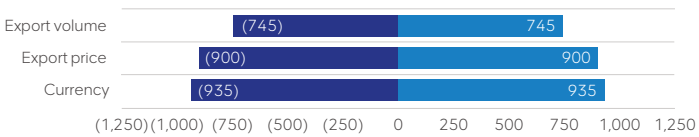
Key relationships

→ For more information on stakeholders see page 72 of the IR

- Utilities suppliers (especially Eskom), service providers (including Transnet), and contractors
- National, provincial and local government
- Department of Mineral Resources and Energy (DMRE) and Department of Forestry, Fisheries and the Environment
- Communities, their representatives, and NGOs
- Equity investors and loans from banks
- Employees and trade unions
- Management and leadership teams
- Technical teams and contractors
- Customers
- Mining company peers and industry bodies
- Media, analysts and institutions
- Banks and lenders
- Academia providing technical insights and expertise

Sensitivity analysis 1% change to key operational drivers, each tested independently – earnings before interest, taxes, depreciation and amortisation (EBITDA) impact (R million)

Sensitivity analysis



Sensitivity analysis Change per unit of key operational drivers, each tested independently

Sensitivity analysis	Unit change	2021 EBITDA impact
Currency (R/US$)	R0.10/US$	**R630m**
Export price (US$/t)	US$1.00/t	**R560m**
Export volume (kt)	100 kt	**R190m**
	Unit change	**Break-even price impact**
Currency (R/US$)	R1.00/US$	**US$4.00/t**

Output

40.9 Mt (2020: 37.6 Mt) of safely mined high-quality haematite iron ore, with a Lump:Fine ratio of 67:33 (2020: 68:32). This year, Sishen produced products with an average Fe content of 63.2%, and Kolomela averaged 64.7%. Our product portfolio includes niche Lump products, as well as standard Fines and standard Lump. In terms of waste outputs, we produce rock, tailings and process water which is largely recycled.

Key risks and opportunities

→ For more information see page 76 of the IR

Key opportunities

Financial	Safety and health	Socio-political	Environment	Cost	Production	People
Significantly improving margins	Automation and roll-out of safety technology	Partnering with organisations to improve impact on our surrounding communities	Transition to renewable energy	Transition to renewable energy	Public sector partnerships to increase port throughput to and capacity in the logistics value chain	Future-enabled workforce
Public sector partnerships to increase port throughput to and capacity in the logistics value chain				Automation and roll-out of safety technology		
Transition to renewable energy				Unlock and identify Horizon 3 opportunities		
Automation and roll-out of safety technology						
Unlock and identify Horizon 3 opportunities						

Key risks

Financial	Safety and health	Socio-political	Environment	Cost	Production	People
Cyber risk	Global health pandemic	Socio-economic challenges	Sustained power disruption	Managing change (transformation of the business)	Operational performance	Safety and health
Commodity markets and currency fluctuations	Safety and health	Current South African governance and political challenges	Climate change – carbon emissions and extreme weather impacts	Operational performance		Current South African governance and political challenges
Managing change (transformation of the business)				Third-party infrastructure (IOEC operating efficiency)		
Operational performance				Sustained power disruption		
Third-party infrastructure (IOEC operating efficiency)						
Fiscal compliance						
Sustained power disruption						

Revenue drivers

Iron ore prices
We secure a Lump and Fe premium for higher-quality ore

Iron ore sales
Total volumes were in line with the prior year

Rand/US$ exchange rate
A stronger Rand reduced local revenues for US$-based iron ore prices

Cost drivers

To maintain the current value proposition:

- Distribution (rail, port and freight)
- Labour
- Corporate overheads
- Energy (liquid fuel and electricity)
- Social investments
- Maintenance
- Capital expenditure
- Consumables
- Drilling, blasting and hauling
- Mining and non-mining contractors
- Rehabilitation
- Beneficiation

To expand the current value proposition:

- Capital expenditure
- Exploration
- Marketing

Potential for revenue differentiation

- Ability to achieve quality and Lump premia for superior ore quality (64.1% Fe versus 62% Fe benchmark), the demand for which continues to strengthen in response to more stringent environmental standards globally ✓
- Price differential potential due to higher Lump:Fine ratio (69:31 versus global average of 20:80) ✓
- Ability to diversify customer portfolio with sales in regions utilising direct-charge materials ✓
- Stronger price realisation, driven by effective marketing activities ✓
- Our ability to unlock value in the logistics chain through effective partnerships ✓
- Challenges in terms of weather, logistical constraints and supply chain delays impacting our value chain ✗

Potential for cost differentiation

- Scope for differentiation through UHDMS technology ✓
- Further leverage in operating costs through enhanced operating efficiencies ✓
- Cost savings programme targeting over R2 billion by 2022 ✓
- Higher stripping ratio due to inherent characteristics of the ore body resulting in higher mining costs, with implementation of the UHDMS project the stripping ratio is expected to reduce ✗
- Higher rail costs from mine to port, and occasional disruptions in distribution ✗
- Higher costs associated with distance from ports, and Australian competitors closer to the key market in China ✗

Operating context: Issues impacting value

→ For more information see page 62 of the IR

- Iron ore price volatility
- Competitive pressure on producer cost curve
- Climate change risks and opportunities
- Digital and technology disruption
- Changing stakeholder expectations
- Quality of assets and life-of-mine
- The Covid-19 pandemic

Chief Executive's review

Mpumi Zikalala
Chief Executive

It is an immense privilege to have been appointed as Chief Executive of Kumba, a Company with a proud history. It is also an honour to succeed Themba Mkhwanazi; through his leadership and collaboration with stakeholders over the last five years, Themba has successfully led the development and implementation of our Tswelelopele strategy that has transformed the business and delivered significant value to our stakeholders, not least our host communities. Kumba's transition in 2018 to a value-focused business has paid dividends, with the group reaching the top spot in the Sunday Times Top 100 Companies this year, from third place last year.

Delivering strong ESG performance in line with our purpose

Kumba is a purpose-led business, with strong values, in an operating environment that has faced diverse new challenges over the last two years under the Covid-19 pandemic. During this period, the Company has continued to demonstrate its resilience and agility, delivering on its business strategy that has an integrated approach to sustainability at its core. As a leader in mining, it is our duty to be responsible and responsive. Kumba maintained an exemplary effort this year to not only safeguard the lives and livelihoods of our colleagues and those in our local communities, but to ensure our presence continues to benefit society – both through our actions and through the high-grade iron ore we mine and produce. Our ability to deliver greater positive social impact where we operate has been underpinned by a favourable commodity market and generally pleasing operational performance, with strong financial results this year.

ESG factors have played a key role in informing our Tswelelopele strategy refresh, which will be launched later this year. Being a leader in ESG is directly relevant to our ability to deliver on the commitments in the SMPs we are implementing at Kolomela and Sishen. These include ambitious long-term targets, aligned with the UN Sustainable Development Goals, relating to three pillars: being a trusted corporate leader, building thriving communities, and creating a safe and healthy environment. Anglo American's FutureSmart Mining™ programme is playing a major part in getting us to these targets, introducing new technologies and digitised approaches that are making mining safer and reducing its overall environmental footprint.

Valuing and optimising our people

Our commitment to being a leader in ESG and sustainability begins with our employees – ensuring their safety, health, and emotional wellbeing, helping them develop the right skills to thrive, and mitigating the consequences of a protracted pandemic.

Kumba's strong safety performance demonstrates the Company's success in driving a safety culture. Operating fatality-free for over five years, since May 2016, is a landmark achievement for the Company and the South African mining industry, and this year Kumba achieved its best total recordable case frequency rate (TRCFR) of 0.80, exceeding the target of 2.01 by 60%. Leading indicators continue to direct our focus in taking real-time corrective and preventive actions, as we strive for zero harm.

For health and wellbeing, we continue to focus on mitigating the physical and psychological effects of the pandemic, recognising the levels of attention and care required to support mental wellbeing. The strength of Kumba's culture is evidenced in the sense of shared responsibility and accountability across the workforce for our collective wellbeing. This includes high levels of Covid-19 vaccination uptake, driven through an

extensive vaccination drive across the Kumba workforce and within our host communities, with more than 75% of the workforce fully vaccinated by year end. While we have maintained a high recovery rate from infections, well above the national average, sadly we have lost 29 colleagues to date to the pandemic. I extend my heartfelt condolences to their loved ones, friends, and colleagues.

Rigorous occupational health management ensured a consecutive year of no new cases of any occupational diseases, including a sixth year of no noise-induced hearing loss cases, and no direct employee exposure to respirable dust and silica above the occupational exposure limit. In strengthening the Company's organisational culture, we have maintained a strong emphasis on creating a more inclusive and diverse working environment and enhanced our efforts to prevent any instances of bullying, harassment, or gender-based violence within Kumba and our communities.

Growing sustainable host communities

Kumba aims to create thriving host communities by acting as a catalyst for enduring economic prosperity through employment, and by creating a more inclusive supply chain that generates shared sustainable prosperity in the communities around our operations. We are also implementing a collaborative approach to regional development to drive sustained economic diversification. Adhering to the Anglo American Social Way social performance management system, we implement a robust assessment methodology tool to measure our socio-economic development performance and inform the design of effective site-level strategies. Our positive social contribution this year included R258 million in direct social investment, supporting those most in need, focusing on health, education, and community development, in line with our SMPs.

Since joining Kumba's world-class team at the start of 2022, I have engaged with some of our key stakeholders and look forward to engaging with the remaining stakeholders. My focus is to build on Kumba's strong safety, sustainability and operational performance track record, to strengthen our strategic partnerships and to unlock further value from the business.

Delivering on climate change ambitions

Climate change remains the defining challenge of our time. In line with the outcomes of the recent COP26 summit in Glasgow, Kumba has committed to play its part in contributing to Anglo American's 2040 goals of achieving operational carbon neutrality across its operations and to reducing its scope 2 emissions to zero by 2030, and to reduce scope 1 emissions to zero by 2040 across our operations. This year, Kumba refined its site-specific energy and carbon projects and finalised targets to achieve the interim group goals of improving energy intensity and reducing absolute GHG emissions by 30%, against a 2016 baseline. In driving a transition to renewable energy, a feasibility study is in progress to develop a 60 MW to 80 MW solar photovoltaics (PV) plant at Sishen, the first renewable energy project of scale at our operations. The Company is also participating with Anglo American in public-private sector initiatives to develop a renewable power network in South Africa.

Kumba is developing an ambitious action plan to drive an increasingly decarbonised "green steel" value chain; later this year, we will finalise our scope 3 reduction targets to support the group goal. The scope 3 emissions along the iron ore value chain account for the bulk of the Company's total GHG emissions, of which includes the processing of sold products (iron and steelmaking). As the iron ore market embraces the need for decarbonisation, countries with traditional steelmaking furnaces are reducing emissions by using Lump ore instead of Fine ore, which significantly reduces overall emissions. This trend is expected to benefit Kumba, given the competitiveness of our share of Lump ore and the high ore content of our products. We are committed to working to ensure that iron ore becomes an important enabling metal as part of the global shift towards a net zero economy.

Kumba's annual spend with host community businesses has grown from R506 million in 2017 to R4.1 billion in 2021, with R294 million accounting for sub-contracting opportunities afforded to host community suppliers by our major suppliers. In supporting the delivery of localised suppliers with our Thuso model, we focus on providing funding and developing supplier capacity to deliver quality work safely.

In helping to manage the Covid-19 crisis in communities our efforts this year included providing community outreach Covid-19 vaccination support and committing R35 million to support economic recovery in host communities.

Looking ahead

Looking ahead, as we forge a path through a period of considerable change and uncertainty, we all have a role to play in ensuring that we protect our environment and our society for future generations. I am confident that Kumba is well positioned to become stronger and more sustainable, delivering on our sustainability commitments, creating a better future for the benefit of all stakeholders.

The positive results this year reflect the quality both of Kumba's leadership team and of the amazing people across the Company. I thank everyone within the organisation, including contractors and service providers, for their contribution. I feel fortunate to be part of the leadership team and know that Kumba's people and our stakeholders will hold me to account in helping to deliver on our stated vision and core purpose.

Mpumi Zikalala
Chief Executive

16 March 2022

Measuring performance

for the year ended 31 December 2021

Key performance indicators (KPIs)	Target	Outcome	2021	2020	2019
Safety and health					
Work-related fatal injuries	Zero harm	✓	**0**	0	0
Total recordable case frequency rate	15% year-on-year reduction against three-year baseline average performance	✓	**0.8**	1.74	2.06
New cases of occupational disease	Year-on-year reduction	✓	**0**	0	8
Employees potentially exposed to noise over 85 dB(A) (%)	Year-on-year reduction	✗	**17.4**	14.2	10.1
Number of employees who know their HIV status (%)*	More than 90% of employees by 2020	✓	**90**	88	92
Number of employees enrolled in HIV disease-management programmes	More than 90% of HIV-positive employees by 2020	✓	**100**	100	87
Environment					
Energy consumption (million GJ)*	2030 stretch target – 30% improvement in energy intensity against the 2016 baseline	–	**8.73**	8.11	8.78
GHG (scope 1 and 2) emissions (Mt CO_2-equivalent)*	2030 stretch target – 30% net reduction in absolute GHG emissions	–	**0.99**	0.91	1
Total water withdrawals** (million m^3)*	2021 target of 75% reuse of water	✓	**27.1**	29.4	30.6
Number of level 3, 4 or 5 environmental incidents	No level 3, 4 or 5 environmental incidents	✓	**0**	0	0
Social					
Procurement from BEE compliant businesses (R billion)	–	✓	**10.3**	9.8	6.1
Host community procurement*** (R billion)	R4 billion	✓	**4.1**	3.7	2.4
Compliance with the Social Way 3.0 (% compliance) → For more detail on the new integrated social performance management system launched in 2020 refer to page 66	Full compliance with the Social Way 3.0 by end 2022	✓	**78**	62	100
People					
Voluntary labour turnover (%)	<5% turnover	–	**3.2**	3.2	3.4
Women in leadership positions (%)	To achieve 33% representation of women at management levels by 2023	✓	**29**	27	25

✓ Positive trend – Neutral trend ✗ Negative trend

* Performance in 2020 impacted by the Covid-19 pandemic.
** Total water withdrawals by source, reported in line with the International Council on Metals and Mining (ICMM) guidance, includes: surface water, ground water, third-party potable water and third-party non-potable water.
*** Including spend with sub-contractors.

Embedding sustainability

Sustainability is at the heart of our decision-making: it is how we do business

Sustainability is integrated in our business strategy, "Tswelelopele", and is critical to everything we do. Our business strategy aims to unlock our full potential and deliver enduring value for all stakeholders. Its seven pillars of value – safety, environment, social, people, production, cost/margin, and returns/financial – underpin everything we do and inform our approach to sustainability.

Our purpose is to re-imagine mining to improve people's lives. Kumba, as part of Anglo American, is well positioned for a future in which broad innovative thinking, enabling technologies, and collaborative partnerships will shape an industry that is safer, more sustainable and efficient, and better harmonised with the needs of our host communities and society as a whole.

At the heart of our strategy lies Anglo American's FutureSmart Mining™, our innovation-led pathway to sustainable mining. Technologies and digitalisation will fundamentally change how we mine, process, move and market our products. Integral to our FutureSmart Mining™ approach is our Sustainable Mining Plan (SMP), designed to tackle the most pressing environmental and social challenges and change how our employees and stakeholders experience us, in line with our purpose.

→ **For more on FutureSmart Mining™:** See page 82
→ Weblink: https://futuresmart.angloamerican.com/futuresmart/futuresmart-mining

Technology	Digitalisation
We are integrating technologies to enable safe mining, removing people from harm's way, and to more precisely target metal and mineral with less waste, water and energy.	**Our vision is to create a truly smart, connected mine, transforming vast quantities of data into predictive intelligence with the ultimate aim of creating a self-learning operation that offers new levels of safety, stability and predictability.**
→ **For more on technology:** See pages 45	→ **For more on digitalisation:** See pages 39

Sustainability

Our far-reaching SMP is built around the following three global sustainability pillars that are aligned with the UNSDGs:

Trusted corporate leader
Developing trust as a corporate leader, providing ethical value chains and improved accountability to the communities we work with

Thriving communities
Building thriving communities with better health, education and levels of employment

Healthy environment
Creating a healthy environment by creating waterless, carbon neutral mines and delivering positive biodiversity outcomes

Each of these pillars has three ambitious stretch goals. These are designed to challenge us to lead and innovate, to deliver on them between now and 2030. The targets are underpinned by a set of critical foundations, or mandatory high standards, that apply across our business and are essential to our long-term success.

The Anglo American sustainability integration team has supported Kolomela and Sishen with developing and implementing their tailored SMPs. These bespoke five-year plans are flexible and responsive to their local context, priorities and opportunities, while remaining aligned with the global sustainability pillars, stretch goals and targets.

In 2021, Kolomela updated its five-year plan implemented since 2019, and Sishen aligned the five-year plan it developed in 2020, with its life-of-mine plan. Both SMPs are underpinned by baseline data in the social, health and environmental space which has informed the identification and prioritisation of projects to implement the SMP requirements in the most effective, efficient and sustainable way.

By using spatial planning and analysis, and working with partners and stakeholders in the Northern Cape, we will identify and deliver long-term development projects that benefit the communities where we operate and leave a positive legacy long after mine closure. We want to transform the way our stakeholders from communities to customers and employees – experience our business.

Embedding sustainability continued

Kumba's alignment with the Anglo American SMP model is illustrated below.

SMP model

Business strategy

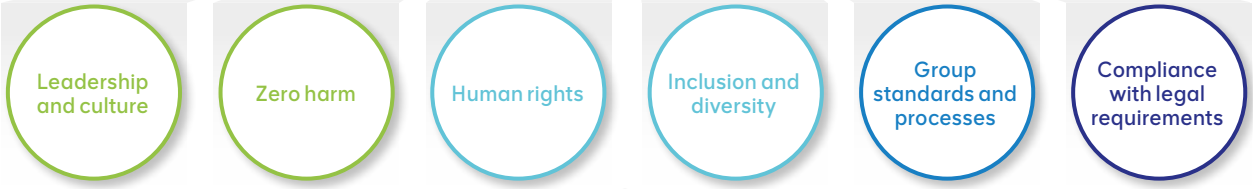
Strategic ambitions

- Achieve our goal of zero fatalities and serious injuries
- Enhance product premium by ≥ US$2/tonne, above Lump and Fe premium and contain C1 unit costs below US$41/tonne
- Sustainably extend the life of our Northern Cape operations to 2040
- Become the employer of choice

Horizons

- We deliver our strategy over three horizons through our Tswelelopele programme
- Horizon 1: Operating assets at full potential (one to three years)
- Horizon 2: Leveraging endowment (three to five years)
- Horizon 3: Optimising competencies and assets to sustain and expand the business (five to seven years)

Critical foundations



Tailored five-year site plan

Kolomela

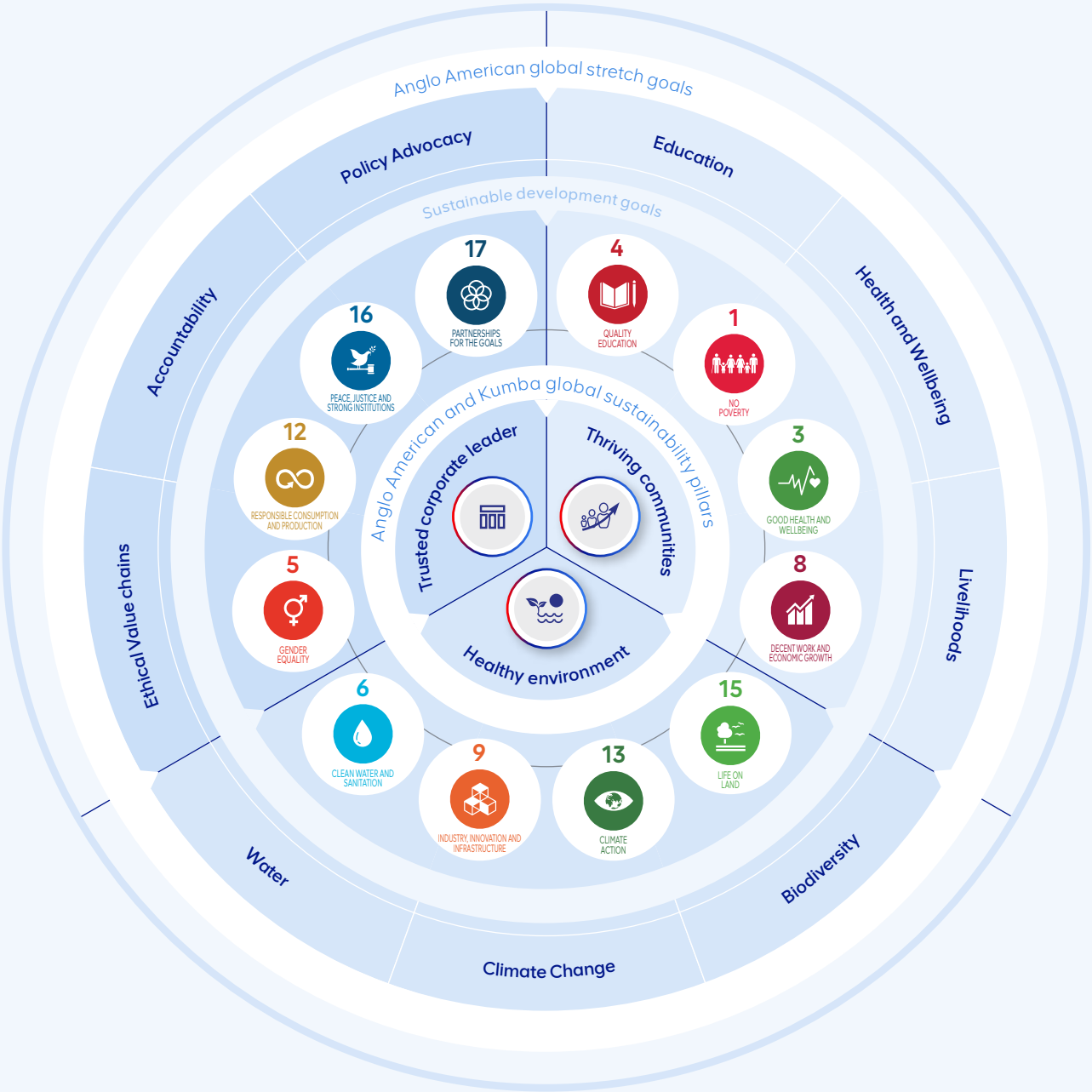
In 2021, Kolomela updated the five-year mine plan developed in 2019

Sishen

Sishen aligned the five-year plan it developed in 2020, with the life-of-mine plan in 2021

Kumba's sustainability strategy and the global UNSDGs are complementary, as illustrated by the following diagram showing how the stretch goals under our strategy are aligned with at least 12 of the 17 UNSDGs. This gives us the basis for a common language and vision to work with other stakeholders on how best to direct our efforts to achieve wider developmental impact.

→ **An overview of our contribution towards the 12 SDGs most relevant to us, is provided** on page 4).



Governance and management approach

Good governance brings ethical leadership, transparency and strong risk management, which guides and keeps us true to our values.

Sustainability is at the heart of Kumba, and our governance structures are set up to support us in our progress. We have a structured and systematic approach to managing our most significant social, economic and environmental impacts and to addressing the material interests of our priority stakeholders. Our approach is underpinned by a well-defined process for identifying and evaluating the risks and opportunities that are most material to the business.

→ **This process is reviewed in our IR** (pages 76 to 89).

Governance

The role of the Kumba Board of directors is to promote and safeguard the long-term success of the business, while considering the interests of its various stakeholders. Directors steer the Company in the right direction through a combination of strategy, effective leadership and sound corporate governance. Our Board of directors remains committed to adhering to the highest standards of corporate governance and ethics as per King IV, the Companies Act, the JSE Listings Requirements, other applicable regulations, and governance frameworks.

The Board has the ultimate responsibility for ensuring that Kumba acts in the best interest of all its stakeholders. The Board has delegated responsibility to the Social, Ethics and Transformation Committee (Setco) for the oversight and reporting of Kumba's social, environmental and governance performance.

The Board plays a pivotal role in the promotion of sound corporate governance which is integral to the running of an organisation and delivering governance outcomes such as an ethical culture, good performance, effective control and legitimacy.

The Setco holds accountability for overseeing how Kumba manages its most material sustainability issues. This includes overseeing that Kumba is a responsible corporate citizen, ensuring that the Company attains its goals relating to the management of safety, health and the environment, as well as social, transformation, permitting, regulatory compliance, risks and opportunities and ethics across the Company. The Committee's responsibilities include developing sustainable development policies and guidelines to manage these focus areas, monitoring performance against key indicators, and facilitating stakeholder participation, co-operation and consultation on key issues.

The Setco is chaired by Buyelwa Sonjica and meets four times a year. The Chief Executive is a member of Setco and executive heads of safety, health and environment, corporate affairs and human resources attend the Setco meetings as invitees, to provide updates on the above mentioned critical areas and any other related business of the Committee.

In 2021, the meetings focused on the following critical areas:

- reviewing performance on safety, through the implementation of the EOF framework and the culture of zero harm programme
- safe open-pit mining management
- considered and recommended to the Board the donation of the Siyathemba flats (the buildings and stand) and 142 vacant and services stands to the Gamagara local municipality as part of the long-term Dingleton renter's strategy
- employee health and wellbeing, in particular management of mental health, and dust and carcinogens
- environmental management, with a focus on water and energy usage
- safe tailings dam management
- stakeholder engagement, transformation and community development
- reviewed and recommended the stakeholder policy and stakeholder engagement strategy to the Board for approval
- permitting
- regulatory compliance
- risks and opportunities pertinent to Setco including overseeing management of Covid-19 risks and impacts
- fraud and corruption including the effectiveness of the Company's ethics policies and the management of the whistleblowing hotline

As part of its overall mandate to oversee audit, internal control and risk management, the Audit Committee reviews the principal risks to Kumba, including those related to potential catastrophic events and material sustainability issues. The Audit Committee has responsibility for monitoring the Company's whistleblowing programme, described on page 29.

The Human Resources and Remuneration Committee (Remco) determines the remuneration of executive directors and senior management, and oversees remuneration policy for all employees. At Kumba, the performance-based remuneration of all employees considers our safety, health and environmental performance. The performance conditions applicable to awards granted to executive directors and senior management under the Long-Term Incentive Plan (LTIP) include metrics relating to tailings dam standards, energy efficiency, GHG intensity, PM10 dust control and safety-critical control management.

→ **For further information on our remuneration practices, refer to the remuneration section of our IR** (page 112).

Kumba's Chief Executive and the executive management team (Exco) are accountable for the day-to-day sustainability management and performance and all aspects of our overall strategy. The Company takes a collaborative approach to ensuring sustainability across the various functions and to delivering on sustainability performance objectives.

Each year the Board, assisted by the Nominations and Governance Committee, conducts an assessment of the Board's performance and of the appropriateness and effectiveness of its Committees, procedures and processes. In addition, an external assessment is performed every three years that includes personal interviews with individual directors.

→ **A full review of Kumba's approach to corporate governance is provided in our IR** (pages 38 to 51). **Our performance against our sustainability governance requirements is reviewed in the material issues section of this report** (pages 38 to 110).

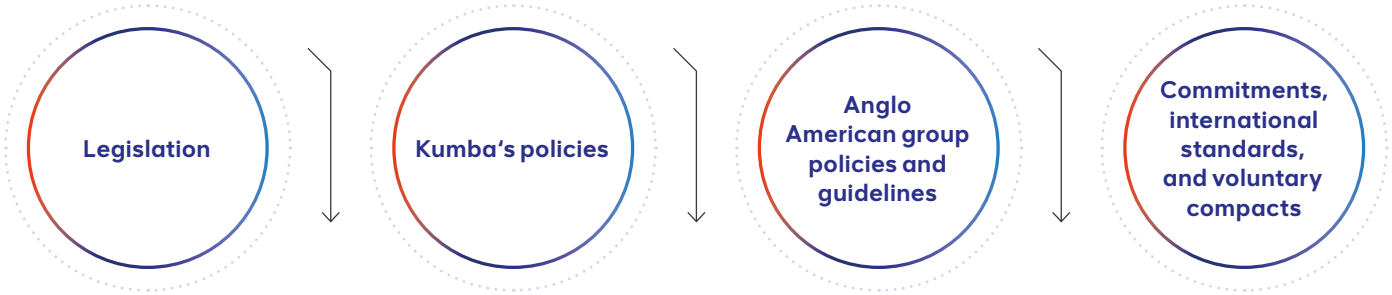
We have the following internal sustainability engagement forums:

Committee	Membership	Focus
Setco	Board members Chief Executive Exco	Ensure that the Company's activities positively impact on its many stakeholders, including employees, communities, the public, as well as the environment, and report on Kumba's performance to our shareholders on an annual basis
Management Risk Committee	Exco Bulks Chief Financial Officer Site general managers	Understand, mitigate and manage key risks and to ensure recognition of opportunities in an integrated manner
Safety, health and environment (SHE) steering committee	Exco Site general managers Subject matter experts	Embed the EOF framework through reviewing trends, benchmarking and identifying and realising opportunities for learning and improvement
Social Way steering committee	Exco Sishen leadership team Kolomela leadership team	Promote an integrated and cross-functional approach to managing social performance risks and impacts, and align with new policy requirements
Transformation steering committee	Exco	Review and report on progress against targets as specified in the relevant transformation regulations, the Kumba transformation strategy, and transformation roadmap
Permitting steering committee	Exco Subject matter experts Site general managers	Steer progress on permitting at Kumba
Rehabilitation steering committee	Senior management Subject matter experts	Review and report progress on rehabilitation at the operations

Our external sustainability engagement forums include: accountability forums; Anglo tripartite forum; Minerals Council; and ICMM.

Governance and management approach continued

Kumba's sustainability governance framework



Including:
- MPRDA
- Labour Relations Act
- Employment Equity Act
- National Environmental Management Act (NEMA)
- Mine Health and Safety Act
- National Water Act
- Companies Act requirements

Including:
- Human rights policy
- SHE policy
- Bullying, harassment and victimisation policy
- Recognise and respond to domestic violence group policy
- Stakeholder engagement policy and strategy
- Social investments and donations policy
- Inclusive procurement policy

Including:
- Anglo American group Code of Conduct
- Anglo American group business integrity policy
- Anglo American group Social Way and Social Way Toolkit
- Anglo American SHE Way
- Anglo American responsible sourcing standards for suppliers
- Anglo American SMP
- Anglo American technical standard for mineral residue facilities and water management structures

Including:
- King IV
- AA1000SES
- International Finance Corporation (IFC) environmental and social performance standards
- GRI
- ISO 9001
- ISO 14001
- ISO 45001
- ICMM principles
- UN Global Compact
- UN Voluntary Principles for Human Rights
- JSE Listings Requirements
- Initiative for Responsible Mining Assurance

Management approach

Policies and standards

Our approach is guided by Anglo American, which has more than 30 group policies and technical standards that describe how the principles set out in the Code of Conduct are deployed. There are two management system frameworks that address the management of sustainability issues and align with the topic-specific policies mentioned throughout this report:
- the Anglo American SHE Way – integrating related expectations and performance standards into a single management system aligned with our goal of zero harm
- the Anglo American Social Way – guiding our social performance

These frameworks set out the vision, principles, policies, management system requirements and performance expectations for addressing our core sustainability risks and opportunities.

Anglo American technical standards define the minimum requirements we set for our operations to manage a wide range of specific issues. In relation to sustainability these include, for example, the management of water, energy, tailing storage facilities and various technical aspects of mining that relate to safety.

Through our responsible sourcing programme, we aim to ensure that those we do business with follow a set of minimum standards of responsible business conduct that are comparable to what we expect of ourselves.

→ **For more information** see page 67.

Permitting

Permits, granted by an authority, allow us to continue with our activities under specific conditions to protect human health, safety and the environment. Engraining permitting into our integrated planning process, understanding the risks and engaging with political and technical authorities openly and transparently is critical.

Kumba has a permitting steering committee which meets quarterly and reports monthly to the Management Risk Committee. We have permitting managers at each site and leadership team buy-in on our permitting culture. This year we reviewed and updated our permitting strategy which aims to ensure we achieve best practice by 2025.

The Anglo American minimum permitting requirement (MPR) is a tool to ensure all permitting fundamentals are in place; without which our mining operations will not be able to continue. Permitting risks can have financial, operational, legal, safety and reputational consequences for the business. MPR self-assessments help us to assess the maturity of permitting practices at business unit, site and project level. We implement action plans to address gaps and opportunities, with progress monitored to ensure continuous improvement towards best practice.

As a business unit we are assessed annually against seven MPR criteria and individual operations are assessed against 25 MPR criteria owing to high-permitting risks. The 2021 MPR score for Kumba overall was 3.9, up from 3.4 in 2020 (out of 5). Sishen and Kolomela both scored 3.8, improving on their 2020 scores (3.5 each). For Kumba overall, the focus will be on reaching best practice (level 5).

Kumba is rolling out the leading IsoMetrix data management system at Sishen and Kolomela. This system integrates all permits with associated conditions and commitments into one system, facilitating effective tracking, monitoring and action management.

Operational risk management

We safeguard our people, assets, legal position, reputation and the environment by understanding and managing risk, as well as ensuring we identify opportunities to best serve the long-term interests of all our stakeholders. This goal is at the core of the Anglo American group integrated risk management policy. This policy is supported by an integrated Risk Management Framework and underpinned by the operational risk management (ORM) standard and implementation guidelines. ORM helps operational managers identify, prioritise and control the risks that threaten their ability to meet their objectives. It is structured into four inter-related layers (baseline/issue-based/task-based and continuous risk management) that support all on-site personnel to ensure that we plan for managing unwanted events, understand and implement the necessary controls and execute work to minimise negative consequences and maximise positive outcomes. We continue to drive improvements in identifying, implementing and monitoring critical controls, analysing deficiencies and incorporating identified controls into task-risk assessments.

To manage risk, we are also building a culture of appropriate risk management. We provide comprehensive training and revision to all employees. Risk management also plays a role in how we evaluate performance. We include leading and lagging indicators related to risk management in employees' KPIs and achievement of targets relating to ORM influences the performance-based remuneration of senior executives.

Kumba's top safety and sustainable development risks and mitigation measures

Risks	Mitigation
***Slope failure or dump failure:** A sudden and unexpected failure of a slope could lead to loss of life, injuries, environmental damage, reputational damage, financial costs and loss of production	• Geotechnical design • Slope stability monitoring • Geotechnical inspections • Emergency response plans and emergency preparedness plans
Safety and health: Exposure exists for possible harm to employees, contractors and communities near Kumba operations	• Covid-19 prevention measures • Safety improvement plans, including the EOF prevention framework • Hazard identification risk assessment and change management processes • Priority unwanted events (PUEs) and their respective critical controls • Use of quarterly vulnerability analysis to direct improvements • Equipment, light vehicles, pedestrians as far as possible • Learning from incidents • Revision of bow-ties and critical controls • Implementation of Anglo American mandatory critical controls • Fair culture application – consequence management for breaking sacred covenant
***Tailings storage facility failure:** A release of waste material leading to loss of life, injuries, environmental damage, reputational damage, financial costs and production impacts with potential loss of licence to operate	• Inspections and regular audits by the manager technical services and the Operational Risk Assurance process • Automated warning systems • Emergency response plans and emergency preparedness plans • Third-party assessments
Socio-economic challenges: The socio-economic situation in the country may have a negative impact on our host communities and other stakeholders	• Implementation of localised inclusive procurement strategy • Kathu Industrial Park and incubator • Collaborative regional development, incorporating shared value strategy for the Northern Cape • Support to the municipality to enhance capacity to support economic growth • Best practice in social performance through implementing the Anglo American Social Way
Legislation and regulatory changes compliance (licence to operate): Unforeseen changes or non-compliance to legislation, regulations and standards that could impact Kumba's licence to operate	• Dawn Raids preparedness • Compliance with permitting requirements • Active monitoring of regulatory developments • Compliance with social and labour plans and social commitments • Assessment of land owned by Kumba, its current and intended use
***Fire and/or explosion:** Fire and explosion risks are present at all mining operations and processing facilities	• Implementation and adherence to fire prevention standard • Event risk reviews identify key fire and explosion risks and provide mitigation recommendations • Emergency response plans and emergency preparedness

* Catastrophic events/risks: These are high severity, low likelihood events that could result in multiple fatalities or injuries. We do not consider likelihood when evaluating these risks as the potential impacts classify these risks as a priority.

Governance and management approach continued

Assurance

Various internal and external review and assurance programmes ensure that priority catastrophic and sustainability-related risks at our operations are identified and that adequate controls are in place to manage them. Operational risk audits are conducted on a rotational basis.

→ **A detailed review of our risk management practices is provided in our IR** (pages 76 to 89).

Kolomela and Sishen conduct annual self-assessments against the requirements of the Social and SHE Ways and group technical standards. We develop and implement site-specific action plans to address areas requiring improvement, tracking the close-out of all actions.

Regarding external assurance, Sishen and Kolomela operations assure their compliance with ISO 14001: 2015, the environmental management systems standard, and with ISO 45001, the occupational health and safety management systems standard. Key sustainability data are externally assured as part of the assurance process.

In 2021 Kumba engaged EXM Advisory Services to conduct a group baseline compliance monitoring audit on all the conditions of the authorisations issued to Sishen and Kolomela. The auditors concluded that compliance with the requirements of the numerous authorisations is satisfactory. Each of the audit findings for Sishen and Kolomela has been quantitatively rated against an audit criterion. The operations are implementing the recommendations made in the report to improve compliance status and prevent future non-compliances. These include multi-year high-capital projects we are actively progressing, such as stormwater management. The audit report provides a baseline to measure future compliance monitoring programmes.

Compliance with the Anglo American Ways and key technical performance standards (as at year end 2021)

SHE Way

Social Way (new version 3.0)

78% (second year of transition)

Mine closure standard

100%

Mineral residue facilities and water management structures' standard

100%

Hazardous-materials management standard

100%

Biodiversity standard

100%

Air quality standard

100%

Business conduct

Kumba expects its employees and business partners to behave ethically, always. We recognise society's enhanced expectations that we should act with integrity, and display consistent care and respect for colleagues, communities and the environment in which we operate. Our Code of Conduct (the Code) and business integrity policy are aligned with these expectations.

Code of Conduct

Our Code of Conduct sets out the expectations for ethical behaviour and provides guidance on how to:	• prioritise safety, health and the environment • treat people with care and respect • conduct business with integrity • protect our physical assets, information and interests

By requiring those who work with us to live our company values, the Code not only delivers positive impacts internally, but also supports the communities that we operate in and with which we interact. Our Code underpins our values, and promotes compliance with applicable laws and regulations in each social and economic area. It requires integrity and consistency in following our values and behaving ethically, both within and outside the workplace.

The Code also acts as a reference point for our group policies. Kumba's leadership supports the Code through various initiatives and demonstrates an ethical tone at the top. We embed reminders about the Code in our regular communications with our employees, and support it with guidelines that help all our employees make the right decisions when faced with ethical dilemmas. Online training on the Code of Conduct is provided to all connected employees (employees with access to Company-provided computers) within Kumba.

Initiatives implemented at our operations in support of living our values include employee and community-centric support programmes such as the *WeCare* (health and safety information sharing) and WOW programmes (the World of Wellness programme supports mental health and wellbeing of employees), Connected employee initiative (promotes the embracing of technology and innovation), Let's Talk Safety, Accountability Framework roll-out, Kumba wellbeing pulse survey, Covid-19 employee and community support and relief programmes as well as the promotion of ethical behaviour through the business integrity programme.

Ethical business conduct

We endorse and comply with all applicable anti-corruption laws and conventions. Our business integrity policy is an anti-corruption and anti-bribery guideline which sets out the standards of conduct required at every level within Kumba, including our subsidiaries, joint ventures and associates, as well as companies/individuals with whom we do business and those who work for and on our behalf (i.e. intermediaries), in corrupt behaviour of all types.

The business integrity programme forms part of the Anglo American group compliance programme. The key elements of the programme include ensuring that risk assessments are carried out, training is conducted and that there is ancillary awareness creation to deter employees, contractors, associates and other agents from engaging in unethical business practices. The policy states that we will neither give nor accept bribes, nor permit others to do so in our name. It also prohibits the making of political donations of any kind on behalf of the Company. The processes and controls that support these requirements are assured by our internal audit function.

Kumba's ethics function is charged with the responsibility of enforcing the business integrity policy, Code of Conduct, and anti-trust programmes which form part of the Anglo American combined compliance programme, to ensure ethical conduct remains top-of-mind at every level and on the part of those with whom we do business and those who act on our behalf. The function monitors ethics-related issues through the Management Ethics Committee, chaired by the Company Secretary, which is mandated to oversee the implementation of the Board's ethics-related policies. The Committee meets quarterly and reports directly to Exco through the Management Risk Committee and to the Board's Audit Committee and Setco.

Business integrity training is provided to all employees who may be exposed to bribery and corruption risks owing to the nature of their work, every two years. These include Kumba officials who interact with public officials, community leaders or manage intermediaries or are involved in the development of new business. Anti-bribery training is provided to all senior management. Efforts are underway to develop non-digital ethics business conduct training for those without access to computers.

Our key bribery risks arise out of the use of intermediaries, and our interactions with government officials, customers, suppliers and communities. We apply a proactive approach to managing bribery risk by continuously developing mitigation controls to strengthen our internal controls. Our internal audit team audits the implementation of the business integrity programme annually.

Group compliance programme

Kumba has started implementing a consolidated Anglo American group compliance programme aimed at supporting the implementation of a co-ordinated and consistent compliance management approach across the group for the following in-scope group policies: business integrity, anti-trust, data privacy, anti-tax evasion, anti-money laundering and sanctions. The four areas in 2021 were: business integrity, anti-trust (competition law), data privacy and anti-tax evasion. The ethics and compliance function is assisting with the implementation of these focus area work streams and provides oversight of the entire programme within Kumba. We are conducting risk assessments for each focus area.

The Protection of Personal Information Act (POPIA) came into force on 1 July 2021 and aims to protect companies against data breach and the misuse of personal information. Kumba has implemented a comprehensive POPIA compliance plan to ensure organisational alignment with the POPIA requirements.

Online training roll-out for various compliance elements for the impacted employee population groups was rolled out in October through to December. We also facilitated virtual face-to-face business integrity training sessions for high-risk roles.

→ **A detailed review of our approach to ethics is provided in the governance section of our IR** (page 50).

Whistleblowing programme

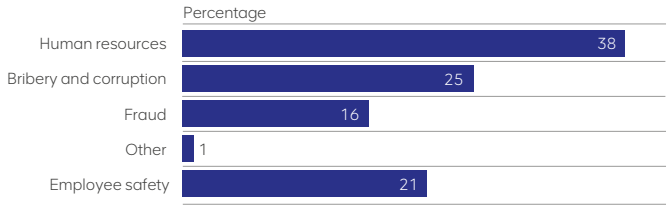
We are committed to promoting a culture that is inclusive and diverse, which necessarily includes appropriately dealing with any form of retaliation and victimisation against employees raising concerns.

Whistleblowing management is a key element of the business integrity programme where all reported incidents – mainly though our whistleblowing facility, YourVoice – are recorded and investigated. YourVoice is available to our employees and all external stakeholders. Online: www.yourvoice.angloamerican.com. Call: 087 232 5426. Reports raised cover a broad spectrum of concerns underpinned by our Code of Conduct, including ethical, legal, supplier relationships, safety and health, and human resources issues. All reports are confidential and reporters are able to submit their disclosure(s) anonymously. YourVoice incorporates technology that enables us to better protect confidentiality and personal information. We review, assess, and where necessary, investigate all reports made, including those reported internally through other channels. Corrective actions are taken where allegations are substantiated in accordance with our policies. The implementation and monitoring of recommended corrective actions or lessons learned remains a challenge given the recurrence of similar incidents.

Governance and management approach continued

During 2021, we received 77 alerts through YourVoice. The majority related to human resources (38%), bribery and corruption (25%), employee safety (21%) and fraud (16%). See graph below for overview of cases by category.

2021 cases by category



Themes, risks and mitigation measures

Analysis of the whistleblowing reports identified certain themes/trends, identified below, together with the key risks and employee engagement initiatives we implement to mitigate concerns reported.

Bullying, harassment and victimisation (BHV) and discrimination accounted for most of the reports, perpetrated by contractor employees. Reporting of human resources fraud, bribery and corruption has increased. Allegations of irregular supply chain processes included allegations of collusion between employees and suppliers signing off invoices for work not performed, short circuiting of processes and kickbacks. Health/safety concerns related to allegations of disregarding safety rules, a contractor not reporting a safety incident, and breach of our sacred covenant – employees tasked to do work without the required training on equipment. The key employee engagement initiatives we implement to mitigate concerns reported are reviewed in the Our People sections of this report.

Of the 77 reports received, 75% were closed out in 2021, with a 31% substantiation rate. Of the 18 proven cases, 33% were human resources related (bullying), 33% bribery and corruption related, 17% safety/health-related (unsafe working conditions), and 6% fraud-related. Disciplinary procedures were followed for implicated employees and contractors. For contractors, disciplinary processes were managed by the respective employers. Kumba terminates access to its premises for employees and contractors if evidence of wrongdoing is found.

Key areas	Risks	Mitigation measures
Human resources	Discrimination may lead to the erosion of the Kumba culture and values, which may lead to demoralised employees. Recruitment fraud reporting is increasing and recruitment scams are becoming prevalent in the public domain.	Implementation of the leadership and culture Code. Under the Inclusion and Diversity Framework, promotion of awareness and training against bullying, harassment and gender-based violence (GBV). Promotion of human rights through the application of the Anglo American values (Code of Conduct). A domestic violence working group has been established to consider related policies, awareness creation as well as support and prevention programmes.
Procurement and suppliers	Unethical business practices may lead to a corrupt business culture among employees and suppliers. This risk has materialised in the public sector and may infiltrate our environment, thereby eroding our ethical values.	Implementation of the Code of Conduct and Business Integrity interventions such as risk assessments, training and awareness campaigns. Sanctions to be applied as a result of misconduct by suppliers and employees for violation of procurement policies and procedures
Employee safety	Conducting work without the necessary training may lead to safety incidents.	Implementation of leadership coaching, My Sacred Covenant Code, I-Care Buddy system, visible felt leadership (VFLs) and Anglo We-Care and Kumba We-Share programmes, etc.

Respecting human rights

Our approach to human rights is aligned with the South African Constitution and the UN Guiding Principles on Business and Human Rights, and we are committed to implementing the UN Global Compact Principles. Our human rights policy articulates our commitment to these principles. The policy is available to employees on the company intranet and external website. Formal mechanisms for reporting human rights grievances and violations are in place at all our operations and the corporate office. During 2021, we recorded no grievances that involved human rights.

→ **For more information** please refer to page 67.

The Anglo American Human Rights Policy and Framework underpins our human rights policy. It describes how the policy links to our standards, such as the Social Way, and what our main human rights risks are. Our responsible sourcing standard for suppliers reflects our determination to ensure an ethical supply chain that is free of modern slavery.

Each of our operations conducts an annual social risk assessment to identify human rights risks and potentially vulnerable groups. We have also conducted operational-level due-diligence processes to determine salient human rights issues, and continue to implement action plans to address the actual and perceived human rights concerns raised. Gender-based discrimination and violence is a priority area for our efforts to protect human rights. Other common issues identified include perceptions of discrimination associated with employment and the visibility of procurement opportunities, unfulfilled commitments and disrespect among contractors for labour rights. We are progressively integrating human rights risks into operational risk management processes. We use our social management system, the Social Way (reviewed on page 66) to monitor and track progress in completing agreed actions to address issues identified.

Security-related human rights issues present risks and potential impacts within our business and in the broader community. We are a long-standing supporter of the Voluntary Principles on Security and Human Rights (VPs) and comply with the VPs at all our operations. A total of 3,222 employees were training during 2021.

Stakeholder engagement

We continue to identify and prioritise the material interests of our stakeholders, and we implement a comprehensive stakeholder engagement strategy and framework to address these interests.

Kumba updated and presented to the Board, its stakeholder engagement policy and strategy in 2021. The strategy is closely aligned to the recently adopted Anglo American South Africa strategic stakeholder engagement strategy, adhering to its principles as well as integrating the processes and principles outlined in the Anglo American Social Way 3.0.

Regular, proactive and meaningful engagements with our stakeholders is essential to developing trusted relationships, reinforcing our collaborative approach. In keeping with this, Kumba hosts stakeholder days every two years, bringing Kumba and SIOC boards of directors and the executive together with national, provincial and local government, our labour unions, business partners, development partners, suppliers, host community groups and civil society, to discuss transformation and sustainability. Constructive feedback received through such an event and other engagement platforms, informs our strategic responses to stakeholder interests. The next Stakeholder Day will be on 21 September 2022, after the scheduled event in 2020 was suspended due to the national lockdown responding to the Covid-19 pandemic.

During the pandemic, we have adapted our channels of engagement, expanding our use of digital communication to ensure regular and effective engagements. The crisis has served as a catalyst for collaboration with our key stakeholders – government, communities, industry peers and trade unions – in supporting vulnerable communities and addressing our shared challenges.

Stakeholder group

Government and political groups

Material stakeholder interest	Our strategic response
• Employee health and safety	• Ongoing implementation of Kumba's Covid-19 response plans to mitigate infections and broader impacts on wellbeing; includes extensive Covid-19 vaccination drive for employees and host communities. • Exploring vaccination requirements for employees and visitors coming to our sites and offices • Effective management of occupational health and safety risks within and around our operations • Setting and communicating non-negotiable standards and procedures for reducing injuries and eliminating fatalities • Learning from incidents and sharing the learnings with stakeholders to prevent their recurrence
• Local community development	• Strategic focus on partnership and collaboration • Joint local economic strategy for the Northern Cape being developed with other mining operations (collaborative regional development and the Impact Catalyst) • Driving localised procurement and youth development through education, training and mentorship
• Social and labour plan compliance	• Constructive and transparent engagement with national, provincial and local government to address concerns • Going beyond compliance • Regular engagement with government on policy developments
• Income tax matters	• Constructive and transparent engagement with South African Revenue Service (SARS) to address additional income tax assessments issued

Shareholders and investment community

Material stakeholder interest	Our strategic response
• Price environment • Impact of Covid-19 on operations, customers and sales • Management and performance on ESG issues • Life extension and logistical capacity • Logistical constraints and ability to increase export sales • Capex drivers and timing in the medium term	• Ongoing implementation of Kumba's Covid-19 response plans • Exploring vaccination requirements for employees and visitors coming to our sites and offices • Implementation of P101 initiatives to drive operating efficiency above 100% and delivering targeted cost savings • Transparent and relevant disclosure • Responsive and proactive investor engagements • Leveraging our endowment in the Northern Cape through optimisation and efficiency; technology; and exploration to extend our life-of-mine to 2040 • Increasing premium sales to 40% of total sales by 2022 • Transformation journey to ensure the sustainability of the Company • Market announcements through the Securities Exchange News Service (SENS) and media releases provided throughout the year, proactively informing the public on all material issues affecting the Company • Public results presentations and engagements with analysts are held to report on performance in a transparent manner • SMP to embrace the ESG approach

Employees and trade unions

Material stakeholder interest	Our strategic response
• Conditions of employment • Safety and health • Housing • Transformation • Production and performance • Job grading and career progression	• Ongoing implementation of Kumba's Covid-19 response plans to mitigate infections and broader impacts on wellbeing; includes extensive Covid-19 vaccination drive for employees and host communities. • Exploring vaccination requirements for employees and visitors coming to our sites and offices • Regular, transparent engagements to understand and correct employee perceptions and maintain good relations • New housing policy and strategy aimed at facilitating and incentivising home ownership • Shift patterns that support a better work-life balance • Demonstrate leadership for responsible citizenship • Plan for beyond cessation of operations • Collaborative engagements to find solutions to issues of concern

Industry bodies (e.g. Minerals Council South Africa)

Material stakeholder interest	Our strategic response
• Safety and health • Covid-19 • Environment compliance • Community development • Environmental management	• Active participation in the Minerals Council South Africa • Support of the Mineral Council-led *Khumbul'ekaya* (remember home) health and safety strategy • Regulatory compliance, and contribution to industry input on mining policy • Minimising negative impacts on the environment and preventing irreversible environmental impacts

Communities

Material stakeholder interest	Our strategic response
• Enterprise development • Skills development, employment and procurement opportunities • Infrastructure development • Health and social facilities • Reduced spending on development projects • Implementation of SLPs	• Collaborating with local businesses and government to understand and address challenges • Ring-fencing procurement expenditure, providing training and support • Developing standards to ensure alignment with socially material service providers on local development requirements • Communicating commitments and delivering accordingly • Supplier development programme • Partnership with government, as well as mining companies operating in the Northern Cape to address socio-economic challenges • Host stakeholder days every two years • Implementation of a post-resettlement sustainability strategy, developed together with relocated community members • Managed Kumba's response plan to Covid-19 • Exploring vaccination requirements for employees and visitors coming to our sites and offices
• Dingleton resettlement project – Siyathemba community	• Invest in ensuring the improvement of the livelihood and quality of life of the resettled families • Support the post-resettlement working group to ensure the sustainability of the community
• SIOC Community Development Trust strategy	• Assisting the trust in socialising its new operational strategy, and communicating its activities • Collaborated on various programmes to develop the host communities

Suppliers

Material stakeholder interest	Our strategic response
• Conditions of contracts • Addressing rail challenges at Transnet	• Provide clear principles that guide the selection and use of reputable contractors with the right skills and value systems to do specific tasks that the business is not able to do • Partner in seeking solutions • Kumba's response plan to Covid-19 • Exploring vaccination requirements for employees and visitors coming to our sites and offices

Stakeholder engagement continued

Business and development partners

Material stakeholder interest	Our strategic response
• Joint community development projects • Local economic development	• Resumption of engagements to advance the establishment of Kathu Industrial Park in collaboration with the Industrial Development Corporation (IDC) and nearby mining houses • The Impact Catalyst joint initiative to accelerate delivery on socio-economic imperatives

Media

Material stakeholder interest	Our strategic response
• Company performance	• Media day to share developments • Proactive interviews on achievements • Managed Kumba's response plan to Covid-19

Civil society (e.g. NGOs)

Material stakeholder interest	Our strategic response
• Ensuring greater community benefit • Environmental impacts • Dingleton relocation	• Engage with and respond to various stakeholder groups as appropriate • Demonstrate corporate social responsibility • Section 54 arbitration process to resolve issues with remaining Dingleton homeowners, in order to ensure adherence to international resettlement standards

A pre-work SLAM meeting at the Dingleton exploration drill site at Sishen. The all-female drill team operate a remote operated exploration drill rig, which improves safe operations at the site. Pictured here is drill assistant, Innocentiah Bolokang Mere.

Our people

We deliver on our purpose through our people. We aim to resource the Company with a capable, engaged and productive workforce, and we are committed to ensuring no harm comes to any of our people.

- Fatality-free since May 2016
- No new case of occupational health disease
- Achieving a substantial improvement in lagging safety performance indicators, with a 56% reduction in LTIs compared to 2020

Staff engagement – Exco and employees of Kolomela dancing the Jerusalema dance outside the Fatigue centre.

AngloAmerican
KUMBA IRON ORE
KOLOMELA MINE
AngloAmerican
JAVLIN

Safety, health and wellbeing

In this section

Employee safety
Employee and community health and wellbeing

The safety, health and wellbeing of our employees are priorities, in line with our core values. Our robust health and safety strategies underpin our leading response to managing Covid-19 across our operations, as well as our unwavering focus on preventing fatalities, reducing (and ultimately eliminating) injuries from the workplace, and mitigating any adverse effects on human health. Our aim is to continually build and instil both a company and industry culture that protects people from harm and improves their health and wellbeing.

Safety and health: Our integrated management approach

In managing safety and health risks, and promoting employee wellbeing, we maintain close cross-functional collaboration as part of our integrated approach. This has been critical in managing Covid-19 impacts (reviewed on page 48). We implement the following key systems, processes and initiatives to support our vision of zero harm:

Resilient management systems

Anglo American's safety, health and environment management system, the SHE Way, sets out the requirements for managing occupational health and safety risks. Together with health and safety-related technical standards, it defines the requirements our sites must meet. The SHE Way requirements are supported by Kumba's SHE policy. Sishen and Kolomela are certified to the ISO 45001 international standard for occupational health and safety management. Each site has continued to implement a SHE management improvement plan to address identified gaps in performance and track performance against key performance indicator (KPI) targets. The integration of health and safety into our Operating Model helps to optimise planning and scheduling of work and tasks. We conduct internal and external audits annually to monitor and provide assurance on our SHE performance.

Effective risk management

By implementing ORM, front-line managers are able to identify, prioritise and control risks that threaten their ability to meet objectives, in an integrated and co-ordinated way. The main purpose of ORM is to ensure that we manage all forms of operational risk effectively, with an emphasis on improving safety performance and eliminating fatalities. We continue to drive improvements in identifying, implementing and monitoring critical controls, analysing deficiencies and incorporating identified controls into task-risk assessments. ORM targets form part of management incentives, driving continuous improvement. We provide risk management training and revision courses across our operations. We conduct operational risk assessments that focus on the most significant risks identified at respective operations, and commission specialists to audit the findings.

Incident management

Reporting and investigating health and safety incidents is an essential part of managing our risks and tracking progress in hazard prevention and control measures. Our incident reporting and investigation process is aligned with our critical-control management and ORM processes. We continue to build in-house capacity to learn from incident (LFI) investigations and promote reporting of high-potential incidents (HPIs) – in which employees are potentially exposed to fatal risks – and high-potential hazards (HPHs) – where we identify hazards that could lead to loss of life – to heighten awareness, facilitate organisational learning, and effect more robust controls. Reporting of HPIs and HPHs at our operations is currently safety focused and we aim to progressively integrate health-related reporting.

Emergency response and preparedness

We provide first aid and emergency response training at various levels in the organisation to ensure that we are adequately equipped to respond to emergencies and deliver the best post-incident medical care for a person in need. We also make our resources available to support emergency responses to incidents outside mining premises.

In strengthening our management approach, our sites are aligning with the emergency management standard developed this year by Anglo American, which outlines a set of performance requirements for emergency management. This includes developing and implementing plans, procedures and actions to effectively prepare for and respond to all reasonably foreseeable emergencies, as identified through the ORM process. In implementing the standard across our operations, each site has appointed an emergency response coordinator and undertaken a gap analysis against emergency management standard expectations. This will assist in identifying immediate and long-term improvement actions to improve operational readiness and preparedness. Each operation will ensure that it has an appropriately resourced emergency response team and an equipped emergency control centre. Training interventions include general emergency activation and awareness training, first aid training, incipient firefighting, use of automated external defibrillators in cases of cardiac arrest, and specialised task-specific training (such as vertical rescue, confined space rescue, and firefighting). To test emergency response capability, sites will undertake simulations of emergencies.

Independent contractors

In implementing our safety and occupational health initiatives, we treat full-time independent contractors and permanent employees in the same way. This includes providing training, level of care and benefits. All contractors have access to our HIV, TB and other chronic disease screening and treatment, and to medical surveillance, though their levels of access to our more comprehensive wellness offering vary across the business.

Our contractor safety management programme is designed to embed consistent, leading safety practices. We use a web-based onboarding system, Passport 360, in line with IsoMetrix, for managing contractor SHE compliance. We have established

minimum mandatory requirements that need to be met before work can commence on-site by a contractor – 85% compliance is required. The system allows Kumba to set its requirements for contractors' SHE files and the "passport" monitors and records essential information uploaded by contractors. It allows real-time monitoring of performance requirements including training, certificates of fitness and further requirements such as permit issuing and management.

Mobility and digitalisation

The pandemic has hastened our digitalisation and automation drive as we seek to do more of the traditionally site-based work remotely, and to perform these tasks with fewer people. For example, we automated the process for employee Covid-19 screening and pre-health checks using our internal Mobi App, with sites requiring only verification of the screening result before entrance is granted to an operation. The expedited roll-out of 10,000 smart watches to employees has been a great advantage in managing physical distancing and contact tracing.

We have continued to roll out Kumba's Mobi App as part of our Connected Worker technology work stream. Mobi App is used diversely for digitised data capture and communication, including for high-risk work verification, HPH reporting, and safety inductions. At year end we had more than 5,000 users. We are also using mobile technology for SHE managers' inspections and audits. This enables digitised data that is stored automatically where it can be analysed to identify areas of excellence or substandard conditions.

Our group-wide digital platform (known as Voxel) is helping our people make data-driven decisions in the most efficient manner, predicting outcomes and driving safety improvements. We are in the process of integrating our SHE systems (Mobi App/ Enablon/SAP).

Engagement and collaboration

Maintaining the collaborative spirit forged with key stakeholders during 2020 in mitigating Covid-19 impacts, this year we worked closely and collaboratively with government in facilitating Covid-19 vaccinations in communities.

Kumba plays a leading role in the industry's initiatives to improve safety and health, and to achieve and sustain zero fatalities. Our outgoing Chief Executive Themba Mkhwanazi chairs the Mineral Council's CEO Zero Harm Leadership Forum, a platform to openly share experiences, determine challenges and drive collaborative action for a step-change in performance. The forum focused this year on tackling the rise in mine fatalities. There were 72 deaths in the South African mining industry in 2021. Themba Mkhwanazi commented that, "With the regression we are experiencing, we need to put a lot more focus on technology and modernisation to improve skills and mining methods to keep employees safe".

We also participate in Anglo American's tripartite health and safety initiative, a senior leadership forum of mining company, government and labour representatives in South Africa that strives to improve the health and safety of miners through collaborative and transparent stakeholder engagement.

Kumba maintains a constructive and collaborative relationship with regulators such as the DMRE and its mine health and safety inspectorate. We engage regularly to ensure a common understanding of issues and challenges, and collaborate on solutions.

Regulatory initiatives

We have continued in our efforts to implement the five-pillar cultural transformation framework developed by the Mine Health and Safety Council (MHSC) and adopted by the mining industry. We participate in the industry health and safety forums and report on our progress, both internally and externally. Key developments across the leadership, risk management, leading practices and technology pillars of the framework, are reflected in this chapter. We are firm on our compliance obligations in respect of policy, legislation and practices.

Assurance and transparency

In line with our culture of assurance and transparency, regular external assurance is undertaken across our operations. In 2021, the key health and safety performance indicators that were independently assured for a consecutive year, split between reasonable and limited levels of assurance, are shown on pages 124 and 125.

As part of our commitment to the safety and security of all our employees and contractors, and to protect everyone within the Anglo American community from the spread of Covid-19. Roll-out of new technology to support safety for all on site, this involves company-issued wearable smart watches, to manage physical distancing.

Employee safety

Testing and screening of Covid-19 at Sishen mine.

The Ulysses Gogi Modise (UGM) clinic, situated in Kathu, has in response to the Covid-19 pandemic, set up a testing and screening clinic to manage to spread of the disease. The specialist lab conducts tests on the Covid-19 samples collected at the clinic. Seen here, biomedical technologists Belinda Joel Kazadi and Teboho Maleho busy testing samples collected.

Highlights	Learnings/challenges	Focus for 2022 and beyond
Kumba has operated fatality-free for over five years, a landmark achievement for the company and the South African mining industry Continued improvements in our lagging safety performance indicators, including the best total recordable injury rate in Kumba's history; we recorded eight LTIs, a 56% decrease on 18 in 2020 Leading indicators continue to direct our focus in taking real-time corrective and preventive actions Engaged Du Pont to assist in implementing a risk reduction programme to strengthen risk management	Increase in HPIs 10 compared to two incidences in 2020; investigations highlighted potential improvements in key areas: system improvements, personal behaviours, and leadership/ supervisory oversight Additional hazards and risks identified through third-party audits and reviews will inform our interventions Transportation remains the most prevalent agency of HPH reported Ongoing Covid-19-related physical and psychological impacts on safety mindsets and behaviours	Remaining fatality-free and further reducing (and ultimately eliminating) injuries from the workplace – by focusing on safe behaviours, monitoring, execution and meeting expectations Culture matured to resilient and safety excellence embedded across all operational sites by 2023 Development and adoption of technology for safety solutions Implement the five-pillar cultural transformation framework of the Mine Health and Safety Council (MHSC)

Safety is our number one priority; we want to ensure that all our people go home safely, every day. During the challenging Covid-19 pandemic, we have focused on driving the right safety mindset and behaviours; we strive to embed a culture of collective accountability and refusing to do unsafe work.

Our ongoing focus on implementing our comprehensive EOF framework continues to have a positive knock-on effect in preventing injuries. While we are very pleased with our consistent progress and committed efforts, we understand where we need to improve and are taking decisive steps to mature our safety culture to "resilient" and embed safety excellence across all operational sites.

Safety performance indicators

For the fifth year in a row, we achieved zero fatalities, honouring our sacred covenant; this is a landmark achievement for the company and the South African mining industry. We are encouraged by the continued improvement in our total injury frequency rate, the best in Kumba's history, and in our total recordable rate. While we achieved most of our safety-related targets for 2021, including leading indicators, an increase in HPIs recorded is a concern, which we are addressing through reinforced efforts.

- We recorded a total of 20 recordable injuries (any injury requiring more than first aid treatment), resulting in a total recordable case frequency rate (TRCFR) of 0.80. This represents a 54% improvement on 2020 (1.74), exceeding the target of 2.01 by 60%
- Total lost-time injuries (LTIs) recorded deceased to eight LTIs (2020: 18), resulting in an improved lost-time injury frequency rate (LTIFR) of 0.32 against a targeted 0.67. Low-level incidents, typically finger injuries associated with materials handling, and slip, trip and fall incidents, accounted for 13% of the LTIs (2020: 17%). We continue to prioritise the prevention of transportation and materials handling incidents
- There was regrettably one major disability injury sustained at our operations in 2021
- We recorded 10 safety-related HPIs in 2021 compared to two in 2020
- We recorded 4,541 HPH, compared to 4,120 in 2020, a 10% increase, exceeding our targets
- Consistent with previous years, the majority of HPHs were transport-related, with the main causes of incident including: non-compliance with procedures, distraction, road conditions and operating space (parking and following distance practices)
- The number of visible felt leadership (VFL) interactions and interventions at Sishen and Kolomela totalled 24,613, compared to 35,692 in 2020, in line with the adjusted KPI target, taking into account Covid-19 restrictions, for leadership and VFL engagement
- Kumba personnel conducted in excess of 7,794 critical-control monitoring inspections (2020: 4,480), which are designed to monitor compliance to critical controls and remedy possible deficiencies. The exercise found that 99% of critical controls were operating effectively (2020: 99%)
- We were issued with two safety-related regulatory stoppage instructions from the DMRE (2020: five)
- We recorded 872 voluntary stoppages (443 internal section 23 stoppages and 429 voluntary section 54 stoppages), compared to 590 in the prior year.

Performance in 2021 and 2022 targets

	Fatalities	FIFR	LTIs	LTIFR	TRCFR	Permanent disabilities	LTISR	Days lost due to injury
Sishen	0	0	5	0.32	0.77	0	23	349
Kolomela	0	0	2	0.27	0.67	0	33	248
Projects	0	0	0	0	2.59	0	0	0
Corporate office	0	0	0	0	0	0	0	0
Exploration	0	0	1	5.81	5.81	0	354	61
Saldanha	0	0	0	0	0	0	0	0
Group performance	0	0	8	0.32	0.8	0	26.2	658
Group target 2021	0	0	15	0.67	2.01	0	47.6	1,063
Group target 2022	0	0	7	0.51	1.30	0	33	835

Definitions:
FIFR – fatal injury frequency rate (calculated) rate of fatalities per 1,000,000 hours worked (total fatalities x 1,000,000/total hours worked).
LTI – lost-time injury is a work-related injury resulting in the employee/contractor being unable to attend work, or to perform the full duties of his/her regular work, on the next calendar day after the day of the injury, whether a scheduled work day or not.
LTIFR – lost-time injury frequency rate (calculated) rate of lost-time injuries per 1,000,000 hours worked (LTIs x 1,000,000/total hours worked).
TRCFR – total recordable case frequency rate (calculated) is the number of recordable injuries (fatalities + lost-time injuries + medical treatment cases) per 1,000,000 hours worked (TRC x 1,000,000/total hours worked).
Permanent disabilities – lost-time injury where there is a disability of 25% or more (American Medical Association (AMA) Guides to the Evaluation of Permanent Impairment) and/or loss of job or redeployment results as a direct consequence of the injury.
LTISR – lost-time injury severity rate (calculated) sum of days lost x 1,000,000/hours worked.
Days lost due to injury – the total number of calendar days (not working days), from the day following that of the injury to the day on which the injured person is able to resume full duties of his/her regular work.

Employee safety continued

Kumba's top 10 priority unwanted events (PUEs)

1 Mobile equipment incidents

Controls:

- Road and traffic management design, construction and maintenance for safe travel
- Vehicle separation;
- Safety berms
- Pedestrian safety exclusion zones
- Proximity-detection system
- Working safety-critical components
- Authorised TMM operators following traffic rules
- Safety belt

2 Falling from heights

Controls:

- Certified steel and FRP flooring, stairs, ladders and guard rails
- Hard barricading of open holes, damaged structures and drop zone
- Work evaluation;
- Certified structures and platforms (e.g. Scaffolding and lifting cradles)
- Double hooked safety harness connected to safe anchor points

3 Uncontrolled release of stored energy

Controls:

- Electrical panels compliant to IPX2
- Electrical room access control
- Earthing systems
- Competent and authorised person
- Authorised, competent and permitted persons conducting live work
- Calibrated testing and fault-finding equipment
- Electrical protection systems
- Servitude management systems
- Distance and delay switching
- Short circuit level management
- Automatic sync control protection system on motivator
- Arc flash resistant equipment

4 Highwall bench failure (Strata control)

Controls:

- Engineered slope design
- Exclusion zones;
- Slope movement monitoring
- Drill and blast to slope design
- Excavate to match slope design

5 Fires and explosions

Controls:

- Separation of ignition source
- Barricading
- Flashback arresters
- Earthing and bonding
- Good housekeeping, through ventilation
- Fire suppression systems
- Fire fighter services
- Fire retardant conveyors

6 Lifting/loss of load

Controls:

- Lifting plan
- Drop zone barricaded
- Certified lifting equipment
- Electrical overload protection system on lifting machines
- Lifting machine levelling indicators
- Section engineer approval for all tandem lifts

7 Premature detonations

Controls:

- Authorised personnel
- Blasting permit
- Clearance procedure
- Separation of explosives and detonators
- Lighting warnings and no contraband, e.g. cellphone, lighters

8 Contact with moving machinery

Controls:

- Guards, isolation and lock-out
- Isolation to standard
- Machine and equipment guarding to standard
- Emergency stop devices
- Safety interlocks
- Certified energy retention devices

9 Abnormal weather conditions

Controls:

- Lightning detection system
- Wind speed monitoring
- Warning SMS system
- Evacuation procedure for inclement weather

10 Confined spaces

Controls:

- Entry permit
- Atmospheric monitoring
- Energy isolation
- Ventilation
- Personal protective equipment (PPE)
- Cleaning and unblocking to make safe
- Access control
- Emergency response

Know what can go wrong and take control

Providing a safe workplace

Kumba's safety strategy is based on the EOF framework, which drives all our safety efforts in fatality eradication and injury reduction. Throughout 2021, Kolomela and Sishen maintained a very visible focus on high-level safety risk management, driving improvements across the six pillars of the EOF framework. We maintained our focus on EOF through full compliance to critical controls, high-risk work verification and on time close out of EOF actions within the organisation. We believe that this has underpinned our sustained good safety record in recent years.

The EOF framework was introduced in 2016 to facilitate a step-change in the management of high-level (potentially fatal) safety risks by stepping up our focus on safety-critical controls and safe behaviour. The six pillars of the framework are:

- strengthening safety leadership and accountability
- embedding a caring culture
- implementing world-class risk and change management systems
- learning from incidents (HPIs and HPHs – own and external)
- safety performance monitoring and assurance
- developing and implementing technology

Diligently focusing on these areas which all impact on the working environment, embeds a culture of safe behaviour. The EOF framework recognises that everyone at Kumba has a role to play in eliminating fatalities and must understand their role, responsibility and accountabilities. In driving a culture of zero harm, we raise awareness of the different factors and focus required in preventing a fatality, to those in preventing an accident.

We have made consistent progress in our reporting, monitoring and LFI processes, critical-control management, focused visible felt leadership (VFL) and operational risk management (ORM). All operators have detailed safety improvement plans which are updated on an annual basis to address issues and challenges identified from the vulnerability analysis, through ORM, incident investigation and analysis, VFL interactions, audits and inspections.

Our EOF activities have been reinforced over the last three years by the implementation at Sishen and Kolomela of the Anglo American group-wide 21 EOF work streams. These work streams include safety organisational review, emergency response, fire risk management, surface traffic management, explosive management, culture, operational leadership excellence, reward and performance, training and education, critical control management and contractor management. An established EOF task team drives and monitors the implementation of the EOF requirements. As at December 2021, the required 95% completion of the tasks within these work streams had been met. The tasks for 2022 would be to close out the remaining requirements of these work streams.

Safety-related training extends to our workforce in various forms, from formal training initiatives to regular safety briefings. We implement a standardised contractor management procedure, which includes safety induction training.

Key developments in 2021

Driving the right safety mindset and behaviours

During the pandemic, we have maintained high levels of engagement with our people to reinforce the imperative of keeping safety front of mind. This year we formalised our initiative called the Safety Rhythm and Routine (Heartbeat), which we developed and implemented in 2020 to drive a positive safety mindset with aligned focus to the high-risk work and critical controls for managing Covid-19 and safety. In embedding this initiative, we have increased our level of oversight and are placing an emphasis on maturing our safe behaviours, making sure that our leaders have the necessary softer skills sets required to measure and monitor the behaviours of their team, and ensure that they understand what is required in delivering effectively on our safety rhythms and routine work.

Leadership-in-action engagements

The pandemic has continued to limit the extent of in-person meetings, and the level of management oversight of our rhythms and routines. To mitigate any shortcomings in our leadership engagement, in 2021 we instituted bi-weekly leadership-in-action calls in which all leadership members convene virtually for an hour to discuss critical safety issues, areas for improvement, lessons learned, actions taken, system compliance and progress in driving a sustained standardised approach across the sites. This initiative is supporting continuous improvements in our safety journey.

Reviewing our standards and specifications

Kumba established a standardisation committee to assist in identifying opportunities to improve our performance standards and specifications, and alignment across Kumba and with Anglo American technical standards, as well as the requirements regarding our PUE. The process includes reviewing monthly tasks or activities to check the efficiency and effectiveness of standards implemented. This process has resulted in amendments being made and action plans being implemented, including simplification of controls and dialogue within our standards and training material.

Sustainable risk reduction programme

To drive continuous improvements in the second half of the year we started implementing a sustainable risk reduction programme at Sishen and Kolomela, with the assistance of Du Pont. This initially focused on evaluating the effectiveness of our current risk management systems and routines. The assessment confirmed that we have good ability and control in the current system, and assisted in identifying certain areas for improvement and opportunities for standardisation and simplification.

The programme aims to support site leadership to identify and reduce the key risks, build a risk mindset leveraging specific leadership routines and integrating risk discussions into managing processes at all levels of the organisation.

Employee safety continued

Programme objectives

Risk reduction and operational discipline	Risk integration into management routines	Leadership routines and capabilities
Enhance and further entrench processes to identify and mitigate key risks and HPHs, ensuring sustainable and efficient risk oversight	Foster risk focused discussions at operational meetings to drive planning for a safer working environment	Refine and establish site-specific desired routines and behaviours
Support the proactive approach to hazard identification and critical controls implementation	Drive meeting effectiveness by defining and coaching towards the desired outcomes of the meetings, supported with data	Coach to strengthen consistency across the different levels of the organisation that can drive and sustain results in the long term
Leverage work management to schedule risk reduction practices and utilise the LCD framework to entrench such activities	Embedding the fusion of process and work management KPIs to achieve an integrated risk and performance management approach	Utilise the LCDF and competencies and incorporate key site initiatives (such as HPH reporting and VFL)

A key component of the programme is one-on-one coaching of leaders and supervisors in the principles of coaching, mentoring and management of teams. Through this process we will develop internal capacity to deliver training on this approach, aligned with components of our safety leadership development programme.

Kumba's leading example informing industry initiatives

Building on the success of our EOF initiative, Kumba spearheaded the development with the Anglo American EOF task team of the Accountability Framework which was rolled out with a supporting policy across Anglo American in 2020. The framework is designed to ensure that we are all empowered to make the right decisions when it comes to safety, and that leaders are able to recognise both positive and negative practices and have the ability to manage the consequences in a consistent and clear way. The Accountability Framework seeks to promote a psychologically and physically safe workplace where everyone is accountable for their own safety and, where applicable, the safety of their teams. Furthermore, having shared the framework with the CEO Zero Harm Forum and the Minerals Council of South Africa, and considered a best practice, this Accountability Framework is now being utilised as a sound base to establish an industry similar approach.

Culture change through ownership and shared accountability

All our employees are unconditional safety leaders and accountable for their own actions, as well as having oversight of their fellow colleagues and teams. No work activities will commence or continue if people are at risk from injury and harm and if conditions are unsafe.

In driving our safety culture, we continue to entrench a commitment throughout the Company to honour the mandatory My Sacred Covenant Code, which articulates a set of life-saving behaviours, and an understanding that if employees do not comply, consequence management through the fair culture model will apply. This approach ensures that fair and transparent processes are followed following safety incidents, and necessary consequences are consistently applied whenever unsafe acts are observed.

In embedding a culture of "stop work when it is unsafe", we continue to record a high number of voluntary work stoppages (872 in 2021), which is reassuring that workers have a safety mindset and feel empowered to stop unsafe work. This is supported by our "I-Care Buddy" initiative, which aims to enhance a common understanding that each person should act and care for each other in the workplace and hold one another accountable for safety behaviour. We continue to acknowledge and praise voluntary work stoppages.

We recognise that safety hazards can also be psychological, associated with personal issues. Supporting our efforts to make employees feel supported and empowered to speak up when they have concerns , the theme of this year's Anglo American global safety day was "safe to always be safe", upholding the importance of speaking up if something does not feel right. The programme was held over a full week in October 2021.

Our safety results affect the performance-based remuneration of all employees. We use KPI-based reward and recognition to drive correct behaviours and provide the necessary training to support outcomes. Production safety bonuses have been reviewed and there is now a 50/50 split for production and safety. We regularly review metrics and rewards to ensure they are in line with prevailing focus areas, and effective.

PUEs and critical-control management

For each of the safety-related PUEs at Sishen and Kolomela, critical controls and the associated oversight, inspection and management controls are clearly defined and managed to ensure compliance and implementation. We have continued to improve the critical-control hierarchy, increasing the percentage of engineering controls, to make the controls less dependent on the action of individuals. We aim to ensure that at least 80% of all critical controls are engineering controls or technology based by 2023.

Kumba has a PUE hazard map, which provides a simplified illustration of hazards associated with our mining process activities and the associated critical controls required, in the focus areas of equipment, conditions, interactions and behaviours. This hazard map is assisting supervisors and leaders in their high-risk work verification and leadership interactions.

We implement a rigorous programme for monitoring critical-control management, helping to foster greater transparency and accountability and improve the levels of work executed to plan. On a monthly basis, we track the percentage of monitoring completed to plan and the critical-control deviation rate. Any shortcomings identified are addressed timeously. Job risk assessments are linked to our PUEs.

Data analytics to inform process and control improvements

For us to continually improve our working environment, it is key that we embrace and drive the fundamentals of a learning organisation. Conducting data analytics to monitor safety performance trends and inform our interventions is an ongoing priority and focus. On a quarterly basis, we conduct an integrated analysis of self-imposed (section 23) work stoppage reports, HPHs and HPIs. The analysis has a significant link to the PUEs and critical-control compliance work, helping to inform improvements in our processes and controls. The combined analysis confirms and supports real-time trends, ensuring that we define the correct focus areas to prevent repeats.

We monitor trends in the key performance areas that continue to present the most challenges. Comparisons each quarter reflect whether actions taken to address the identified shortcomings are proving effective. Transportation and mobile machinery remains the main agency involved in HPHs (averaging 45% of cases), with working at heights and uncontrolled releases of energy the other main agencies, accounting for on average 5% to 10% each. In 2020, we maintained a 100% close-out rate of HPHs, as tracked on our Enablon/Isometrics system. HPH trend analysis has been instrumental in the initiation of technical projects including our berm monitoring technologies for static and dynamic monitoring, reviewed in the case study on page 46.

Proactive and predictive analysis is supported by high-risk work verification, which is an independent inspection for compliance to standards and procedures, and by another leading indicator, focused VFL activities throughout the course of the day.

High-potential incidents

HPIs are unacceptable as they expose our employees and contractors to fatal risks. The 10 HPIs this year were thoroughly investigated by internal and third-party teams. Corrective and remedial actions are implemented, monitored and closed out in our efforts to prevent repeats. Potential improvements are consistently highlighted in the following areas: system improvements, personal behaviours and leadership/supervisory oversight.

Incidents recorded in 2021 and actions taken to prevent a repeat:

- Four separate incidents involving heavy mobile equipment (HME). We investigated road design and provided additional driver training to better prepare operators for all scenarios.
- A falling from heights incident in the crusher plant, involved an artisan losing his balance and falling from the scaffold. While a safety harness was worn, safety lanyards were not attached properly to prevent the fall. We looked at better work planning and supervisor oversight to strengthen protocols.
- Collision occurred between HME and a light delivery vehicle (LDV). We provided additional training to drivers to avoid non-compliance with road safety rules and investigated improved collision-avoidance technologies.
- Collision occurred between a HME and a dozer. Additional training provided to drivers to avoid non-compliance with road safety rules and investigated improved collision-avoidance technologies.
- There were two uncontrolled release of energy incidents. In the first, an artisan was struck by a valve. We ensured additional training for the artisan and better supervisor oversight. In the other incident, an electrical flash occurred while testing a cable due to incorrect testing equipment. We have intensified our oversight of such procedures.
- A fire as a resulted of a hydraulic pressure hose failure at the valve extensively damaged a shovel. We have reviewed critical controls and maintenance procedures.

Technical innovation to create a safer working environment

Kumba continues to demonstrate leadership in developing and adopting leading technologies that help to minimise and where possible eliminate the human behaviour interventions that may result in fatalities. We are progressing with various technology development projects identified in conjunction with the Anglo American technical team.

In 2020 we rolled out smart watches, which have been used primarily to support social distancing and contact tracing. We have also started using the wearable devices for blast clearance monitoring. The smart watches will progressively be used to measure and collect actionable data on employees' health and wellness, create safety and hazard awareness, and improve productivity by means of asset and equipment integration, while respecting issues relating to personal privacy.

Established technology innovation initiatives driving safer work environments at our operations include:

- automated drilling, which allows drill operators to work in air-conditioned cabins away from dust and bulldozers that can be operated remotely in risky conditions
- collision-avoidance systems using vehicle and person proximity-detection systems and auto-braking, across HME, have significantly reduced the number of collisions between machines
- using remote dozers, where workers operate machinery remotely in risky conditions, such as steep slopes and inclines
- drone technology, which is reducing the need for employees to do physical blast clearances; drones are also used to conduct survey technology and general observations
- advanced driver-assistance systems and real-time driver monitoring system
- real-time and shift monitoring technologies to identify and manage fatigue
- berm monitoring to assist in maintaining berm as per standard
- blast clearance to assist with identification of equipment within the blasting radius
- biometric access control to substations, reducing the risk of accidents and injuries
- real-time contractor management compliance monitoring through web-based onboarding solution "Passport 360"
- integrating various data platforms so that we can work smarter using Kumba's Mobi App for high-risk work verification

→ **Our progress with driving mobility and digitalisation is reviewed** on page 39.

Employee safety continued

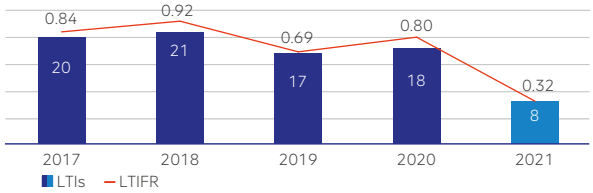
Kumba develops and implements industry-leading berm monitoring technology

Kumba collaborated with a technology partner to develop a dynamic berm monitoring system (BMS) that uses industry-leading technology. The system ensures real-time berm monitoring on a 24/7 basis and provides an alert when a berm is out of specification, so that remedial action can be taken to prevent a major incident. Custom-built BMS trailers stationed at respective waste dumps each have a laser scanner which continually tracks and feed data on active dumping activities to a laptop for analysis, comparing the actual safety berm height to the planned or design berm height. The results are communicated over a WiFi network to a server which uses a web-based user interface (software) that a control room operator uses to identify substandard berm conditions. In 2021, the technology was rolled out and commissioned initially at Kolomela, which has six BMS trailers, and then at Sishen, which has 17 trailers. Static berm monitoring proof of concept is underway at both operations with full roll-out planned for 2022 utilising a similar technology to that already adopted within Anglo American.

Safety training

Training initiatives in 2021	Number of employees trained	Percentage of target employees trained
Safety representative training	**276**	159
PUE and CC/VFL/Buddy training	**2,717**	151
A3 ORM process training	**62**	109
A2 ORM process	**601**	217
A1.2 hazard ID/SLAM	**4,071**	143
Legal liability training	**623**	242
First aid	**3,300**	183
Fire fighting	**2,870**	163

LTI and LTIFR



Moses Muvefu, pictured next to the Kolomela BMS in the Leeuwfontein pit. The system monitors any movement or height deficiencies in the berms and send warnings to the control room, where the team takes remedial actions.

Employee and community health and wellbeing

Employee wellness – Registered nurses Nicolette van Rensburg and Jacolien Dreyer at the Sishen mine employee wellness centre.

A Covid-19 diagnostics lab was set up by Sishen mine at the UGM health centre in Kathu. The lab analyses samples from the community as well as employees of Kumba, for the Covid-19 virus.

Highlights

- No new cases of occupational disease recorded for a consecutive year
- Covid-19 risks and impacts effectively mitigated and managed at our operations; 95% recovery rate from infections recorded
- Implemented an extensive Covid-19 vaccination drive for our employees, contractors, their families and outreach programme for communities, which have progressed well
- R224.5 million committed to provide Covid-19 relief to employees and communities
- 86% year-on-year reduction in new HIV cases (employees and contractors)
- TB incidence rate (employees and contractors) decreased to 138 per 100,000, a 5% year-on-year improvement
- Implemented a health and wellbeing behavioural change programme, for employees and the community, reaching 6,423 individuals

Learnings/challenges

- Covid-19 impacts at our operations more pronounced in 2021: Sadly 29 employees died of Covid-19 (Beta and Delta variants) in 2021
- Two new cases of HIV diagnosed among new and existing employees; 306 employees are HIV-positive (4.6% prevalence)
- Approximately 23% of our workforce (employees and contractors) have chronic medical conditions, 34% are classified as overweight and 15% as obese

Focus for 2022 and beyond

- Ensure that all efforts are implemented to reduce Covid-19 infection rates, morbidity and mortality
- Optimising real-time monitoring and data analytics to improve controls to further reduce levels of exposure to occupational health hazards
- SANS 16001 certification in 2023
- Mental and financial wellbeing campaigns
- Implementation of site-level strategy focusing on substance abuse, TB and HIV/Aids and adopting a syndemic response to achieve SDG 3 health targets in our host communities by 2030
- Exceed the UNAIDS 90/90/90 targets and strive for TB 100/100/100 targets

Against the backdrop of the Covid-19 pandemic and an increasing burden of communicable and non-communicable diseases, our approach to health extends beyond protecting our people and striving for zero harm to promoting employee, as well as community wellbeing and optimal levels of health.

Employee and community health and wellbeing continued

Protecting and supporting our employees and communities through Covid-19

The Covid-19 disease has remained the foremost health challenge facing Kumba employees (including contractors), and their families and communities. We have maintained comprehensive response plans to protect and support our employees, and provide support where most needed in our communities. We have placed an emphasis this year on promoting and facilitating Covid-19 vaccinations.

In 2021, Kumba spent R35.3 million on Covid-19 response initiatives for employees and communities. These included medical equipment, bulk high-flow oxygen supply system to Kuruman and Postmasburg hospital, employee and community care packs which include distribution to schools, and isolation and quarantine facilities. A further humanitarian relief package was pledged to assist our employees and host communities with the impact of Covid-19.

Infection rates and recoveries

In line with national trends, the majority of infections recorded at our operations in 2021 were in January (second wave of infections), June to August (third wave) and December (fourth wave). Our proactive approach to Covid-19 prevention and treatment has ensured sustained control of infection rates at all our operations. Infection rates and mortality rates have remained significantly below the average national rates. At year end, we had a 95% recovery rate from infections, well above the national average.

Kumba Covid-19-related statistics (at managed operations, as at year end)

Employees and contractors	Number
Diagnostic PCR testing	41,525
Rapid antigen testing	9,561
Positive cases	3,121
Recovery rate (%)	95
Deaths due to Covid-19	29

Building resilience

As the pandemic unfolds, we have continued to strengthen our approach, informed by learnings. We have continued to implement risk-based control strategies, maintaining our rigour in ensuring effective infection preventive measures and an aggressive testing and case management regime aligned with the evolving Covid-19 risk exposure profile and recommended health protocols. To support early detection of infection, we conduct antigen tests including random screening of people who have travelled to areas with prevalence greater than 10% and risk-based PCR tests at work and in communities. All employees continue to self-screen for Covid-19 symptoms and log their results on our internal Engage app every day before they report for work.

We have dedicated resources to provide screening, testing, case management and return to work activities. Our Covid-19 facilities continued to provide excellent nursing and healthcare, including sufficient quarantine and isolation beds, given the shortage of resources in the public healthcare system. We have continued to provide robust mental health support, and make available Covid-19 packs, saturation monitors, oxygen and concentrators. We continue to learn from our own cases and broader Covid-19 research findings.

Covid-19 humanitarian relief boost for employees and communities

As part of an Anglo American initiative, in July 2021, Kumba announced a R224.5 million commitment to provide ongoing Covid-19 relief to employees and communities. We invested R18.2 million in providing 26,000 food parcels to vulnerable employees and communities. To assist in resetting and rebuilding our economy, we are investing R100 million in various initiatives, including unemployment programmes, education programmes, and infrastructure repair programmes.

Kumba head office – family vaccination day.

Covid-19 vaccination roll-out

Kumba fully supports Covid-19 vaccinations as the major public health step in combatting the pandemic. We have proactively encouraged and facilitated employee vaccinations in line with vaccine availability, and we have supported government vaccination initiatives in Northern Cape.

Kumba has driven a Covid-19 vaccine roll-out programme for employees, contractors and family members (targeting more than 72,000 people in total), educating on the benefits of vaccination and ensuring convenient access to vaccination sites. We prepared and registered four site clinics as vaccination centres (Sishen, Kolomela, Centurion head office and Saldanha), according to the Department of Health (DoH) criteria, for all Anglo American South African business units to use. Each facility is licensed to administer Covid-19 vaccines on the government's behalf and had the necessary infrastructure, expertise and staff to support vaccination at scale. Our medical staff and hospital administrative staff underwent Covid-19 vaccination training and were seconded to assist the DoH with the clinical trial of Johnson & Johnson's vaccine from February 2021. As part of the trial, all consenting healthcare workers were vaccinated.

Our workplace vaccination programme began mid-July 2021. Vaccines were sourced directly from a government supplier and have been issued according to the government roll-out phases. All vaccine recipients are briefed about the process and monitored immediately afterwards for any untoward reactions to the vaccine. The overall cost of the vaccine roll-out is estimated at R87 million, including support for the Northern Cape community vaccine roll-out programme. Part of these costs will be recovered from the medically insured employees, contractors and family members.

We have implemented campaigns to tackle vaccine hesitancy. This included raising awareness of the benefits – notably in preventing serious disease and hospitalisation; promoting trust through leaders setting an example; and providing incentives to promote uptake.

By year end, more than 75% (12,539) of employees and contractors had been fully vaccinated, and 8% (1,378) partially vaccinated. We have also vaccinated 796 dependents and another 4,486 community members. We will also continue to facilitate and promote the uptake of vaccine booster doses.

Supporting local communities

Kolomela and Sishen have continued to leverage the Social Way in developing and implementing initiatives to help communities to mitigate, respond to and recover from the Covid-19 pandemic and its social and economic effects. We collaborate with local NGO partners, health authorities and other social services.

Kumba has continued to reinforce preventive measures to stop the spread of the virus within host community in collaboration with DoH, including ongoing facilities for isolation or quarantine (over 400 beds) in Kathu and Postmasburg. We have monitored host community medical infrastructure, facilities and professional capacity and provided assistance where required, including additional critical health equipment such as 18 ventilators, blood gas analysers, 30,000 litres of oxygen supply and 28 critical care monitors. A further support was given to Postmasburg hospital with seven professional nurses to strengthen professional capacity.

We have provided the Northern Cape government with resources for community vaccinations, including staff, consumables and facilities, including for outreach vaccination initiatives into the broader Northern Cape to include the Uppington area within the ZFM District, Namakwa District and the Sol Plaatjie area as part of a partnership with De Beers. This was done in collaboration with the DoH to assist the province to reach herd immunity for the vaccination roll-out. Other initiatives include providing FAMSA mental health services to local communities.

In supporting livelihoods impacted by the pandemic, Kumba has continued to provide water and food parcels, collaborating with the agricultural industry to increase food supply within host communities. We are maintaining our collaboration with other mining companies, SIOC-CDT, our contractors, non-profit organisations and government at the national, regional and local levels to navigate for long-term solutions and sustained economic recovery.

Sishen rebranded a bus that takes community members to vaccination centres.

Employee and community health and wellbeing continued

Management approach

At Kumba, we understand that a person's health and wellbeing involves physical, social, cultural and psychological factors. Being in good physical and mental health is a vital component of employee wellbeing and contributes to a safe and productive workplace. We also address public health issues among our employees and their families to build healthier host communities.

While our emphasis this year has been on mitigating Covid-19 infections, we have remained steadfast in our efforts to ensure no new cases of occupational disease because of exposure to health hazards at our operations, and to positively influence the health and wellbeing of our employees through a proactive, integrated, holistic approach to managing workplace and personal health.

We have a health and hygiene strategy in place with clear objectives and targets for our health outcomes. Ongoing action plans implemented at our operations are aligned with achieving the Mine Health and Safety Council's (MHSC) 2024 occupational health milestones for the South African mining industry, which include targets for controlling HIV, TB, dust and noise, and supporting the achievement of the 2030 SDG 3 targets in our host communities. In 2021, our community efforts remained focused on mitigating Covid-19 impacts, with an emphasis on enabling access to Covid-19 vaccination.

Our health programmes focus on:

- eliminating and mitigating health hazards in the physical work environment through occupational health risk management processes and practices
- ensuring a workplace culture that supports all aspects of health and wellbeing
- providing resources to help employees manage personal health risks, including the risk of HIV/Aids, TB and non-communicable diseases
- transforming health and wellbeing in our host communities by achieving the relevant health targets of UNSDG 3 for all of these communities, by 2030

Continuously improving our health performance is underpinned by our progress in aligning health risk management with the Operating Model and ORM processes, as well as improving occupational hygiene capacity and capability.

Controlling occupational exposure

Where the health of our employees is concerned, our primary focus is to eliminate health hazards in the workplace. Where that is not possible, we aim to reduce hazards to levels as low as reasonably practicable.

Our main occupational health risks include, but are not limited to, potential excessive exposure to:

- inhalable hazards (respirable and silica dust, welding fumes, etc.)
- occupational carcinogens
- noise
- stress to muscles, bones and joints
- fatigue
- work and non-work-related stress

→ **Our key health and safety management systems, processes and sector initiatives are reviewed** on pages 38 to 39.

We are taking a similar approach to safety in improving our ability to learn from serious health incidents and embedding critical-control management processes. We focus on the way we manage health hazards that potentially lead to life-threatening illnesses or premature death, with a particular focus on elimination of the hazards or implementing engineering controls to minimise the risk.

We provide employees with appropriate PPE, such as respiratory or hearing protection devices, wherever there is a risk of exposure levels exceeding safe limits. We also consider adjustments to our system of engineering and administrative controls when these risks occur. All PPE adheres to stringent national and international standards, including specific requirements for women. We carry out intensive training to make sure our employees are aware of the hazards to which they are exposed, as well as the risk-mitigation measures implemented, and that they use and maintain PPE properly.

Innovation in technology is further helping us protect the health of our employees, reduce exposure to hazards, and give us early warning of when we need to take action. In parallel with engineering solutions, we implement a digital real-time data analytics platform that monitors environmental conditions and the performance of engineering controls in areas where exposure levels potentially exceed safe limits. The system triggers alerts when exposure to hazards such as noise or inhalable particles reaches unsafe levels, or when a control fails. This prompts timely intervention to determine root causes and take remedial action to prevent repeat occurrences. The real-time data monitoring has driven a marked reduction in potential exposure to health hazards for our employees at our operations.

In 2021, we achieved our goal of a 15% reduction in the number of employees and contractors potentially exposed to respirable and silica dust at levels above the occupational exposure limit (OEL) as well as between 50% and 100% of the OEL.

There were no regulatory work stoppages or non-compliance notices issued for medical or health-related matters. We recorded 12 voluntary, proactive stoppages to mitigate occupational hygiene risks related to dust exposure at the plants and on haul roads.

Managing inhalable hazards

Occupational exposure to airborne pollutants at our operations, such as respirable dust, silica and carcinogens, is associated with developing occupational lung diseases, notably silicosis, tuberculosis, lung cancer and airway diseases. We implement monitoring and control programmes for dust and other airborne pollutants at Sishen and Kolomela, with results informing controls and initiatives to reduce exposure. Exposure levels are linked to medical surveillance. Ongoing improvements have been achieved most efficiently at sites where we are implementing real-time monitoring.

The progressive installation and refurbishment of dust suppression and extraction technology has enabled a steady reduction in the number of employees and contractors potentially exposed to respirable dust and silica above the OEL limit (HEG A for silica and respirable dust exposure), from 24 at the end of 2020 to 13 by the end of 2021. At year end, we had 535 employees (4.7% of the workforce) working in areas classified as HEG B (exposure above 50% of OEL) for respirable dust and silica (2020: 828 employees). Sishen and Kolomela continue to use and improve engineering controls to eliminate dust and silica overexposures.

Our progress is supported by the use of automated drilling rigs at our mines, which are controlled from an air-conditioned cabin far behind the machines, mitigating the risk of exposure to dust. Our innovative design interventions have ensured that no visible dust is emitted during reverse circulation drilling.

→ **Our non-occupational air quality management is reviewed** on page 103.

In managing exposure to respirable diesel particulate matter, we ensure adherence to vehicle maintenance schedules and implement engineering controls to minimise exposure levels, which remain below 10% of the exposure limit. For example, when operating trucks are in contained work environments, we ensure there is adequate ventilation, including using more extractor fans, and only using engines when necessary. In managing exposure to metal fumes (welding fumes) and hazardous chemical substances, which also remain well within safe limits, we maintain ongoing monitoring. We use mobile extraction ventilation to keep welding fumes to as low as possible levels and issue respirators to employees exposed.

At Sishen, in recent years we have identified and managed potentially asbestos-contaminated material. The relevant areas have been demarcated, to ensure that employees are not affected and no further disturbance of the material occurs. We have removed exposed asbestos in line with the required standards.

Noise and hearing conservation

All operations have comprehensive noise registers comprising an equipment inventory and mitigation measures to reduce the overall noise readings. Our focus remains on controlling exposure at source and protecting employees who work in environments where noise levels exceed an eight-hour 85 decibel (dB(A)) limit. We have 962 employees potentially exposed (17.4% of the workforce compared to 14.2% (2,177 reported in 2020) as a result of 1,527 pieces of equipment that emit levels above the OEL (2020: 2,942). We have 25 pieces of equipment at our mines that emit noise levels above 107 dB(A); these are blast sirens which have to be loud enough to be heard by all. None of our other equipment emits noise levels above 107 dB(A), in line with the MHSC milestone requirement by 2024.

Employee hearing conservation education is ongoing and custom-made hearing protection devices are issued to all employees and contractors potentially at risk of excessive exposure to noise and potential noise-induced hearing loss (NIHL). Noise zones are clearly demarcated and the use of protective devices closely monitored. To detect early hearing deterioration we conduct both annual and ad hoc (dependent on noise exposure) audiometric screening examinations, which incorporate the required standard threshold shift (STS). Where necessary, we implement additional corrective measures before permanent NIHL develops. In 2021, no new cases of NIHL percentage loss of hearing (PLH) shift >10%) were diagnosed at both Sishen and Kolomela for a fifth consecutive year, nor any cases of STS >25 dB.

Monitoring the health of employees

We record the baseline health of every operational employee who joins Kumba, and then periodically monitor the state of their health throughout the time they work for us. Our medical surveillance programme aims to detect early signs of ill health, whether due to occupational health risks or lifestyle factors, and carry out focused interventions. We screen for obesity, smoking and alcohol abuse, as well as chronic diseases. Medical surveillance continues with Covid-19 exposure prevention protocols and protection for both the healthcare workers and the employees.

Based on our health profiling and wellness examinations, we implement initiatives to address lifestyle-related health risks, particularly chronic disease management, smoking, nutrition, stress and mental health conditions.

We use an advanced electronic system that allows health professionals to capture each health visit through a secure electronic medical record system. The employees' health records are linked to their occupational hazard-exposure profile and can be accurately tracked and analysed over time.

In 2021, no employee contracts were terminated due to ill health, disability, occupational disease or injuries, for the fourth consecutive year.

Musculoskeletal conditions

In striving to prevent musculoskeletal disorders, in recent years we have focused on introducing technical solutions to reduce vibration and ergonomic exposures. This includes ensuring checks on shocks, dampers and seat cushions as part of the normal maintenance schedule. We also implement recommended actions identified in vibration studies and ergonomics surveys in lower risk, office environments, where risks have been identified or work-related musculoskeletal injuries sustained.

The findings of ergonomic risk assessments for all mobile equipment and tasks involving manual lifting and handling, and vibration studies, are integrated into ORM processes and continue to inform the implementation of corrective measures to mitigate the risk exposure profile at each operation. For example, to lift heavy loads, we seek to use equipment instead of physical labour.

In 2021, we recorded no work-related musculoskeletal disorders for a second, consecutive year. Repetitive motion

Employee and community health and wellbeing continued

risk-mitigation interventions include using machinery to lift heavy loads, using trolleys to transport the material and reducing the weight required to be carried. We are exploring solutions to dampen the vibration or operate the dozers remotely.

The most common musculoskeletal injuries have historically involved limbs and lower back injuries. We continue to implement an education and awareness campaign relating to correct manual handling, good posture and the periodic use of stretching exercises.

Fatigue management

Fatigue is a high-priority wellbeing challenge. Various factors, such as medical and psychological conditions as well as aspects of a person's workplace or lifestyle, can contribute to fatigue and, in turn, reduced alertness and poor judgement. Fatigue-related risks are heightened at our mines, which experience generally high temperatures (up to 50°C in summer), as well as by the diverse impacts on people's lives and wellbeing during the Covid-19 pandemic. This includes the particular new challenge of "long Covid" (post-Covid-19 syndrome) and its potential impact on fatigue.

Our fatigue management strategy is aligned to minimum mandatory critical controls and the updated Anglo American technical standard for fatigue management, which was introduced in September 2021. Our sites are conducting self-assessments against the standard and will develop and implement action plans to address any gaps in meeting requirements.

Fatigue management systems implemented at our operations continue to successfully mitigate fatigue-related incidents. Across the Company we implement fatigue management codes of practice and programmes and fatigue committees are in place at all sites, which meet monthly. Our interventions encompass risk assessments and mitigation, including through education and training, application of controls, such as compulsory fatigue breaks, and monitoring and review for continuous improvement. In instances where symptoms of fatigue are detected, we implement counter measures, such as seeking to reduce or substitute medication that can cause sedation. In high-risk areas we use more sophisticated prevention, prediction and detection technologies (PRISM and the MR688 systems); for example, when truck drivers' eyes appear to be closing while driving, this will trigger an alert to the driver and a notification to a control room. If three alerts are received within an hour, a compulsory stop is enforced. Our Kolomela fatigue centre plays a key role in measuring and evaluating the fatigue of employees using a computer software system called PRISM, and includes relaxation and resting areas, as well as a gym. Plans are in place to replicate the same set-up at Sishen. Our interventions extend beyond the workplace to include community and family education and awareness aimed at mitigating worker fatigue.

Employee wellbeing

We have continued to place an emphasis on managing the diverse impacts and implications of the Covid-19 pandemic on employee health and wellbeing. We have well-established wellness initiatives for employees and contractors. In addition to interventions and supporting campaigns focused on Covid-19 and mental wellbeing, our various programmes include striving to educate people on preventing and managing chronic and lifestyle diseases and to positively influence their wellbeing and lifestyles. In addition to HIV, TB and chronic disease management, we continue to focus on mental health, drug and alcohol abuse, and other health issues.

In strengthening our management approach, we are implementing the South African National Standards (SANS) 16001 wellness and chronic disease management standard at all our sites, which includes HIV and Aids, chronic diseases and cancer management. Our progress has been slowed while we focused on managing Covid-19. We will conduct an internal audit in 2022 to ensure that we meet all requirements and aim to be externally audited in 2023. The standard supports our efforts to achieve the UNSDG 3 targets and DMRE milestones.

We recognise the importance of a good work-life balance. An imbalance can put strain on an individual and have negative implications for their physical and mental wellbeing. Our wellness initiatives, employee assistance programme, medical surveillance programmes and HR interactions support individuals in identifying and managing challenges. This included providing self-care and resilience workshops during 2021.

Our integrated and holistic approach to improving our employees' health is demonstrated in our World of Wellness (WOW) programme, which integrates aspects of mental health, physical wellness, recreation and inclusion and consists of three themes: mind (mental wellness), body (physical wellness), and spirit (emotional wellness). The diverse offering of regular sessions includes yoga, meditation, and entertainment oriented shows, to take the mind away from stress. Attendance has been mainly people who can connect virtually, with many of the initiatives conducted through Microsoft Teams, and we are now resuming training centres to extend our reach.

All our employees are screened for chronic medical conditions such as hypertension, diabetes, cholesterol, body mass index (BMI), TB and, where consent has been given, HIV, during annual medical surveillance processes and health campaigns. We take an integrated approach to addressing HIV, TB and sexually transmitted infections. We proactively seek to identify and support employees experiencing mental health-related challenges and personal issues, such as substance abuse. As a condition of employment, permanent employees are required to have a medical aid.

Managing TB and HIV/Aids

TB and HIV/Aids are significant public health threats in southern Africa, with potentially life-threatening consequences for employees and their communities. These threats have been amplified by the spread of Covid-19, as people who have HIV or TB (or both) are considered more at risk of severe illness if they contract the virus. At our operations, ensuring that immunocompromised employees have their chronic diseases under control, with viral load suppressed, has been an ongoing focus.

Kumba is a recognised leader for its TB and HIV/Aids programmes in the workplace and our performance is in line with World Health Organization, DoH and DMRE expectations. We continue to drive progress towards meeting ambitious targets. While we are improving our case detection, reporting and disease management in the workplace, we continue to diagnose new HIV cases each year and endeavour to further strengthen our prevention efforts to bring the incidence rate down.

Our integrated HIV management provides HIV-related services and primary healthcare services to mine employees, contractors and host communities through the Ulysses Gogi Modise (UGM) wellness clinic, in partnership with the DoH. The UGM clinic at Kathu collaborates closely with the surrounding public health clinics.

The estimated prevalence of HIV infection within Kumba's permanent workforce in 2021 was 4.6% (2020: 4.8%). This year we achieved all three of the 90:90:90 targets on HIV management set by UNAIDS. At year end, 90% of full-time employees (5,914 employees) knew their HIV status (2020: 88%). The uptake of antiretroviral therapy (ART) by HIV-positive employees was 100% (2020: 100%), which included two new HIV infections (2020: 14 cases), one of which were sero-conversions. Of the known HIV-positive employees on ART, 90% have achieved viral suppression.

At year end, 83% of contractors knew their HIV status, of which 37 new HIV-positive cases were diagnosed. A total of 479 contractors are known to be HIV-positive, of whom 221 (100%) are on ART, with a 91% viral suppression rate.

In preventing and managing TB, we strive towards 100/100/100 targets: 100% of our employees and contractors must be screened for TB; 100% of those diagnosed with TB must receive treatment, and 100% of those individuals must complete their treatment. During 2021, 92% of our workforce were screened for TB. We diagnosed 14 new cases of non-occupational TB (seven employees and seven contractors), a 13% year-on-year decrease (2020: 16%). All were placed on treatment with a 100% completion rate. At 138 per 100,000 of the employees and contractors, our TB incidence rate has decreased by 5% year-on-year (2020: 146 per 100,000 of the employees) and remains well below the South African national rate of 615 per 100,000 (2019 WHO data). The rate of TB/HIV co-infection was 16% (2020: 56%). We are on track to meet the MHSC milestones for TB and HIV management.

Our focus on TB prevention includes active case finding, the provision of isoniazid (INH) for seropositive workers and those with existing silicosis, contact tracing and the "test and treat" HIV strategy. We have not diagnosed any cases of extra-pulmonary TB, multi-drug-resistant TB or extremely drug-resistant TB, or recorded any employee deaths as a result of HIV or TB infection.

→ **For additional performance tables** please refer to page 114 of this report.

Chronic disease and lifestyle management

We have maintained our focus on identifying and managing patients with chronic medical conditions. All employees with chronic conditions are referred for medical management and monitored regularly through our occupational health clinics to minimise associated risks.

The number of employees with chronic medical conditions has reduced to about 2,600 (23% of the workforce). Ninety-three percent of cases are controlled with treatment that is monitored in screening tests during medical surveillance examinations and wellness campaigns. The other 7% are newly diagnosed and people who defaulted on treatment. In these cases, further counselling and education is provided and individuals are enrolled on treatment programmes.

Based on assessments during 2021, 34% of our workforce is classified as overweight (2020: 31%) and 14.8% classified as obese, with 2% admitting to a sedentary lifestyle. The average participation rate in our weight loss programme at Sishen is 7% (2020: 22%). The key measure of success is sustained weight reduction. About 31% of the workforce has hypertension (2020: 21%), 15% have high cholesterol levels (2020: 10%) and 5% have diabetes mellitus (2020: 5%). The number of respiratory diseases has reduced due to Covid-19 preventive measures such as frequently wearing face masks, social distancing and good hand hygiene.

Our drug and alcohol policy allows for random testing of employees and compulsory testing of all employees in high-risk occupations during medical surveillance. In 2021, we recorded 900 level 2 incidents of positive alcohol and drug tests during medical surveillance examinations and post-incident (2020: 31).

Mental health support

We place an emphasis across our operations on proactively supporting employees in managing mental health-related issues. This support has been critical in helping to mitigate mental health effects associated with the Covid-19 pandemic, which can be greater for people with pre-existing mental health conditions. To promote emotional wellbeing, and support employees with early signs of emotional stress, we facilitate access to professional support. Kumba's employees and contractors who need psychosocial support have access to the Company-funded employee assistance programme (EAP), through a confidential 24-hour helpline, as well as face-to-face (virtual) and email contact. The facility is provided by an external service provider.

We monitor and analyse engagements to understand the most prevalent challenges, then design and implement initiatives to address these, and assess progress in mitigating problems. By year end, 1,082 employees had sought assistance during the year, compared to 1,007 in 2020. In 2021, the top reasons for consultation (similar with the previous year) were: stress (8.9%), relationship issues (5.4%), organisational issues (6.3%), trauma (2.8%), health and lifestyle issues (4.7%), and addictive behaviours (2.5%).

We deliver awareness and training sessions to empower managers and employees on managing the most prevalent issues, identified above, and on relationships, stress management and building mental resilience. These engagements with managers include a focus on how to identify vulnerable employees. We also train peer educators and shift supervisors to act as mental health first aiders.

Financial wellbeing

Mental health and other wellbeing issues are often linked to financial difficulties. Kumba engages a service provider to run financial wellbeing support services to address these causes and focus on mitigating over-indebtedness. We offer support

Employee and community health and wellbeing continued

on-site at all our operations. The benefits are evident in the improved financial and mental health for thousands of employees involved. In 2021, a total of 198 employees accessed Summit financial services on-site by requesting individual assistance. A further 319 employees also engaged with Summit during targeted training sessions. In 2021, the financial status of employees improved by 13% with 35% of employees deemed to have an unhealthy financial status reduced to 22% by end of 2021. Summit services in 2021 resulted in a total savings and refunds of just over R9.8 million for employees with over R9 million attributed to debt-relief instalments and savings.

Absenteeism

Initiatives that support employees in achieving optimal levels of health also assist in reducing levels of absenteeism, which can have a significant impact on the ability of our teams to execute planned tasks safely and effectively.

The total absenteeism rate (from injuries on duty, non-work-related injuries and sickness or due to Covid-19 symptoms was 5.7% at year end, compared to 2.6% in 2020. Barring the negative impacts of Covid-19, we continue to drive lower levels of non-work-related illness through improved sick leave and medical case management at Sishen, and active case management of employees with acute and chronic medical problems.

Absenteeism	**2021**	2020	2019
Absenteeism due to injury on duty	**0.10**	0.05	0.05
Absenteeism due to non-work-related illness and injuries	**5.61**	2.57	2.39
Total absenteeism rate	**5.71**	2.62	2.44

Community healthcare

Our community health initiatives in 2021 focused on contributing meaningfully to mitigate the impact of the Covid-19 pandemic on lives and livelihoods. Our community response plans this year included a focus on promoting and facilitating access to Covid-19 vaccinations. We have also continued to provide PPE and hygiene packs, food packages for vulnerable community members, and support community health service provision. As part of the *WeCare* programme, we are implementing a community primary healthcare plan, supporting remote host community clinics in screening, testing, tracing and caring for positive cases, while managing existing chronic diseases.

→ **An overview of our contribution is provided** on page 76.

We also provide support to combat gender-based and domestic violence.

Our community healthcare initiatives continue to improve access to quality medical and healthcare services and to alleviate some of the mounting pressure on health service delivery by government. Kumba's diverse community health programme includes making improvements to health infrastructure in local municipalities, monitoring health indicators and providing training for healthcare professionals, as well as educating on TB control, alcohol and drugs, diabetes and hypertension, and sexual and reproductive health. Our principal ongoing initiatives are identified below.

Our comprehensive socio-economic assessments in local communities using the Social Way Toolkit (see page 66), include health considerations that are also included in social management plans. Kumba spent R59.0 million this year on community healthcare projects (2020: R115.6 million), many of which were integrated as part of our Covid-19 community response plan.

In implementing our sustainability strategy, Kolomela and Sishen have developed site-level stretch targets linked to UNSDG 3 and selecting initiatives to achieve these targets. To inform this process, we completed health baseline assessments to establish baselines of locally relevant health and wellbeing priorities. This will include identifying programmes that provide a systemic response to substance abuse, TB and HIV/Aids. Our strategies will make provision for the evolving and uncertain Covid-19 landscape. Our 2025 milestone is to be halfway to closing the gaps between baselines and achieving UNSDG 3 targets for health in our host communities by 2030, with a particular focus on girls, young women and people with disabilities.

We provide HIV-related services and primary healthcare services to mine employees, contractors and host communities through UGM wellness clinics, in partnership with the DoH. The clinic at Kathu collaborates closely with the surrounding public health clinics. Individuals registered on the disease management programme are closely monitored on an ongoing basis. The clinic has continued to focus on providing treatment while dealing with the pandemic. The UGM wellness clinic also runs an intensive community health education programme. In 2021, approximately 728 employees, 757 contractors and 4,774 community members across our operations visited UGM wellness clinics. Through the UGM wellness clinics, in 2021, 6,259 community members received HIV-related services and 4,493 community members were screened for TB. In supporting our host communities in managing HIV and TB and chronic diseases, our initiatives are more advanced at Sishen than at Kolomela. At all operations, we partner with NGOs and faith-based organisations in assisting community members with managing mental health and wellbeing challenges.

FAMSA rendered therapeutic services to 1,669 people of John Taolo Gaetsewe district in 2021. Therapeutic services covers a wide range of issues such as marital and family problems, depression (not on treatment, no medication) and child behaviour problems. A total of 20,995 people of John Taolo Gaetsewe district were reached through educational and skills programmes. Topics cover amongst others are sexual harassment, GBV and anti-bullying.

To assist in alleviating a shortage of local healthcare resources, with demands heightened as a result of the pandemic, this year we acquired and equipped four ambulances, which we handed over to the DoH to provide support in host communities.

Sishen's Batho Pele mobile clinics offer primary healthcare to people in remote rural areas in collaboration with the John Taolo Gaetsewe District Municipality, to screen for diseases and provide dental, ophthalmic and surgical services. In 2021, about 6,927 community members benefited from the services. The DoH manages the mobile clinics. Kolomela established a high-tech trauma care unit in 2016, which plays a valuable role in being able to accommodate and stabilise the sick and injured before they are transported to medical facilities that can provide definitive care, which are at least 200 km away. In Tsantsabane, Kolomela continued to support the primary healthcare facility in Postmasburg, equipping it with new facilities to treat Covid-19 patients.

New ambulances supplied by Kumba.

Community behavioural change programme

Anglo American's health and wellbeing community behavioural change programme leverages the *WeCare* programme to influence the sustained adoption of positive behaviours in mining communities of South Africa. Kolomela and Sishen initiated the programme by hosting workshops attended by stakeholders from various organisations. Key issues relating to the Covid-19 pandemic were discussed, as well as opportunities for behavioural change. Community action groups (CAGs) were established to drive interventions locally, while maintaining community ownership. Following further workshops, the CAG commenced field work.

Twenty-four community facilitators were trained on the positive deviance approach, including participatory community goal setting and monitoring. The objective was to drive behavioural change, sharing messaging on vaccination, Covid-19, routine healthcare and GBV support services. Personal engagements were held with 6,423 individuals and 931 families. An additional 609 individuals were reached via the social media platforms. We had 276 people assisting with vaccine registration, 56 and 44 community structures and mining communities were mapped at Sishen and Kolomela, respectively. Key observations from consultations are consistent with national findings, including initial misinformation surrounding Covid-19 and vaccination hesitation. An encouraging improvement in adherence with protocols was observed.

Workforce culture and capability

In this section

Talent and leadership		Inclusion and diversity
Highlights	**Learnings/challenges**	**Focus for 2022 and beyond**
Organisational restructure to create a future fit organisation, successfully completed without any forced retrenchments Improved (year-on-year) diversity profile at senior management and top management level Healthy talent pipeline across disciplines with a strong focus on local talent (Northern Cape) and good spread of HDSA and female candidates Partnering with a leading consulting company to co-create GBV interventions within Kumba and our communities Trained 96% of our workforce on our zero-tolerance stance on BHV	Covid-19 prevention measures and associated restrictions impacting our operating practices Restructuring exercise enabled a number of valuable employee movements and promotions, however certain areas of the business were negatively impacted Ongoing challenges in further improving levels of HDSA and female representation at senior management levels, as well as female representation at junior management levels, and disabled employees Incidents of GBV reported at our operations Clarifying role accountabilities, minimising bureaucratic processes and optimising team cohesion through Team+ (Kumba's performance management approach) remain critical leadership and culture success factors	Introduce and embed the new Anglo American talent management system across the organisation Implement first-line manager development programme for about 365 supervisors and operational leaders, to develop relevant leadership capabilities Reskilling employees to work in more technically advanced environment Advance diversity and improve female representation across the business, specifically in core disciplines, as well as greater representation of employees with disabilities

Our people are instrumental to how we live up to our purpose in everything we do. We strive to create safe, inclusive and diverse working environments that encourage high performance, accountability, care and innovation.

Creating a safe and caring working environment, in which everyone lives up to our values and Code of Conduct, provides a critical foundation for promoting our desired organisational culture and achieving our Tswelelopele objectives. Implementing strategic interventions aimed at identifying, developing and retaining talent, is an ongoing focus.

→ **See safety and health sections,** pages 38 to 55.
→ **See section on business conduct,** page 28.

The progress we have made in recent years in creating our desired culture and leadership behaviours has underpinned the resilience and ability shown by our leaders in navigating the Covid-19-related challenges impacting human resources management, and of our teams in adapting to new ways of working. The pandemic accelerated the need for new work models, including remote working and digital learning.

Given the volatility of our external operating environment, and to ensure that we accelerate our efforts to remain competitive and sustainable over the longer term, Kumba conducted an organisational restructuring during 2021 to ensure that we have the right structure to effectively and efficiently deliver on our strategic ambitions. The process was designed to create a fit-for-purpose organisational structure to realise efficiencies and improved productivity. The restructure impacted 26% of the workforce. It was announced in March 2021 and the process has been concluded with care and respect, ensuring no forced retrenchments.

In striving to be an employer of choice, Kumba is proud to be recognised as the top listed company in South Africa by the Sunday Times Top 10 Companies

Talent and leadership

We aim to attract the best people in the industry, and provide professional and personal development opportunities that empower everyone to fulfil their potential.

Talent and succession management

In assessing the capability of current and prospective employees, we consider their technical skills and knowledge, mental processing ability, social process skills, and their degree of drive and commitment. Our talent management strategy aims to ensure that we have the right people at the right place and at the right time. Every 24 months we conduct a talent identification process for non-bargaining employees in the organisation. We identify and allocate talent into different talent pools, to address weaknesses, realise new opportunities and support our diversity and inclusion roadmap.

In 2022, we will adopt and implement a new talent management system introduced by Anglo American across the organisation. The system will ensure a more robust approach to assessing employee performance and potential, including learning agility, through formal competency assessments. The outcomes will be automated and will assist in identifying high-performing employees with special talents and leadership capabilities, as potential successors in various positions. The platform will enable better integration and access to talent across Anglo American operations. This year we have provided training on the talent management process, equipping managers and their subordinates to have the right discussions to identify individual strengths and areas for development, enabling employees to make informed development and career decisions.

Our restructuring exercise has unlocked opportunities for people to progress within the organisation. Other areas of the business have been negatively impacted, including through our talent contribution to the broader Anglo American group. This included two Band 3 black women placed at Anglo American Platinum.

Through succession planning and talent pipeline development, we had 433 promotions, across Sishen, Kolomela and corporate office, ensuring that we nurture and retain our talent and institutional knowledge. Female appointments took priority in line with our Burning Ambition to have women in 33% of our leadership roles by 2023. There are a number of technical disciplines where filling roles with mature and seasoned talent remains challenging. However, our leadership academy and women leadership programmes are nurturing women with potential to fill these positions in future.

Our recruitment processes, including interviews and assessments, are predominantly conducted virtually.

Building leadership capability

A compelling culture is dependent on leadership being inspiring and motivating our people and their personal development. We have a diverse range of internal and external programmes to enhance the skills, knowledge and awareness of leaders, equipping them to be more effective in their roles and more accountable for their contribution in driving value. To strengthen our leadership pipeline, we implement the Anglo American leadership capability development framework, which provides a holistic yet focused approach to developing leadership capabilities.

Over the last four years we have been cultivating a unique experience for our employees. We have implemented innovative, high-quality leadership and culture interventions, focused on robust employee engagement, team development, a leadership 360-degree capability assessment, bespoke leadership programmes through globally-recognised Duke Corporate Education, and diversity workshops. These efforts are underpinned by our Kumba Leadership Code, which is fully aligned with the Anglo American plc values. Building on the foundations established through these ongoing interventions, we are now focusing more specifically on leader-led actions and behaviours to incrementally achieve leadership alignment and commitment to new, more effective ways of working.

Our recent employee engagement survey, that was implemented globally, attested to the fact that we are making steady progress on how leaders at Kumba are "showing up" on our Kumba Leadership Code, with an overall employee engagement score of 88%. We have a keen focus on cultivating more psychological safety in all our workplaces, and our Team+ performance management approach is one such vehicle to achieve this through instilling the practice of robust dialogue to achieve shared goals. Furthermore, we are intentional about eradicating all instances of BHV at Kumba.

Every month, we conduct a leadership session, virtually, known as a "Kgatelopele Call" (Setswana for progress), in which management is invited to participate in a review of business performance, including a specific focus on safety, health and environmental performance. Every two months, Exco, general managers and strategic project leaders convene for aligned discussions and decisions on the leadership and culture we aspire to embed at Kumba.

Enhancing front-line supervisor capability remains an important focus. Kolomela and Sishen implement a supervisor scorecard with clear monthly KPIs and a supervisor development programme that includes extensive one-on-one (in-person) coaching. As part of our restructuring process this year, during the recruitment/reappointment of supervisors we assessed the capability and potential of more than 390 candidates. We integrated the findings into the development of a customised front-line manager development programme aimed at building the relevant leadership and management capabilities. The programme will be launched in 2022 and rolled out to 295 supervisors, and an additional 65 operational leaders over 18 to 24 months. The development programme will include five days of contact classroom training and 14 weeks of coaching on the floor.

In building leadership capability, Kumba is committed to accelerating the recruitment, development and promotion of designated groups into under-represented occupational levels. We are encouraged that women account for 33% of our talent pool, of which 55% is represented by black women.

Workforce culture and capability continued

Developing our talent pool and pipeline

We aim to strengthen leadership and technical skills by developing an internal pipeline of successors for critical roles. We work with local schools and other education stakeholders to identify and develop skills in our youth to recruit directly from our local communities in the future.

Internal training and development interventions focus on providing skills training and also include learnerships, leadership development, mentorships, and career progression plans. We implement a learning management system that is predominantly digital/e-learning based. Skills training is managed by fully accredited training centres, equipping employees with the requisite skills to work safely, effectively and efficiently. Further training opportunities we offer employees include portable and transferable nationally accredited competencies and qualifications within their line of work, study assistance, and e-learning. All in-person capacity building programmes have Covid-19 protocols integrated to safeguard all trainees in the workplace.

In 2021, we invested a total of R232 million (2020: R263 million) on training and development delivered across 11,313 employees and contractors (100% of workforce), excluding refresher, induction and ex-leave training. Employees participating in training and development programmes were 93% HDSA and 38% women. The training delivered amounted to 5.4% of payroll at Sishen, 5.9% of payroll at Kolomela. Combined training spend across Kumba operations amounted to 6.1% of payroll (2020: 5.6%). Mining Charter III previously required 5% spend of wage bill on skills development.

In the young talent space, we develop technical talent for the Company through our three-year professionals-in-training (PIT) programme, which offers degree and diploma graduates the opportunity to obtain training and work experience during a fixed-term contract with the Company to cover their bursary debt. In 2021, 23 PITs were permanently appointed within the Company, of which eight were women, and no previous contracts terminated. We currently have 45 PITs in the pipeline (67% female, 91% HDSA, 20% local).

Our bursary programme supports the talent pipeline for our PIT programme and focuses on increasing female and local participation. Over the past three years the programme has maintained above 80% employment equity (EE) representation and over 50% to 60% female participation against the 30% female target. There were 46 bursars enrolled for 2021 in various fields of study, with 61% female and 98% HDSA representation. In 2021 we onboarded 23 new bursars (100% HDSA) for 2022. We support local learners to participate in a tertiary transition programme (bridging school) as potential candidates for bursaries and thereafter the graduate programme.

Kumba supports the Youth Employment Services (YES) Programme, a business-led collaboration with government and labour to assist South Africa's youth to gain work experience through employment placement. Every year, we place previously disadvantaged, unemployed youth from local communities into 12-month work experience and training opportunities in the Company. In 2021, we appointed 31 YES interns (52% female, and all local), in support function disciplines including finance, human resources, SHE and hygiene, and engineering. We issued the Interns with YES cellphones for YES-related communication and training. We will be assigning a bigger intake of 60 YES interns in 2022.

We estimate that more than 98% of Kumba employees are deemed to be functionally literate. We continue to provide training in skills that are transferable to industries outside mining, for community members as well as employees, to support alternative forms of employment.

Commitment to developing young talent – former Chief Executive Themba Mkhwanazi sponsors nine PIT graduates

Kumba's PIT programme is one of the longest running initiatives at the Company, ongoing since 2007. When the initiative's sustainability was challenged during the Company's financially challenging years, our outgoing Chief Executive Themba Mkhwanazi's commitment to the programme ensured its continuity. Every year we host a PIT symposium where the new graduates give presentations. The winner of the highest rated presentation receives a sponsored educational trip to one of our international Anglo American operations. At this year's symposium in October, Themba demonstrated his passion for talent development by announcing that he would personally sponsor all nine PITs presenting on the day, to visit overseas operations.

2021 Pit Symposium – Award Winners.

Training and developments statistics 2020

Programme	Number of participants	HDSA (%)	Female (%)	Expenditure (Rand million)
Mining and plant learners (operators)	218	46	46	17.9
Engineering learners (artisans and apprentices)	314	86	21	18.0
ABET training	20	70	70	0.7
Professionals in training	50	84	50	37.6
Bursaries	46	98	61	3.1
Bridging school	—	—	—	—
Portable skills training (capacity building of mine communities)	267	23	23	4.6
Internships (admin and engineering)	50	70	62	14.9
YES internship programme	31	97	52	2.4
Total	996	93	38	99.2

* The remainder of the total training spend (R133 million) was for other training initiatives including external courses and seminars.

Performance management and rewards structures

Rewarding successful business outcomes is central to delivering our desired high-performance culture supporting our Tswelelopele initiative. It is critical that we provide an appropriate level and mix of remuneration to attract, retain and motivate the right calibre of employee. Kumba also strives for a fair compensation dispensation with the principle of "equal work for equal pay" being applied across our diverse workforce.

Performance linked remuneration and incentives

Kumba implements a team-driven performance management approach, Team+. Introduced in 2019, the approach applies to middle management and above and aims to foster a purpose-led high-performance culture where everyone is working together as one team to deliver on our ambitious Tswelelopele strategic objectives and performance targets. The overall approach is well understood across the business and Exco has robustly role-modelled the approach. The Team+ routines have been fully co-opted into existing Exco routines and are cascading downwards effectively.

Business and team performance are measured against a structured set of key strategic business objectives cascaded throughout the non-bargaining category. The performance outcomes influence the specifics of the annual short-term incentive and derived long-term incentive. Senior leaders within the organisation are also incentivised with longer-term awards that are provided on meeting predetermined objectives that are in line with the interests of shareholders.

Our incentive framework makes clear provision for performance on relevant ESG indicators (20% of scorecard), including on the EOF, the total recordable case frequency rate, environmental incidents, carbon performance, dust emissions, and critical control monitoring.

Through our performance management programme, we have committed to offering attractive remuneration and employment benefits, together with effective incentives. Our guaranteed pay packages are designed to be competitive with both the national market and specifically the mining sector. We undertake regular benchmarks of pay and conditions to ensure that we remain competitive. Our recruitment strategies and succession planning maintain a strong focus on delivering on our goal of attracting women to leadership positions and in core mining activities, underpinned by our employee value proposition and to deliver on our women-in-mining strategy, which remains a priority objective.

→ **Details of Kumba's remuneration practices and performance are provided in our 2021 IR** (pages 112 to 141).

We implement a bargaining unit production bonus scheme that involves employees working towards monthly, quarterly, bi-annual and annual targets for specific key result areas including safety, production, productivity and attendance. In addition, employees can also qualify for a gain share bonus in the event of exceptional business performance, substantially exceeding budget targets.

Recognition of exceptional business contribution

Through our recognition programme called Applaud Awards, we make sure that we are putting our values into action and that we are following our Code . The Anglo American group-wide recognition programme has three levels: operational, Kumba level, and Anglo American GMC level. This creates both formal and informal ways of acknowledging individuals/teams across the business who go above and beyond to complete tasks and objectives. Award winners are selected through a rigorous adjudication panel process from a pool of nominees motivated by line management and peers. Recognition is awarded in the following five categories: safety, sustainability, collaboration, achiever and partnership. In 2021, we reinstated the physical celebration of the awards, at annual gala events.

Employee share ownership

Under Karolo, the broad-based employee share ownership (ESOP) scheme, the last award was made in August 2020, pending the design, approval and implementation of a new ESOP scheme for employees. A shareholder resolution was tabled and approved at the Company's annual general meeting of 14 May 2021 to extend Karolo in its current form for two more years, while keeping the optionality of extending the scheme for an additional third year, if required. The first new award took place in August 2021 (vesting in August 2024) and the second award will take place in August 2022 (vesting in August 2025), while an option will exist for Kumba to make a third award in August 2023 (vesting in August 2026), if the circumstances require it.

Workforce culture and capability continued

An inclusive and diverse working environment

Creating a more inclusive and diverse workplace is business-critical for us and a key component in building a high-performance culture and sustainable and healthy business. A diverse and inclusive culture ensures that we have access to the widest possible pool of talent and diversity of thought and perspectives, while providing equal opportunity for all to fulfil their potential.

Underpinned by our Code of Conduct and Values, our inclusion and diversity policy and mandatory leadership training set out the behaviours we expect of all our colleagues. We implement an inclusion and diversity strategy that aims to achieve the following four outcomes:

- leaders demonstrably value the diversity and unique contribution of every employee
- colleagues feel able to bring their whole selves to work, regardless of gender, sexual orientation, age, race, ethnicity, religion, national origin or disability, including mental health
- our workplace is supportive, fair, adaptable and involving for all
- the working environment is safe, effective and enabling.

Achieving sustainable and tangible transformation is a business imperative and is core to our licence to operate. We implement a comprehensive human resources transformation strategy. Our operations are implementing five-year EE plans that set numerical targets and goals for EE, including affirmative action measures.

As part of our drive to provide a working environment that is safe, effective and enabling, we have been fostering a commitment to involve, support and enable colleagues living with a physical disability, learning difficulty or mental health issue, to reach their full potential. We implement a disabled persons strategy aimed at attracting and retaining more people with disabilities. This will include creating opportunities to leverage suitable technology, work remotely, earmarking positions for people with disabilities, and ensuring our workplaces are conducive for disabled employees.

Tackling BHV, including gender-based violence

In our efforts to create a physically and psychologically safer environment, Kumba has maintained a focus on raising awareness and eliminating BHV and gender-based violence (GBV), and has strengthened its approach.

We encourage the reporting of any concerns through various support channels including our confidential reporting platform YourVoice. This drive is supported by Kumba's domestic violence working group, which considers related policies, awareness creation as well as support and prevention programmes. In March 2021, we launched the group "Recognise and respond to domestic violence group policy". We rigorously enforce this policy and our policy on BHV. This has been supported by BHV train-the-trainer workshops to increase internal capacity to identify and address risks and contraventions. The training has been well received across all Kumba sites, with each site training over 96% of their employees. In total 5,720 employees have been trained.

In taking a longer-term approach to tackling issues of violence against women, taking into account the systemic nature of GBV, we have partnered with Reos Partners, a global 'social agitation' consulting company, to co-create GBV interventions within Kumba and our communities, with conversations guiding the development of future initiatives. Our Leadership Code anchors this work and we have articulated a set of principles that will govern our work on GBV. The initiative will be evidence-based and results oriented.

Mainstreaming gender equality

Gender imbalance has long been a feature of the mining industry and we have set clear pathways to greater female representation. Kumba has remained committed during the Covid-19 pandemic in striving to create an environment conducive to gender equality and to address barriers to the employment, retention and advancement of women. Our commitment to improving female representation across the business, specifically in core disciplines, is reflected in our target to achieve 33% representation of women at management levels by 2023.

Sishen and Kolomela continue to identify opportunities to improve the appointment and promotion of women in core roles, especially at supervisory level. Kolomela is our flagship operation in driving the appointment of women in core technical roles, with 28% representation. Sishen, which has 17% women representation in core roles, has targeted development plans for women in technical fields, including increasing the graduate pipeline in areas that are not adequately represented. We aim to leverage new technologies that will benefit women within core mining operations, and allow them to perform on the same level as their male counterparts.

We have improved levels of female representation across the business, specifically in core disciplines. This year 142 women were appointed into leadership positions (both core and support services) including the appointment of Mpumi Zikalala as Chief Executive for Kumba effective January 2022, and our new Executive head of safety and sustainable development, Nandi Sibanyoni. Following the transfer of our Executive head of human resources, Virginia Tyobeka, to Anglo American Platinum, we are in the process of appointing a black woman to assume this role.

Since the start of the pandemic, we have appointed 377 women (240 trainees, 84 fixed-term, 53 permanent). By year end, women made up 25% of our overall workforce (2020: 24%), 22% of core disciplines (2020: 21%), and 29% of management positions (2020: 27%). We implement a women-in-mining (WIM) strategy and intervention plan to promote the integration of women in the workplace, especially in core functions. A WIM steering committee oversees performance against objectives. Capacity building is critical, and we aim to ensure at least 30% women representation in our talent pipeline programmes. Kumba has policies and procedures relating to sexual harassment and proactively addresses this issue in the workplace and in host communities.

Female representation at Kumba

Workforce	Core mining
25%	20%
Board	**PITs**
45%	50%
Management	**Bursars**
29%	61%

Kumba actively supports the initiatives driven by the Minerals Council to advance women in the industry. This includes the Women in Mining leadership forum established in 2021, comprising senior executives from 16 companies, which is supported by a Women in Mining Task Team. The forum's goal is an industry-wide commitment with a clear ambition, strategy and action plan towards gender equality in mining.

Our commitment to promoting gender equality is reflected in our inclusion in the Bloomberg 2022 Gender-Equality Index (GEI) which recognises companies committed to transparency in gender reporting and advancing women's equality in the workplace. The GEI measures gender equality across five pillars: female leadership and talent pipeline, equal pay and gender pay parity, inclusive culture, sexual harassment policies, and pro-women brand. Kumba's GEI score was 2.49%. Gender does not play a role in determining salary levels for our employees. Qualifications and experience are the key determinants.

Equitable representation

We made good progress this year in promoting equitable representation at all levels at our operations. At senior management and top management level, the white male demographic reduced from 47% to 43%, the black male demographic increased from 23% to 29%, and black women from 11% to 14%. Overall female representation has improved by 1% across Band 5 and Band 4 roles.

→ **Details of Kumba's diversity profile are provided in our performance tables in the appendix** (pages 112 to 113).

Kumba's workforce profile meets the targets, previously recommended by Mining Charter III for Board, Exco, middle management, junior management (HDSA), and core levels. We continue to focus on improving levels of HDSA and female representation at senior management level, and female representation at junior management levels. Increasing the number of employees with disabilities is another priority.

We currently employ 41 people with disabilities (2020: 40), with 13 in managerial positions (2020: 13). This represents 0.7% of our workforce, against targets previously recommended by Mining Charter III of 1.5%. We expect to see significant improvements once our disability strategy gains traction.

This year we progressed in advancing HDSA representation at management levels. At year end, HDSAs represented 89% of our total workforce (2020: 89%) and held 72% of management positions (2020: 75%).

HDSA and women in management

	Total management			% HDSA in management			% women in management		
	2021	2020	2019	**2021**	2020	2019	**2021**	2020	2019
Corporate office	**297**	231	238	**70**	71	65	**40**	47	37
Sishen	**729**	747	719	**73**	70	69	**22**	20	19
Kolomela	**342**	340	323	**83**	78	76	**33**	31	31
Group	**1,368**	1,318	1,280	**75**	72	71	**29**	27	25

Supporting labour rights

As expressed in Anglo American's human rights policy, and as signatories to the UN Global Compact, we are committed to upholding the labour rights principles of the International Labour Organization through the implementation of fair employment practices. We have clear policies and processes in place to ensure observance of human rights, including the right to freedom of association and collective bargaining, the eradication of child and forced labour, and non-discrimination. Observance of these rights is required of all our operations and suppliers, irrespective of location. Our responsible sourcing standard stipulates that all suppliers shall respect all labour and human rights throughout their own value chain.

No incidents of employing underage individuals or forced labour were reported in 2021, and there were no significant incidents of discrimination or grievances regarding labour practices.

Employee engagement and workforce relations

We have maintained strong employee relations, reflected in an employee turnover rate of 3.2%, well below the 7.6% industry benchmark. We maintain high levels of employee engagement based on the shared values of respect and care, collaborative relationships with unions, and effective communication with employees. Kumba enjoys a stable and productive industrial relations environment, with no industrial action-related work stoppage experienced since 2012. Our employee relations are strengthened by our constructive relationship with national, provincial and local government through regular engagement, strong regulatory compliance, and encouraging performance on transformation and developmental objectives.

Kumba's restructuring exercise this year was a smooth process concluded in alignment with labour unions. The section 189 consultation process began in March 2021 and was facilitated by the Commission for Conciliation, Mediation and Arbitration (CCMA) through to its conclusion in November with an

Workforce culture and capability continued

agreement signed with the unions. The new organisational structure was finalised at the end of November. About 1,620 employees were impacted during the restructuring. Due care was taken to ensure that forced job losses were minimised as far as possible through various job-loss avoidance measures.

Most employees have been redeployed to positions at other sites. Additional roles have been introduced, reducing the number that could not be accommodated. Some employees impacted opted for voluntary retirement and separation for medical reasons. Other measures included natural attrition, reskilling and retraining, and voluntary separation. The voluntary separation package, negotiated with unions, included the opportunity to receive training in a chosen "portable skill" aimed at providing the individual with skills to utilise in other occupations/jobs in the future. The restructuring exercise was concluded in January, with no forced retrenchments.

We conduct quarterly quick pulse employee surveys and the global colleague insight survey take place twice a year (see on the right) at our operations to gain insights into how effectively we are engaging with our employees and delivering on our objectives, and to better understand where we can improve.

A new multi-year collective bargaining agreement was signed with Association of Mineworkers and Construction Union (AMCU) and National Union of Mineworkers (NUM) in August 2020. The agreement provides a total negotiated increases, applicable to basic salaries, housing allowances, thirteenth cheques and fixed allowances for all bargaining unit employees. Certain issues were not finalised during the wage negotiations and were referred to working groups. Engagements are in progress on issues including productivity improvement initiatives, skills development, medical cover, and sick leave.

In 2021, 36 employee grievances were referred to the CCMA and labour court, some of these cases related to the prior year but were deferred due to Covid-19 restrictions (2020: eight grievances).

In 2021, 98% of the total workforce was represented by one of the three recognised unions (see table below). The NUM remains the dominant union with 66% representation within the bargaining category. In total, 74% of our employees are covered by collective agreements (excluding management). These agreements address salary and benefit reviews, the participation of unions in decision-making at different forums and consultation and notice periods regarding any significant organisational changes. The minimum notice period for any organisational change at Kumba is 30 days.

Union membership in 2021 (% of bargaining categories)

	NUM	AMCU	Solidarity	Agency shop
Corporate office*	29.63	22.22	48.15	—
Sishen	68.81	14.13	15.45	1.61
Kolomela	59.55	36.06	1.2	3.37
Group	65.96	19.2	12.27	2

* Corporate office – no organisational rights.

Gaining insights into what we are doing well and where we can further improve

The outcomes from the employee "global pulse survey" provide insights on what we are doing well and where we can further improve, the survey comprised of various topics, including, engagement, safety and wellbeing. This year, 1,697 Kumba respondents participated. Our overall engagement level of 88% indicates that we are doing very well on engaging our people; 88% of our employees report having a sense of pride in working for the Company, with 84% experiencing job satisfaction and 92% happy to go the extra mile for the Company. Our efforts around leadership and culture seem to be yielding positive results.

Attesting to Kumba's commitment to safety, 89% of our employees feel that safety is prioritised over production. The survey primarily focused on wellbeing. Of concern is that 54% of the employees engaged confirmed experiencing strain in their job, with Covid-19 being a major impact. Other negative impacts are an excessive workload, lack of management support, and too many technical/process issues. Wellbeing resources are perceived positively with 91% of employees aware of resources available. In evaluating key drivers of wellbeing, the results indicated where we should focus. We will seek to better understand the strain that our employees are under at work and recognise that clarifying role accountabilities, minimising bureaucratic processes and optimising team cohesion through Team+ performance management remain critical leadership and culture success factors. In promoting mental health and personal resilience, we will continue to focus on psychological safety to enable employees to operate at their full potential and will continue to refine World of Wellness (WOW) programme offerings.

Workforce movement and availability

Covid-19 continued to impact labour availability, including employees in the process of either being tested or awaiting results, or in quarantine or isolation.

Absenteeism, or workforce unavailability, covers both planned leave (annual, maternity, study, union) and unplanned leave (sick, unpaid, absent without leave, special, family responsibility, injury on duty, suspension, unprotected strike).

Kumba's employee turnover rate (the number of permanent employee resignations as a percentage of total permanent employees) was 3.21%, well below the 7.6% industry benchmark. New hires amounted to 3.3% of permanent employees.

Kumba has a policy of employing people from communities close to our operations where possible. We seek to respond to high expectations for us to increase levels of local recruitment (from our host communities). We only recruit people from outside the Northern Cape area if a specific skill is not available locally. At year end, 79% of employees were local.

At year end, our workforce totalled 11,290 employees (2020: 11,392 employees): 6,146 full-time permanent employees (2020: 6,184 employees), 4,486 full-time contractors (mining contractors involved with the core processes of the mine) (2020: 4,556 contractors), and 658 learnerships (2020: 652 learnerships). During the year we also employed 1,904 fixed-term project contractors (contractors with an approved supply chain contract with Kumba to perform capital projects) (2020: 953 contractors).

Employees and contractors in 2021 (excluding learnerships)

	Full-time permanent (full-time equivalent and permanent employees)		Full-time contractor (mining)	
At year end	Total	Female	Total	Female
Corporate office	292	148	—	—
Sishen	4,235	926	3,199	291
Kolomela	1,448	441	1,287	124
Technical services	98	30	—	—
Projects	48	12	—	—
Saldanha Bay	25	9	—	—
Total	**6,146**	**1,566**	**4,486**	**415**

Building social capital

South Africa's economic and social challenges have been compounded by the effects of the pandemic over the last two years. Against this context, Kumba stays true to its purpose of "Re-imagining mining to improve people's lives" and is committed to supporting our stakeholders to address the challenges brought by the pandemic and to make a meaningful and enduring contribution to South Africa's economic and social fabric.

- R257.5 million in direct social investment
- R22.7 billion paid in direct and indirect taxes to government
- R4.1 billion on localised preferential procurement
- R10.3 billion paid to BEE suppliers

Back to school at HTT Bidi Primary School in Postmasburg during the Covid-19 pandemic.

AngloAmerican
KUMBA IRON ORE
KOLOMELA MINE
AngloAmerican
KUMBA IRON ORE
KOLOMELA MINE

Upholding high social standards

Highlights	Learnings/challenges	Focus for 2022 and beyond
Transition to full compliance with updated Anglo American Social Way (version 3.0) progressing well, with Sishen and Kolomela rated the top two performing sites across the Anglo American group Reduction in social incidents from 19 to nine Kolomela and Sishen commended for leadership-driven integration of social performance, while Kolomela recognised for comprehensive monitoring and evaluation framework Kumba successfully relocated all Dingleton households to Siyathemba Initiative for Responsible Mining Assurance (IRMA) third-party certification commenced with self-assessment and interim audit undertaken	Kumba achieved 78% requirements on target for the Anglo American Social Way, with a target of 80% or more Protests and ongoing risk of unrest at our resettlement suburb Siyathemba, with demands largely related to additional cash benefits, and employment and procurement opportunities IRMA on-site audit date amended due to health and safety risks associated with Covid-19	Performance expectation for the sites to fully implement the Anglo American Social Way version 3.0 in 2022 Focus areas for Social Way include establishment of community engagement forum and monitoring and evaluation across requirements Collaborative regional development roadmap and platform developed, projects and initiatives being implemented Social impacts and risk management IRMA on-site audit and certification Understanding evolving needs and priorities of the communities in which we operate

We hold ourselves to the highest standards of social performance to ensure that we deliver a lasting, positive contribution to local communities and those affected by our activities, beyond the life of our mines. This starts with understanding and responding to the needs and priorities of communities to create an environment where stakeholders can prosper sustainably. Fulfilling this commitment is critical to our long-term success as a business.

Management approach

The SMP provides a strategy that places sustainability at the heart of our decision-making, underpinned by critical foundations and driven by Collaborative regional development to bring long-term sustainable development opportunities to the regions around our operations. Kolomela and Sishen have developed site-based strategies for livelihoods, health and wellbeing and education under the thriving communities pillar of the SMP outlining focus areas for 2021 and beyond. The Impact Catalyst, Northern Cape was successfully launched in June 2021, covering a myriad of socio-economic development initiatives for the province through key partnerships. The Initiative for Responsible Mining Assurance (IRMA) third-party certification is being conducted at Sishen and Kolomela under ethical value chains driven by the trusted corporate leader pillar of the SMP. The sites conducted a self-assessment and interim virtual audit in 2021. An on-site audit is scheduled for 2022.

The Social Way version 3.0 is our integrated social performance management system, launched in January 2020 across Anglo American, and a critical foundation of the SMP. The Social Way sets out clear requirements to engage with affected and interested stakeholders, avoid, prevent, and, where appropriate, mitigate and remediate adverse social impacts, and maximise development opportunities. The integrated social performance management system brings under one umbrella the governing policy (what we do), the Social Way Toolkit (how we do it – focusing on governance, review and planning, engagement and analysis, as well as risk prevention and management), and Assurance Framework (monitoring of implementation and ensuring continuous improvement).

Kumba has been the leading Anglo American business unit in implementing the Social Way 3.0. 2021 marked the second of the three-year transition to the Social Way version 3.0. Kolomela and Sishen were the top two performing sites across the Anglo American group, with the sites achieving an average score of 78% of the requirements. The sites were commended for their leadership-driven integration of social performance into the appropriate functions and processes. Kolomela was recognised for their comprehensive monitoring and evaluation framework which links social performance activities, while Sishen was praised for its comprehensive and cross-functional review and update of its community emergency preparedness and response plan.

Kumba achieved 82% implementation across the requirements with the aim to reach full implementation and compliance to the Social Way in 2022. Key focus areas include establishing a community engagement forum, monitoring and evaluation across requirements as well as meeting the requirements under community health and safety, site-induced migration, contractor social management and indigenous people's plan. Once transition to the Social Way 3.0 has been completed, we will use the new management system to push continuous improvement and embed social performance into decision-making and process planning across our business, to minimise any negative impact of our activities, while expanding the positive impact.

Kumba's Social Way steering committee continues to drive an integrated, cross-functional and collaborative approach to social performance management. The committee is led by the Executive head of corporate affairs and includes general managers supported by social performance teams and management committees at sites. Social performance management committees have been established at both Kolomela and Sishen comprising site leadership teams. Senior managers are held accountable for social performance and receive ongoing sensitisation and engagement on requirements.

Grievances and incidents

The Social Way provides clear guidance on how to manage grievances and incidents. The sites are required to develop and implement grievance and incident management procedures guiding screening, investigation, and the reporting and close-out of incidents and grievances based on the social consequences. The site procedures are designed to ensure transparent handling and resolution of issues, and to promote care, respect and accountability.

Whereas previously we have reported social incidents rated levels 3 to 5 (moderate to significant) to our Board, and included them on the Chief Executive's quarterly performance scorecard, we now only report incidents rated levels 4 and 5. As part of the roll-out of the new Social Way 3.0, the incident levels have been redefined and are now more comparable to occupational health and safety and business consequence definitions. With this focus on more material incidents, we can ensure that the right conversations happen at senior forums. Our procedures commit us to dealing with them in a transparent, accountable and respectful manner.

During 2021 we recorded and reviewed 73 social complaints and grievances across our sites (2020: 45), and nine social incidents. Consistent with the previous year, the review highlighted that social challenges at both Kolomela and Sishen are primarily related to expectations for greater procurement and local recruitment opportunities, community safety relating to road conditions as well as demands from the resettled community. We continue to deal transparently with social grievances, and seek to communicate opportunities more openly and to remove barriers to local employment and entrepreneurship.

→ **Our efforts to build the capacity of SMMEs to better position themselves for opportunities are reviewed** on page 73**, and our efforts to support youth employment opportunities are reviewed** on page 75**.**

We continuously engage with the municipalities for both operations to address challenges in delivering sustainable services to the communities and addressing their critical needs.

Of all the complaints, grievances and incidents for 2021, five were at level 3 or 4. During 2021, social tensions increased around our operations ahead of the 2021 local elections and during the civil unrest in Gauteng and KwaZulu-Natal in July.

Protests in our resettlement suburb Siyathemba in July 2021 focused on demands for additional cash benefit, and greater local employment and procurement opportunities. We implemented an action plan to reset the relationship and facilitate stability based on comprehensive internal (crisis committee) and external (joint operating committee, municipal, faith-based leadership and other) engagements. Kumba has maintained its commitments.

Our stakeholder engagement processes are designed to mitigate any potential tension and misunderstanding on the work we are doing. Engagements continued with, among others, local business forums, municipalities, and the Departments of Mineral Resources and Energy, Health, Education, Department of Cooperative Governance and Traditional Affairs (CoGTA) and Social Development (at provincial level), to facilitate the implementation of various programmes and to provide an update on key developments and opportunities.

Responsible sourcing

Kumba's vision is to be part of a value chain that supports and reinforces positive human rights and sustainability outcomes. We prioritise ethical decision-making when purchasing goods and services, allowing us to work more closely with our suppliers who provide us with goods, labour and services that support exploration, mining, transportation, aggregation, processing and technology development. Kumba worked with about 1,803 suppliers in 2021, with only around 3% of our procurement expenditure directed towards 35 global and large suppliers.

Our responsible sourcing standard sets out our expectations for current and prospective suppliers. It requires suppliers to commit to:

- protect the safety and health of their workforce
- demonstrate their protection of the environment
- respect all labour and human rights through their value chains
- be good corporate citizens within the communities and regions where they operate
- conduct business with the utmost integrity, and always act in a proper manner, fairly and lawfully

The standard defines minimum expectations for each of these areas, and sets more ambitious goals for suppliers to work towards. We set out requirements for risk assessments, for a safe working environment, and for responsible employee relations. We also expect all suppliers to contribute actively to social and economic improvement. The standard is closely aligned with our own policies, including our human rights policy, SHE policy, and business integrity policy. In particular, the standard highlights the importance of inclusion and diversity, and the role we expect suppliers to play in identifying and addressing modern slavery risk.

→ For more information see: angloamerican.com/suppliers/responsible-sourcing

Upholding high social standards continued

Through a combination of self-assessments, third-party audits and bespoke capacity building programmes, we support suppliers to understand and flag potential risks and improve their management controls. Based on potential for sustainability risk, suppliers across our global procurement categories are identified and required to complete self-assessments or third-party audits. Where risks are flagged, corrective actions are agreed and monitored. In some cases, additional guidance and bespoke capacity development programmes are provided to support reducing risk.

We continue to raise awareness of the standard's requirements and build supplier capacity to support the identification and management of potential sustainability risks. Small and medium-sized supplier businesses often have difficulty in demonstrating procedures and practices linked to core legal requirements. To support them in meeting our requirements, we provide tailored programmes and access to training, as well as mentorship.

Responsible resettlement

Displacement and resettlement as a result of our activities is a complex and sensitive issue, which we handle in line with international best practice. In line with Anglo American's resettlement governance processes, we now treat all community resettlements as capital investment projects. This means resettlement planning undergoes rigorous assurance and review by senior leaders, supported by subject matter experts.

Kumba's successful relocation of the Dingleton community to Siyathemba, the new host site area in Kathu, was undertaken in line with the best practice codes of the IFC Performance Standard 5 and has maintained full compliance with the Anglo American Social Way. The world-class relocation process began in 2014 and was finalised this year, with the last two remaining property owners relocated from the Dingleton mining area in May 2021, following a lengthy dispute.

The R3 billion Dingleton resettlement project, undertaken to enable the extension of Sishen mine to the Dingleton area, saw Kumba move about 3,400 people from Dingleton to Siyathemba and other areas around Kathu and the Northern Cape province. The newly built suburb has neat grids of over 500 new houses, each with a solar geyser and rainwater tank, as well as seven churches, police stations, schools, and a youth centre. Rental accommodation (for over 600 renters and their families) was temporarily replaced by the construction of 104 units at the Siyathemba flats, as well as the construction of prefabricated units to replace shanties. As part of the long-term Dingleton renters' strategy, the Siyathemba flats (the building and the stand) and 142 vacant and serviced stands have been donated to the Gamagara local municipality.

Kumba continues to monitor and strengthen relations with the community at Siyathemba and to invest in ensuring the improvement of the livelihood and quality of life of the resettled families, especially the vulnerable; we also support local businesses and entrepreneurs, particularly the youth, with training and business opportunities. Highlights this year included completing the establishment of a Siyathemba clinic in June 2021 and conducting 206 health talks for young people, reaching 3,411 people on various themes and topics. Sports and recreational activities are ongoing at the youth centre with full Covid-19 regulation adherence.

The Siyathemba concerned group has nevertheless raised certain various concerns, most notably about unemployment levels, which we aim to address through skills development initiatives as part of our social and labour plans (SLP). The post resettlement working group continues to operate in collaboration with Gamagara local municipality to ensure integration of the resettled community into the greater Kathu. A trust is in place to pay for the rates and taxes of the new houses for 20 years and five-year gradual phase-off period.

Strict monitoring and evaluation of the resettlement project is undertaken and an extensive grievance mechanism is maintained by the on-site resettlement office and support staff. All efforts to complete outstanding estates and maintenance issues are being done by the team on-site. A completion audit has been commissioned by an independent service provider and the final report is expected end of May 2022. Kumba will ensure that any identified corrective measures will be carried out.

Illegal mining

The South African mining industry faces a long-standing risk of illegal mining activities. At Kumba we are fortunate that the risk is insignificant due to the bulk commodity that we mine. We do, however, have access control processes in place at all our operations to mitigate the risk of unauthorised entry.

Making a positive social contribution

In this section

Supporting local economies	Building local capacity	Sharing the benefits of mining
Highlights	Learnings/challenges	Focus for 2022 and beyond
Spend with host community suppliers has grown exponentially, from R500 million in 2017 to R4.1 billion in 2021 Kumba has committed R100 million to facilitate economic revitalisation in host communities, recognising the impacts of the pandemic An industry first, Kumba awarded a R1.6 billion mining contract to a new black-owned and community-based joint venture Livelihoods, health and wellbeing and education strategies developed under thriving communities pillar of the SMP Continued support through the Anglo American education programme with the launch of Phase 2 of the initiative Impact Catalyst Northern Cape launched covering a myriad of socio-economic development initiatives for the province through key partnerships Started implementing a new housing strategy and policy aimed at mitigating the housing shortage at Kolomela	Kolomela levels of youth procurement in mining services slightly below target Covid-19-related impacts have impacted on the timelines for delivery of certain programmes Housing shortage at Kolomela Ensuring 100% compliance in terms of stated commitments in SLPs at all times Service delivery within our communities in particular water and waste management Potential misalignment on key community upliftment needs Evolving communities' sentiments of fair share and resource settlement	Increase localised procurement spend to R4.5 billion in 2022 Develop supplier capacity in three municipalities where Kumba's spend is low Northern Cape Impact Catalyst will facilitate implementation of the integrated collaborative regional development initiatives Phased roll-out of new Company housing strategy and policies designed to facilitate and incentivise home ownership Refine site-specific plans and KPIs, and implement initiatives to meet SMP thriving community targets Impact assessments on our projects and programmes Continued support from the municipal capacity development programme (MCDP) programme focusing on councillor capacitation

Kumba contributes to communities both directly and indirectly, through the taxes and royalties we pay, the jobs we create, the local workforces we upskill, the local business opportunities we generate, and the education and community health initiatives we support.

Local communities rightly expect mining to bring significant economic benefits, and our goal is to leave host communities better off than when we arrived. Kumba aims to create thriving communities by acting as a catalyst for enduring economic prosperity through employment, and by creating a more inclusive supply chain that generates shared sustainable prosperity in the communities around our operations, and a collaborative approach to regional development to drive sustained economic diversification. We take a long-term view, designing our operations and community development interventions to enable communities and economies to thrive well beyond the closure of our mines.

Covid-19 response and recovery efforts

Socio-economic conditions in communities have been exacerbated during the pandemic. Our short-term initiatives this year to manage the crisis included providing Covid-19 management and vaccination support at sites, supporting community outreach Covid-19 vaccination support, raising community awareness and driving behavioural change, and distributing *WeCare* packs to households. Investing in sustained recovery, Kumba has committed R100 million to facilitate economic revitalisation in host communities. We have engaged with stakeholders to identify focus areas and agree on interventions to be implemented early in 2022. These will include unemployment programmes, education programmes, and infrastructure repair programmes.

Making a positive social contribution continued

SMP targets and progress

We strive to make progress towards our socio-economic development targets and stretch goal of thriving communities with better health, education and level of employment. Various health, education and livelihood programmes are at different stages of implementation, in line with the targets set in the SMP. In 2020, we established our baselines, and this year we have been developing strategies to accelerate impact and meet the targets. Next year we will be refining the plans, developing KPIs and implementing the initiatives under each of the pillars.

Thriving communities

Education

Our vision is for all children in host communities to have access to excellent education and training.

2030 milestone: Schools in host communities to perform within the top 20% of state schools nationally. All operations will implement measures to support education.

2025 milestone: Schools in host communities to perform within the top 30% of state schools nationally.

Health and wellbeing

Our vision is for the UNSDG targets for health to be achieved for all our host communities.

2030 milestone: UNSDG 3 targets for health to be achieved in our host communities.

Livelihoods

Our vision is shared sustainable prosperity in our host communities.

2030 milestone: Five jobs created/supported off-site for every job on-site.

2025 milestone: Three jobs created/supported off-site for every job on-site. The targets apply at a regional level and are not directly linked between mines and mine communities.

Collaborating towards an integrated regional vision

Anglo American's collaborative regional development (CRD) approach, our model for bringing long-term sustainable development opportunities to regions around our operations, is at the heart of our SMP. It is a model that brings socio-economic resilience to communities and regions and has partnership at its core. The CRD approach recognises that safe, responsible and productive mines need to operate in areas that are thriving. The changing nature of mining requires longer-term, sustainable, regional development that can bring prosperity beyond the employment and supply chain opportunities that mining provides. In short, we want our communities to benefit from our operations, but not become dependent upon them, helping them to thrive long after the mine itself has closed.

This innovative approach starts by identifying socio-economic development opportunities with the greatest potential in a region via spatial analysis and planning. This creates a basis on which partnerships can be built, bringing together businesses, local and national governments, community representatives, faith groups, academics, NGOs and others to build a common and shared vision for the future. The partnerships that are built diversify and therefore strengthen the regional economy as a whole and create tailored, coherent, integrated strategies based on government and private sector collaboration.

The shared value vision for the Northern Cape region, agreed in 2019 between these diverse stakeholders, has provided the foundation for developing and implementing an integrated strategy. A change in strategy was agreed upon after consultation to appoint the Impact Catalyst as an implementing agent due to the focus of the identified projects, the opportunity to leverage on external funding and the affordability of the implementation platform. In 2020, the spatial planning exercise was finalised and SED projects identified. Given the importance of food security, we are working on an agricultural strategy. The Impact Catalyst cross–sectoral development platform co-founded by Anglo American, was launched in the Northern Cape in June 2021 and provides a ready-made vehicle to facilitate the implementation of the shared value strategy. Governances structures have been finalised and an operations committee is in place, comprising Kumba, Assmang, KMR, and South 32). The steering committee has reviewed and agreed most of the initiatives for further development, or expansion where projects are already in implementation. These focus on schools and community ICT, enterprise and supplier development, health, agriculture, municipal capacity development, and infrastructure support. Agreements have been concluded between the different mining houses. Workshops are ongoing to finalise interventions under each programme. A Northern Cape Impact Catalyst roadshow is planned to secure buy-in from local and regional stakeholders.

Socio-economic development (SED) around our operations

Our CRD programme is designed to complement our established SED activities. These apply a more granular, local lens to opportunities for our business to create social value. Our aim is to strengthen the institutions that support local economies, and build the skills and capabilities that diversify economic activity beyond mining.

By adhering to our Social Way requirements on SED, our sites are guided in identifying priorities and target interventions that have the greatest impact. We implement a robust assessment methodology tool to measure our SED performance and inform the design of effective site-level strategies.

Our approach is also informed by regulatory requirements, such as those of our social and labour plans (SLPs). In addition, we seek to implement the recommendations previously indicated in the Mining Charter III. These requirements and recommendations focus primarily on education (programmes, school and university infrastructure included), bulk infrastructure (supporting local government), and enterprise and supplier development. The five-year SLPs are developed through a consultative process with the respective municipalities and through regular interaction with host communities. They are reviewed and revised where necessary, including prioritisation of projects. Large-scale projects are aligned to municipal integrated development plans and local economic development strategies. The quality of relationships and levels of trust that we have fostered with our host communities, have enabled us to maintain good relations and communicate effectively about our SLPs and other social commitments. Each of our operations has a stakeholder engagement plan that is updated on an annual basis, and functioning community engagement forums that meet at least quarterly.

Our objectives are aligned with national, provincial and local priorities, and draw from South Africa's National Development Plan and the SDGs. We work closely with the Department of Mineral Resources and Energy (DMRE) and the provincial and local authorities, and seek their guidance, advice and support on how best to integrate our efforts into their integrated and local development planning for the region.

Many of our initiatives are implemented through strategic partnerships including with local government, development partners, SIOC-CDT, the Anglo American Chairman's Fund, suppliers, communities, and non-governmental organisations (NGOs). By focusing on leveraging our value chains and skills and implementing programmes systematically, we can have a significantly greater positive impact on host communities at a much lower cost than conventional social investment-led approaches.

Social legal compliance

Ensuring full compliance with government's legislative requirements is a cornerstone of our commitment to delivering social value and promoting socio-economic transformation. We engage actively with government, both directly as a Company and through Anglo American, as well as indirectly through representative business organisations, to build trusted and co-operative relations, with the aim of contributing to the development of socially progressive and pragmatic legislation. We also subscribe to various leading voluntary codes and social compacts.

We endeavour to play our full part in transformation initiatives to meet the government's social and economic development goals. We are committed to meeting the requirements of the MPRDA. We also seek to meet the targets previously established in the Broad-Based Socio-Economic Empowerment Charter for the South African Mining and Minerals Industry (Mining Charter).

→ **An overview of our performance against targets previously recommended in the Mining Charter expectations is provided in the appendix** on page 118.

We also seek to align with the B-BBEE Act and work towards compliance with the new B-BBEE Codes of Good Practice.

→ **Kumba's latest B-BBEE scorecard is provided** on our website.

We continue to play a leading role in the Minerals Council South Africa, helping to lobby on key issues and for a consistent and stable regulatory environment. We subscribe to the principles and commitments outlined in the human rights framework, and have maintained our commitments in terms of the leaders' declaration on the mining industry commitment to save jobs and ameliorate the impact of job losses.

Supporting livelihoods – building local economies

Inclusive procurement and local supply chains

Kumba is committed to inclusive procurement and developing local supply chains that can support resilient communities. We aim to build these supply chains by supporting small-business growth in our host communities, stimulating job creation, building manufacturing capacity, and focusing on creating economic opportunities for previously excluded groups.

The following principles guide our approach to inclusive procurement, supporting our thriving communities objective:

- Economic enablement: co-creating shared, sustainable value in our host communities to promote economic growth and improve the quality of life in the area
- Sustainability: going beyond compliance targets and ensuring that host communities thrive beyond the life of our mines
- Sound governance: fair and inclusive sourcing processes, and a commitment to helping new suppliers achieve our standards on quality, delivery, service, safety, health and environmental considerations
- Working in partnership: creating an enabling environment for inclusive procurement through working with internal and external partners, including our major suppliers, communities, government, industry and development institutions

Advancing the recommendations of the Mining Charter III

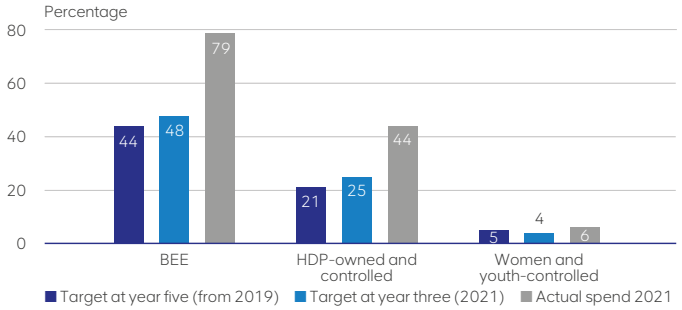
Our procurement activities and targets were established having regard to the objectives and targets previously indicated in the Mining Charter. The charter placed a significant focus on procurement spend with South African women-owned and South African youth-owned suppliers (51% or more owned and controlled).

The performance of Sishen and Kolomela against year three targets in their respective five-year procurement plans, is illustrated on the next page. There has been encouraging progress in increasing sourcing of goods and services from youth and women-owned and controlled businesses. We have met all of our internal targets for procurement of goods and services. Kolomela youth procurement in mining services was marginally below target and is an area for improvement.

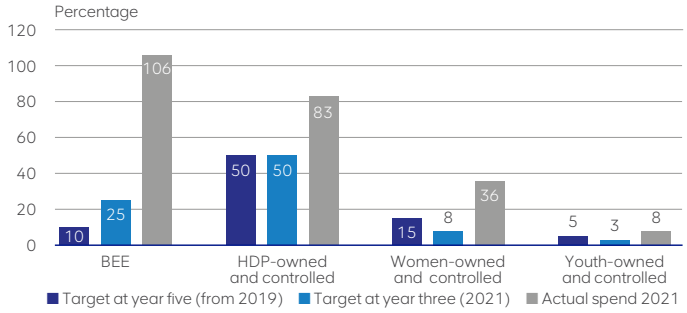
Making a positive social contribution continued

Procurement – performance against internal targets

Mining goods



Services



Mining Goods (R billion)	Kumba	Sishen	Kolomela
HDP-owned and controlled entities	**1.6**	**1.0**	**0.4**
Women and youth-owned enterprises	**0.2**	**0.1**	**0.1**
BEE compliant companies	**2.9**	**1.9**	**0.8**

Mining services (R billion)	Kumba	Sishen	Kolomela
HDP-owned and controlled entities	**5.8**	**2.8**	**1.8**
Women-owned and controlled enterprises	**2.5**	**1.2**	**0.9**
Youth-owned and controlled enterprises	**0.5**	**0.4**	**0.1**
BEE compliant companies	**7.4**	**3.4**	**2.1**

Spend with host community businesses

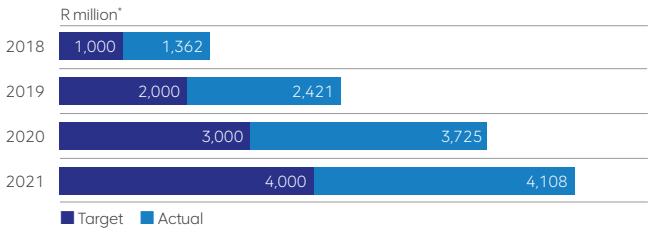
Kumba has consistently exceeded its annual targets set to dramatically increase the proportion of spend with host community businesses. Since introducing our inclusive procurement strategy in 2017, we have focused on procuring with transformed businesses that have a structure make-up of 51% or more black ownership and place a stronger emphasis on those that reside in designated host municipalities. Some of the enabling interventions include eliminating barriers to accessing opportunities with operations, focused development as well as technical enablement of the enterprise, suppliers and youth, increased collaboration with partners, and ring-fencing opportunities for host community suppliers. Kumba has also implemented conditions and processes to ensure that large contracts deliver maximum impact towards host community procurement through sub-contracting and skills transfer, and procurement from localised suppliers. Our approach is in line with the commitment to create three indirect jobs for every on-site job by 2025.

Annual spend with host community businesses has grown from R506 million in 2017 to R4.1 billion in 2021, against a targeted R4 billion, with R294 million accounting for sub-contracting opportunities afforded to host community suppliers by our major suppliers. Increasing levels of procurement with women and youth-owned entities is a particular highlight. The aim is to increase spend with host community suppliers to R4.5 billion in 2022. This target is supported by the number of eligible host community suppliers (minimum 51% black ownership and minimum 36 months residency in the host communities) onboarded onto the database that increased year-on-year from 320 to 341 in 2021, with 90% of the count actively conducting business with Kumba. A total of 73% of local suppliers are classified as exempt micro enterprises and 143 suppliers have earned above R5 million in 2021.

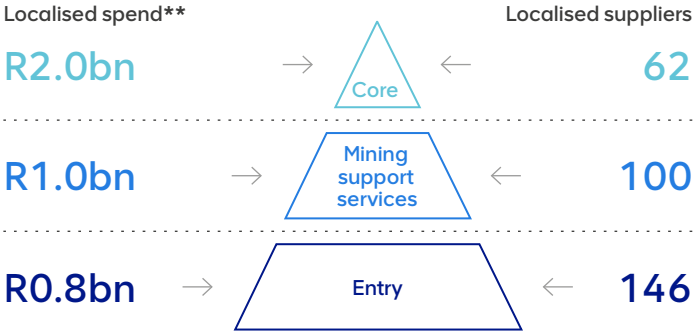
Kumba also measures the distribution of the spend in all six of the host municipalities, which favours the more developed municipalities of Gamagara, Tsantsabane. Work is underway to develop the capacity of suppliers from the municipalities of Kgatelopele, Joe Morolong and the town of Griekwastad to enable increased spend with suppliers in these areas. Kumba recorded spend in all six municipalities for the first time in 2021.

In 2021, Kumba spent R11.5 million with host community suppliers on Covid-19 relief efforts.

Year-on-year host community spend



* Including spend with sub-contractors.



** Excluding spend with sub-contractors.

Success stories in 2021

Kumba has awarded an industry first R1.6 billion mining contract to a new black-owned and community-based joint venture to mine iron ore at Kolomela. The joint venture comprises four 100% black community-owned companies and is the most tangible demonstration yet of Kumba's commitment to the economic inclusion of local suppliers from our community. The joint venture will start mining operations at Kolomela's Kapstevel South project in quarter one of 2022. As part of the contract, Kumba will provide ongoing upskilling and support to the joint venture to ensure quality and safety standards are met. The contract marks the first in the industry where local community suppliers will be used to run mining operations of this scale and magnitude.

At Sishen, a four-year, R0.7 billion Lyleveld South Mining contract was awarded to a joint venture comprising a 100% black-owned and 100% localised company based in the John Taolo Gaetsewe District, with 51% black women ownership, and Gamagara doorstep community suppliers. Operations commenced in November 2021.

Five-year people transport contracts are planned for 100% localised, black-owned transportation companies at Sishen (R0.4 billion) and at Kolomela (R0.18 billion) expected to start in July and May respectively, 2022. The Sishen contract scope will be shared by five transport service providers and the Kolomela among four host community transporters. All four transporters have black women-owned shareholding with two transporters being 100% black women-owned providers.

Komatsu WA1200 loader operators, Martin Koikanyama and Ashley Beukes, handing over and changing shifts in front of the loader in the Kapstevel South pit.

In advancing prospects for SMMEs in the host communities of Postmasburg and Kathu, a flagship contributor is a R2 billion contract in place with 51% local exploration drilling contractor Rosond that includes a dedicated localised spend of R500 million over five years (2019 to 2024).

Strategic engagements with business forums and SMMEs that are not in forums, are instrumental for creating and maintaining harmonious relationships and alignment on focusing on what is important to the community businesses. Engagements are conducted at various organisational levels including with our Chief Executive, who engages with the business forums twice a year.

The Kathu Industrial Park development project, which is under construction through a joint development agreement with the IDC, will support local suppliers located in and around Kathu. An independent assessment conducted in 2021 confirmed the need and appropriateness of the project, as a viable and impactful economic development intervention in the Kathu area.

Supplier and enterprise development

In supporting the wellbeing of localised suppliers, we focus on providing funding and developing supplier capacity to deliver quality work safely. Our efforts are driven through the supply chain technical enablement team and partners such as Zimele and the SIOC community development trust. In-house interventions to develop localised suppliers include providing purchasing tender preparation training, legal training, and financial coaching and mentorship. Most training is conducted virtually. This year we engaged Aurik to conduct business health assessments of 222 suppliers to assist with categorising them by level of capability and readiness for the various development interventions offered.

Anglo American's Zimele initiative is our flagship capacity-building programme for small businesses in our host communities. Zimele's work in our host communities incorporates a structured four to nine-month programme that empowers host community entrepreneurs to start, grow and sustain their businesses. The programme provides mentorship, helps suppliers access new markets, and develops skills among young people. These programmes are delivered through host community hubs in partnership with TechnoServe, an international non-profit organisation, while the loan funding programme for these suppliers and enterprises is administered through Absa.

During the Covid-19 pandemic, we have used digital platforms to deliver the training, mentorship and access to market services to programme beneficiaries. Since the roll-out of the Zimele programme in the third quarter of 2019 until 31 December 2021, a total of 496 beneficiaries have completed the supplier, enterprise and youth development programmes, which incorporate training, coaching and mentorship as well as access to markets and funding. These programmes have supported at least 1,860 jobs in our host communities.

Zimele has disbursed R42 million in Kumba funded loans to 15 suppliers from the host communities through a partnership with Absa bank. This is against a target of R42.3 million set for 2021.

The Absa partnership also allows co-funding on loan funding applications that are above the Zimele limit of R5 million per applicant, enabling beneficiaries to access loan funding for relatively larger scale contracts. In this respect, a further R3 million in loans was disbursed.

Making a positive social contribution continued

Developing host community contractors at Kolomela

The Kapstevel South (KSS) project is underway at Kolomela developing a new pit to extend the life of Kolomela by three years to 2031. The project aims to achieve 90% localised spend for the construction portion of the project. To achieve this ambitious target, we developed a support model we called the Thuso model (Thuso being the Tswana word for support). The objective is to provide additional support and coaching to enable our host community contractors to grow and establish themselves as competent and experienced contractors. The Thuso model provides customised support for each of our appointed host community contractors based on their level of skills and experience. We have partnered with Anglo Zimele to also provide construction management training through an accredited service provider to our Thuso model contractors. To date, seven host community contractors have been enrolled in the Thuso model and are working on-site with daily coaching and support from the KSS project team. The KSS project team is very proud of the progress made by the seven Thuso model contractors to date.

The Department of Education MEC signed a provincial MoU for the Anglo American education programme implemented at Sishen and Kolomela, in Kathu on 10 March 2021.

To enable capacity development of suppliers from the municipalities of Kgatelopele, Joe Morolong and the town of Griekwastad, where access to training opportunities is limited, we are implementing a satellite training hub 18 km from Kolomela.

In addition to external partnerships, Kumba has a technical enablement team that is designed to support host community suppliers at an operational level to build their capacity and better position themselves for procurement opportunities. The Kumba safety officers that are part of the structure support host community suppliers with onboarding on the Kumba safety management platform to optimise the time required to commence work at our mines. In 2021, the team reported 2,734 engagements in total, with host community suppliers (1,670 technical and 1,064 Passport 360).

We strive to conduct business with as many suitable suppliers as possible, yet cannot meet the demand. As part of our ESD activities, we encourage suppliers to seek opportunities with other companies rather than wait for a contract with Kumba.

Changing lives through education

We have maintained a focus on delivering positive outcomes through our efforts in implementing the Anglo American education programme at Sishen and Kolomela, in partnership with the Department of Basic Education (DBE). The ambitious five-year education programme with new time lines due to the impact of Covid-19 (2018-2023) is aimed at students in early childhood development (ECD) sites and primary and secondary schools local to Kolomela and Sishen. We support 25 schools, as part of Phase 1 and further impact is expected with the implementation of Phase 2 in 2022. This year the Provincial Department of Education signed a memorandum of understanding (MoU) for the Anglo American education programme, a significant development in fostering the partnership within this programme.

The response to the programme remains very positive from all stakeholders involved. We continue to provide support to school governing bodies, school management teams, teachers, parents, and grade 12 learners. During the pandemic, we have provided remote training and engagement through digital platforms, and have remained responsive and agile in mitigating Covid-19 impacts to the school year.

At least 28 ECD sites are being supported with practitioner development as well as minimum infrastructure support. We conduct learner assessments to measure learner progress towards stated goals and to inform the support required at the various schools, and educator assessments for diagnostic purposes. We also have projects to support a select number of schools with infrastructure upgrades aimed at ensuring there is a safe and conducive learning environment. Progress has been limited this year due to challenges and delays related to contractors and stakeholder alignment.

Another education initiative to highlight is Kumba's participation in an Anglo American initiative in partnership with Google to launch an ICT training sprint. One hundred and fifty matric students across the South African business units were selected to take online courses including ICT support and data analytics. Amazon provided discounted tablets for the students and 130 Anglo American employees volunteered to mentor the students.

As part of our programme, we will also be launching an ICT programme across all schools. This will ensure that all schools are connected and that teachers and students have access to WiFi and online resources. Devices, content and training will accompany the connectivity to help develop ICT skills for teachers and students. The programme will start leveraging more ICT related learning to support the requirements for the future of work.

Kolomela distributed 250 laptops across five high schools in Tsantsabane and Kgatelopele, aimed at supporting improved educational performance at the schools.

Sishen's education (Bachelor of Education) programme, which started with 16 learners, has been extended to 2023, due to Covid-19-related impacts. Two of the students have unfortunately left the programme and the remaining 14 are all in their third year. The professional cooking programme was launched with 20 students, all of whom are in the final year of their studies.

Youth work readiness and local workforce development

To help meet host community requests for employment, we work with partners to provide diversified workforce development opportunities and to develop non-mining jobs in host communities through enterprise development and local employment programmes.

Kumba runs a training centre at Kathu and at Kolomela, providing training in skills outside the mining sector, such as welding, plumbing and carpentry. In 2021, 267 community members participated (2020: 377).

In supporting youth development, Kumba participates in the Youth Employment Service (YES) initiative, a business-led collaboration with government and labour to stimulate demand-side job creation through the placement of about 800 previously disadvantaged, unemployed youth from the local communities into new, 12-month work experience and training opportunities, in non-engineering roles. There is a steering committee to manage our involvement in the initiative. In 2021, we employed 31 local graduates into the Company, up from 17 in 2020, to provide work exposure.

The Kolomela community bursary scheme continues to deliver good results and currently supports 41 local students. Sishen also runs internship programmes in our different local municipalities aimed at preparing graduates for the workplace. These interns have been placed in various government departments. Sishen partners with the Northern Cape Rural TVET college in Kathu in allocating bursaries to learners from the district to further their studies towards a hospitality management and teaching qualification. This initiative is also part of a bigger programme to develop the local TVET and diversify the courses offered by the institution.

Through our Zimele programme, we have partnered with Summit to implement a youth development initiative focused on the hospitality and tourism sector. The programme is aimed at training at least 900 youth from Kumba's host communities over three years. The first contingent of learners have been selected and training commenced in September 2021. We continue to identify similar initiatives and partnerships for the development of high-demand jobs skills.

Building local capacity

Social investment

We concentrate on delivering social investment that supports those most in need, focusing on health, education and community development, in line with our SMP.

→ **Our long-standing community healthcare activities are reviewed** on pages 54 and 55.

Our community development budget is 1% net profit after tax. In 2021, the budget was R290.0 million (Sishen: R99.5 million; Kolomela: R81.1 million; corporate office: R109.4 million). We ramped up spending on community projects in 2021 to address a backlog created by the pandemic and associated national lockdown. By year end, we had spent R257.5 million (2020: R263.6 million). A substantial number of our development initiatives contribute directly to progressing our SLP commitments, of which the majority are bulk infrastructure projects and education and skills development projects. During 2021, we spent R108.6 million on SLP projects (2020: R83.1 million).

Some of the SLP projects carry over into the following year.

Internal municipal challenges, including land access issues, continue to have an impact on the progress of certain infrastructure projects as well as Covid-19 related delays and restrictions. By year end, 96% of planned SLP projects were implemented at Sishen and Kolomela. Sishen is in progress to conclude consultations with local stakeholders on its 2022 to 2026 SLP and submitted a draft to the DMRE for further review.

Sishen, Kolomela and Kumba corporate office collectively implemented 64 community development initiatives (excluding donations and Covid Response initiatives) in 2021. Overall expenditure was 89% of our 2021 budget. The Anglo American education programme, Zimele loan funding and a number of infrastructure projects at the sites accounted for the majority of expenditure in 2021.

Kumba implements an employee volunteering programme, Anglo American's ambassadors for good, at all our sites. The programme encourages employees to implement community projects in partnership with an NGO, with funding provided by the Anglo American Foundation.

Making a positive social contribution continued

CED expenditure corporate social investment (CSI) and SLP projects

Rand million	2021*	2020	2019
Corporate office (including Chairman's Fund)	**65.7**	127.8	55.3
Sishen	**114.0**	77.6	62.1
Kolomela	**77.8**	58.2	53.5
Group	**257.5**	263.6	170.9

* Including Covid-19 spend of R35.3 million.

Areas of CED expenditure

	2021		2020	
Rand million	**Amount**	**%**	Amount	%
Education and skills development	**65.6**	**26**	37.8	14
Health and welfare	**59.0**	**23**	115.6	44
Enterprise development and poverty alleviation	**95.1**	**37**	90.3	34
Infrastructure	**21.4**	**8**	12.0	5
Institutional capacity development and donations	**13.2**	**5**	7.6	3
Sports, arts, culture and heritage	**3.2**	**1**	0.3	—
Total	**257.5**	**100**	263.6	100

Supporting livelihoods, Denise Strauss and Phemelo Tsogang from the Gamagara hydroponic farm project, situated 10 km outside Kathu. This is a community agricultural project initiated by Sishen mine. The farm grows vegetables such as cucumbers, spinach and tomatoes which are supplied to local supermarkets.

Municipal capacity development and infrastructure

Kumba is implementing a MCDP that is aligned with the National Development Plan. Our point of departure is that mining operations must exist alongside thriving communities and sustainable municipalities. The MCDP was designed in recognition of the developmental and capacity challenges experienced by our host municipalities which sometimes inhibit them from fulfilling their service delivery responsibilities. The MCDP has also strengthened the partnership between government and third parties. We are partnering with the national department of CoGTA, which sponsors our initiatives at provincial and local levels.

The second phase of the programme, implemented since 2019, has progressed well. In line with the National Capacity Development Framework, the MCDP aims to strengthen systems and processes that are critical for municipal operations and also strengthening of skills soft and technical skills of municipal staff. The focus areas are strategic development planning (including SDFs, linked to the CRD programme), asset life-cycle management (including infrastructure maintenance), and sustainable water quality and availability.

Implementation programmes have been developed and well received by municipal counterparts, due to the close collaboration and sound technical inputs. We have had positive engagements with Assmang to extend development projects to a further two municipalities within John Taolo Gaetsewe district.

Progress with certain municipal capacity development initiatives, especially relating to training, as well as our workshops and empowerment sessions for councillors, was impacted in 2021 by contractual challenges and preparations for local elections, when councillors were unavailable due to on-the-ground campaigning.

Accommodation and living conditions

The Company's investment in the accommodation and living conditions of employees is a pillar of our contribution to the wellbeing of our host communities, and an area where we are recognised as leaders across the sector. Kumba continues to facilitate access to housing by providing support measures to all employees in the form of a housing allowance and housing loan subsidy to enable them to either purchase or rent accommodation. Affordability presents a challenge for many employees interested in home ownership.

We currently have 3,810 employees (62% of permanent employees) living in Company-provided accommodation where there is a rental contract applicable (2020: 3,578.) In 2021, Kumba's housing expenditure (including housing allowances) was R363 million (2020: R499 million).

Housing is a concern at Kolomela where there is a shortage of approximately 200 houses and the municipality has limited capability to provide and maintain bulk services. Demand for housing is increasing. Recognising that the Kolomela home ownership plan and housing strategy was not delivering on its objectives, we have taken decisive steps since 2019 to improve our approach to mitigating the housing challenges at Postmasburg, while ensuring the sustainable attraction and retention of talent and complying with legislative requirements.

Following an in-depth process to determine how best to address our challenges, with our housing steering committee engaging with industry experts, and with support from organised labour, we have developed an innovative new Company housing strategy and policies for both Kolomela and Sishen. The policy focuses on promoting home ownership (both generally, but particularly near our operations), and on having the required controls to ensure decent accommodation for eligible employees, in line with employee aspirations informed by a housing survey conducted in 2019, as well as with Company requirements, and the housing and living conditions standard for the mining and minerals industry, published in 2019.

The policy supports and encourages employees to pursue a range of transaction options to invest in home ownership, rather than choosing to rent. In providing support to eligible employees to enable them to become homeowners at work, we will provide:

- Financial support in the form of a once-off grant of R150,000 for home ownership at work, to assist with aspirations to buy, build, or upgrade a house; the grant is provided in addition to a housing allowance increased by R750
- Discounted valuations of Kumba houses for sale (40% discount of market valuation)
- Housing advice (financial advice, coaching on builder, ownership and maintenance responsibilities)
- Transactional support
- Creditworthiness support
- Facilitated access to home loans and serviced sites
- Facilitated government housing grants for qualifying employees

In offering housing allowances, a new requirement is that if an employee elects to rent or own private accommodation, such accommodation must meet minimum specifications of the policy – which the Company is obliged to confirm, in line with the standard.

The policy applies to the permanent employees at Kolomela and Sishen in the bargaining unit and GBF job bands. Other Kumba employees renting Company accommodation at Kolomela an Sishen will be aligned to the policy. We communicated with employees about how the policy works and its benefits in November 2021 and will start phasing in the policy from January 2022. The policy roll-out is a gradual process, with home ownership support being made available at the onset and with rental adjustments implemented across two tranches. At every step Kumba will ensure that there is detailed communication, both at a general level and at an individual level, to ensure that all affected employees are able to make fully informed decisions that make best use of the changes in the policy in their specific circumstances. The impacts of the policy change on Kumba employees will continue over a number of years as the financial impact of changes on rents, housing allowances and other areas are gradually phased in.

Once the policy is implemented, we will amend our housing and living conditions plan, which articulates our strategy to meet the standard's requirements.

Making a positive social contribution continued

Sharing the benefits of mining

Economic value added

The people we employ, taxes we pay and money that we spend with suppliers, represent our most significant positive contribution to the South African economy and our host communities.

In 2021, Kumba contributed R74.2 billion of direct economic added value (2020: R52.3 billion). For a breakdown of this figure, see the table below.

Through the multiplier effect, our total economic contribution extends far beyond the value that we add directly.

Value distributed

	Rand million		%	
	2021	2020	**2021**	2020
Employees	**5,620**	5,006	**7.6**	9.6
Providers of finance	**285**	258	**0.4**	0.5
Government	**21,215**	13,146	**28.6**	25.1
Community spend	**258**	264	**0.3**	0.5
Shareholders	**48,208**	15,049	**64.9**	28.8
Value reinvested	**4,377**	2,836	**5.9**	5.4
Value (distributed)/ retained	**(5,750)**	15,737	**(7.7)**	30.1

Community and employee share participation

Kumba's neighbouring community members own a part of SIOC through the Sishen Iron Ore Company community development trust (SIOC-CDT), which holds equity on behalf of the communities around Kumba's mines. In line with our SLPs, the trust invests in community development, with an emphasis on education (especially ECD), skills development and infrastructure projects. For the 2021 financial year, SIOC paid R1,499 million (2020: R468 million) in dividends to the SIOC-CDT. SIOC-CDT benefits around 400,000 people in our host communities. Since they operate independently, they are development partners and material stakeholders of our mines, seeking to help communities become empowered and economically active in a way that will be sustainable long after our mine's life has ended.

Under Karolo, the broad-based employee share ownership (ESOP) scheme, the last award was made in August 2020, pending the design, approval and implementation of a new ESOP scheme for employees. A shareholder resolution was tabled and approved at the Company's annual general meeting of 14 May 2021 to extend Karolo in its current form for two more years, while keeping the optionality of extending the scheme for an additional third year, if required. The first new award to took place in August 2021 (vesting in August 2024) and the second award will take place in August 2022 (vesting in August 2025), while an option will exist for Kumba to make a third award in August 2023 (vesting in August 2026), if the circumstances require it.

Payments to government

We see public disclosure of our tax payments as a key means of building trust in society around mining. We are committed to paying the right tax at the right time and recognise the importance of respecting the letter of the law, including the alignment of tax treatment with commercial reality.

Tax strategy

Our strategy is closely aligned with the responsible tax principles of the B-Team, a not-for-profit initiative that aims to encourage a better way of doing business. We act responsibly in relation to tax planning matters, do not take an aggressive approach to managing taxes and use business structures that are driven by commercial considerations.

Our approach to tax management is aligned with the Anglo American group tax strategy and is guided by the following five principles:

- Tax is a core element of corporate responsibility and is overseen by the Board
- The tax strategy is aligned with our values, purpose and Sustainability strategy
- Pay the correct amount of tax at the right time in the right place and respect the spirit of the law
- Only use business structures driven by commercial considerations, which are aligned with business activities and substance
- Seek to engage positively and constructively

→ More detail on the tax strategy can be found on the website: www.angloamerican.com/tax-strategy

Responsibility

The Kumba Board is ultimately accountable for our compliance with the tax strategy. Responsibility for ensuring compliance is delegated to the group head of tax, and taxation matters are overseen by our Chief Financial Officer and Audit Committee. The group head of tax is supported by a local and global team of experienced tax practitioners.

Approach to tax compliance

We are committed to paying the right tax at the right time. We recognise the importance of respecting the spirit and letter of the law, including aligning tax treatment with commercial reality. We seek certainty on tax matters where possible. In all our dealings with tax authorities, including where we seek certainty, our relationships are centred on transparency. Where tax authorities have adopted co-operative compliance arrangements, we will therefore favourably consider participation.

As set out in our tax strategy, we allocate value by reference to where it is created and managed within the normal course of commercial activity, and we pay tax on that basis. We do not use tax haven jurisdictions to manage taxes and we commit to not transfer value created to low tax jurisdictions.

Transparency

We take a responsible approach to tax, supporting the principles of transparency and active and constructive engagement with stakeholders to deliver long-term sustainable value. We see the following benefits from this transparency with all our stakeholders, including:

- Stakeholders: the knowledge that Kumba is deeply committed to good tax governance and responsible tax practices, thereby mitigating tax risk
- Tax authorities: the development and maintenance of long-term, open and constructive relationships
- Communities: understanding the economic benefits attributable to mining in the region
- Others: making a meaningful contribution to ongoing tax and transparency debates. Through our holding company Anglo American plc we proactively engage with industry bodies, business forums and civil society.

Anglo American Tax control framework

During 2021 significant progress was made on the development and implementation of the tax control framework (TCF).

The TCF is instrumental in reducing our tax risk through the implementation of stable, effective and documented control systems, as well as aiding the management of tax risk within Kumba's broader risk governance systems. The TCF will also help facilitate transparent and co-operative relations with the tax authorities. The TCF pillars are:

- clarity over accountabilities for tax
- identification of key risks across the end-to-end process
- prescriptions of documented and effective controls to mitigate such risks
- set-up of a solid governance and monitoring process

Tax contribution

Since listing in 2006, Kumba has voluntarily provided information about tax payments. Tax matters are regularly presented to our Board and Audit Committee, who take a particular interest in the extent to which our approach to tax meets commitments to stakeholders, including government and local communities, as well as our policy of good tax governance. In addition, tax affairs are regularly scrutinised by external auditors and by tax authorities as part of the normal course of local tax compliance and reporting procedures.

Tax payments include corporate income tax, mineral royalties, value added tax (VAT) on purchases, duties on imports and exports, payroll taxes and dividend withholding taxes. We also pay a skills levy of 1% of our employees' pay to SARS. SARS distributes this amount to the Skills Development Fund, the government's training initiative, and the relevant sector education and training authorities (SETA).

Tax is a significant element of the overall economic contribution we make to government and our host communities and the following cash payments were made to the jurisdictions in which we operate.

Total tax contribution by category

Rand million	2021	2020
Corporate income tax	**16,603**	10,146
Mineral royalties	**4,612**	3,001
Payroll tax	**1,387**	1,226
Skills levy	**50**	33
UIF	**23**	23
Total	**22,675**	14,429

Taxes paid and collected in South Africa

Rand million		2021	2020
Taxes paid	Corporate income taxes, mineral royalties, import and export duties, and other taxes which are a cost to the group	**20,145**	12,845
Taxes collected	Payroll taxes, withholding taxes and other taxes that are collected and remitted to government, but are not a cost to the group	**1,460**	1,282
Total		**21,605**	14,127

Tax and the SMP

As part of the SMP, the tax function has also developed a five-year sustainability plan. This will ensure embedding sustainability in the finance function. The tax sustainability plan is aligned to each pillar of the SMP and consists of:

- Trusted corporate leader – Be (and be recognised by key tax stakeholders as) a respected partner that operates best-in-class controls and tax reporting, contributes taxes responsibly and leads a dialogue on how tax can contribute to wider societal goals
- Thriving communities – Contribute to broader culture of learning and development through enhanced tax transparency, knowledge sharing, tax education and capacity building
- Healthy environment – Ensuring compliance with all environmental taxes, while delivering operational risk management, maximising value of environment-driven projects, and contributing to the broader societal debate on the role of green taxes

Managing environmental impacts

Ensuring responsible environmental management through the life-cycle stages of our operations can influence future access to land and financial capital, improve resource security, and reduce operational risks and mine closure liabilities.

Material matters discussed in this section

- Healthy environment
- Water
- Climate change and energy management
- Mine closure, rehabilitation and biodiversity
- Air quality
- Mineral residue management
- Non-mineral waste management

Tamaga Lodge, one of three biodiversity conservation areas on the western side of Sishen mine. These areas were originally livestock farms and are being carefully restored to their natural state.

Healthy environment

We are stewards of the land and ecosystems at and around our operations. Our vision is to maintain a healthy environment, where we not only minimise impact, but also deliver positive and lasting environmental outcomes in the areas in which we operate. We are innovating to transform the environmental footprint of our business as we work towards achieving ambitious environmental goals. In contributing to a low-carbon world, the high-quality iron ore we produce supports efficient steelmaking now, as well as the future transition of the sector to lower carbon methods.

Our journey to deliver on our healthy environment vision

Stretch goals and visions	Climate change ambitions
Climate change To operate carbon-neutral mines → **Read more** on pages 89 to 90	2022: (indexed on 2019 actual) 4.5% improvement in energy intensity (GJ/tonne), and 3.6% improvement in GHG emissions efficiency (tonne CO_2e/tonne) 2024: Maximising our premium product* offering, which reduces scope 3 emissions. 2030: Zero scope 2 emissions across our operations 2030: (against 2016 baseline): 30% reduction target in energy use and net GHG emissions 2040: carbon neutrality (scope 1 and 2) across our operations
Water To operate waterless mines in water-scarce catchments → **Read more** on pages 93 to 97	2030: Kumba will set site-specific targets in 2022 to support the Anglo American group goal to reduce the withdrawal of freshwater by 50% (2015 baseline)
Biodiversity To deliver net positive impact (NPI) across our operations through implementing the mitigation hierarchy and investment in biodiversity stewardship. → **Read more** on pages 100 to 102	2021: Approved site-specific plans with biodiversity targets in place by end-2021, successfully completed 2022-2025: Indicators tracked against plan on quarterly, half-yearly or annual basis as per approved site plan 2030: Deliver NPI on biodiversity across our operations

* Utilising high iron ore content products in blast furnace steelmaking can realise a 2.5% reduction in carbon emissions for every 1% increase in iron ore grade.

With a mindset of minimising harm to the environment, we are working towards achieving stretch goals set in three key areas – climate change, biodiversity, and water use (see above). Our environmental work also includes focusing on reducing levels of waste sent to landfill, supporting the circular economy throughout the value chain, managing mineral waste facilities optimally, addressing quality of the air around our operations, and ensuring effective land rehabilitation and mine closure planning.

Achieving our targets and vision of a healthy environment is underpinned by FutureSmart Mining™, Anglo American's innovation-led pathway using technology and digitalisation to drive sustainability. Introduced in 2018, this approach is accelerating our ability to protect the environment, delivering step-change innovations that will fundamentally change our operations, from how we evaluate the ore body to how we mine, sort and process the ore. We envisage a much-reduced environmental footprint from innovative ways of mining. For example, we will optimise our mining processes through technologies that target the required metals and minerals more precisely, with reduced water, energy and capital intensity, and producing less waste.

We are also transforming how we make best use of data, through integrated digital tools for planning, simulation, execution, and monitoring, from resource definition to the output of processing plants. Our group digital platform (known as Voxel) is bringing the full mining value chain together in a digital form to help our people make data-driven decisions in the most efficient manner, predicting outcomes and driving safety, environmental and productivity improvements.

This journey is underpinned by best practice policies, performance standards and business processes; investing in internal capacity, capability and technological innovation; and partnerships and collaboration with stakeholders.

→ **We track and ensure compliance with our policies and performance standards, which are publicly available through our website** https://www.angloamericankumba.com/ **or upon to request**.

Environmental management

Highlights	Learnings/challenges	Focus for 2022 and beyond
Zero level 3 (or higher) environmental incidents in the past six years 30% reduction in environmental incidents reported – 97 (all level 1) compared to 139 in 2020), supported by improved reporting of leading indicators (high-potential hazards and hazards) No major non-compliances recorded	97 low-impact environmental incidents; hydrocarbon spillages continue to account for the majority (61%) One environmental complaint received 24 PM10 dust exceedances recorded, but only 15 could be attributed to our mines – four exceedances per station allowed per year	Sustain zero level 3 to 5 environmental incidents and continue reporting HPHs and hazards Track and maintain compliance with all applicable legal audit findings of environmental authorisations related to mining/process activities, water and air Accelerate the implementation of automation, predictive monitoring and data-driven decision-making

No level 3 to level 5 environmental incidents for six consecutive years	Greater focus on proactive dust management, with a dust dashboard developed that includes an early warning system	Energy intensity decreased with 4.5% to 0.21 GJ/tonne milled	Good progress with concurrent rehabilitation, exceeding all rehabilitation targets for reshaping, growth medium and seeding

In demonstrating responsible environmental stewardship, our starting point is to ensure environmental regulatory compliance across our business, and to strive to ensure no repeats of environmental incidents. Environmental management systems guide our continuous improvement, and we continue to identify, develop and implement data-driven solutions to protect the environment.

Effective risk management and continuous improvement

Our environmental policy forms part of the integrated SHE policy under the overarching Anglo American SHE policy. It supports the long-term sustainability of our business by ensuring we effectively manage resources, reduce our impact on the environment and local mine communities, and comply with legal requirements. The Anglo American SHE Way is the management framework we use to implement the SHE policy. This dynamic tool sets out what is expected of all employees, managers, and our organisation as a whole. SHE Way requirements extend to all non-core operations, activities, as well as care-and-maintenance operations, to be fully implemented by end-2022. The Anglo American SHE policy and SHE Way were updated in 2020 to align with our purpose, and ensure future compliance with our standards and internationally recognised safety, health and environmental standards (ISO 45001 and 14001). The refreshed policy management system has been rolled out in 2021 and we are working to embed the SHE policy into our planning and executive processes.

The SHE policy embodies three guiding principles:

1. Zero mindset: we apply the hierarchy of eliminating, avoiding, minimising, mitigating, remediating, rehabilitating and offsetting the impacts and risks arising from our activities
2. No repeats: all the necessary steps are taken to continuously learn from SHE incidents and prevent them from recurring
3. Non-negotiable standards: we apply common, non-negotiable minimum standards and procedures throughout the group.

The Anglo American technical standards define the minimum requirements for our operations to manage a range of specific issues, including the management of water, energy and mine residue tailings. The precautionary principle is integrated throughout our environmental performance standards. Our operations conduct self-assessments against the standards and implement action plans to close any gaps in meeting requirements. We continue to drive improvements through environmental management systems (EMS). In 2021, Sishen and Kolomela retained ISO 14001: 2015 certification. EMS compliance with the standard is assessed annually by an independent certification body.

We are integrating environmental risk management into our Anglo American operational risk management (ORM) processes and Operating Model. ORM is aligned with our environmental incident no repeats campaign (see page 27). We measure the effectiveness of controls implemented through an on-site verification process. Monthly inspections are undertaken at each site and status reports compiled. ORM implementation, particularly for our most significant environmental risks, forms part of performance-based remuneration for senior executives, along with a target to reduce significant environmental incidents. In building a culture of appropriate risk management, we continue to include leading and lagging indicators related to risk management in employees' key performance indicators and all business unit scorecards.

Through ORM and regular technical and legal assessments, we continue to identify controls and improvements to prevent unwanted events. The priority environmental risks facing our business relate to the potential impacts of our activities on communities, as well as climatic variability. Our priority

Environmental management continued

unwanted environmental-related events are depletion of groundwater resources due to dewatering, inadequate hydrocarbon management (resulting in soil and water contamination), excessive dust generation, and administrative delays in the issuing of environmental permits. We implement critical-control improvement plans across the operations. Some risk-mitigation controls include: dust suppression, using "dust-a-side" for roads and mist spraying for ore stockpiles; storage of hydrocarbons in properly designed areas preventing hydrocarbon spillages through ensuring regular maintenance of equipment and awareness; treatment of hydrocarbon contaminated soil at bioremediation facilities; and an aquifer recharge project at Kolomela to minimise the impact of dewatering.

Minimum permitting requirements (MPR), which apply to all permits (not only environmental), guide our operations in planning for and identifying all permits and addressing potential risks of non-compliance with permit conditions.

In line with the Anglo American group-wide approach, we report against a comprehensive set of leading environmental performance indicators. This includes reporting on progressive rehabilitation, permitting and compliance indicators, risk management indicators, and high-potential incident and hazard reporting.

Regular engagement with our key stakeholders is central to our efforts to identify and address environmental issues and impacts timeously. We engage regularly with government at all levels to ensure compliance with environmental authorisations and related requirements, including any instances of environmental incidents or grievances.

We implement environmental improvement plans (EIPs) that are designed to address material issues. We review progress twice a year at management review forums. Our EIPs focus on:

- permitting and environmental awareness
- pollution prevention and remediation
- energy and GHG emissions management
- water stewardship
- land management: rehabilitation, mine closure and biodiversity

We set and track measurable goals for our performance, including targets on energy use, GHG emissions reductions, water-use efficiency, PM10 dust emissions, high-potential hazards, and hazards. We measure our progress through structured auditing to ensure compliance and continual improvement. Externally audited KPIs include those for water, energy, rehabilitation, and incidents.

Legal compliance

We monitor and drive compliance with all relevant legislation regulating the management of environmental impacts. Our licence to operate relates directly to environmental permits and authorisations under relevant sections of the:

- Mineral and Petroleum Resources Development Act (MPRDA) – environmental management programme report
- NEMA – environmental impact assessments (EIAs), basic assessments (BA), waste management licence and air emission licence
- National Water Act (NWA) – water use licences (WULs)
- Hazardous Substance Act

All operations work towards full compliance with legal commitments (as per approved environmental authorisations) by continuously managing these through action plans and tracking progress against findings from internal and external audits. All reviewed findings are discussed with senior management at each operation and key findings are reported continuously to our Exco and monthly SHE committee.

We report any deviances from regulatory conditions and limits in our authorisations, and we collaborate in a transparent manner with the authorities to address any compliance challenges that may arise. We engage with regulators on a regular basis to ensure that all outstanding amendment applications are processed on time in order not to delay our expansion projects and continued operation of the mines.

The implementation of our permitting strategy, overseen by Kumba's permitting specialist, has driven steady improvements in our management of permits. All existing licences/permits are documented in registers, for both Sishen and Kolomela and we continue to address legal gaps identified in meeting conditions and commitments, through operation-specific action plans. We are implementing the leading IsoMetrix environmental data management system, which integrates all permits with associated conditions and commitments into one system, facilitating effective tracking, monitoring and action management.

Progress in permit management is measured annually through the Anglo American MPR programme (see page 26.) We continually assess our environmental permitting needs; most of our required permits have been issued. We continue to engage with authorities to seek approval for applications for certain authorisations or permits at Sishen and are making good progress.

Regulatory and external audits in 2021

Site	Auditor	Type	Number of major non-conformances*
Sishen	Bureau Veritas	ISO 14001:2015	0
	DMRE	Regulatory	0
Kolomela	Bureau Veritas	ISO 14001:2015	0
	DMRE	Regulatory	0

* Major non-conformances include sections 54 and 55 notices, environmental pre-directives and major non-conformances raised by Bureau Veritas. Corrective action plans to prevent recurrence were implemented and shared with the respective auditors/regulators.

We conduct regular site audits and focus on the close-out of audit findings. We conduct external legal compliance audits annually at Sishen and at Kolomela. Both mines demonstrate high levels of compliance against the management commitments and conditions within the EMPRs and EAs.

Audit results: Compliance rating	EAs issued in terms of NEMA	Waste management applicable condition	Water use licence applicable conditions
Sishen	96%	97%	95%
Kolomela	97%	94%	89%

Environmental-legal risk concerns still relate to the management of stormwater, clean and dirty water separation, the disposal of waste at the Postmasburg waste disposal facility that has not been licensed, and excessive dust generation. We have been proactively addressing the non-compliances by implementing various capital projects, especially at Sishen. Focus areas at both Sishen and Kolomela are to improve stormwater management infrastructure and revise certain operational procedures to improve water management. Another focus is our zero waste to landfill initiatives which will mitigate against the use of the unlicensed landfill at Postmasburg.

Sishen and Kolomela have completed and timeously submitted air quality reporting for the National Atmospheric Emission Inventory System (NAEIS), as required by the National Atmospheric Emission Reporting Regulations.

In 2021, there were no non-compliances or stoppages issued by the authorities.

Environmental incidents

Reporting, investigating and sharing lessons learned from environmental incidents or substandard acts and conditions play an essential role in heightening awareness around critical controls and promoting actions to improve their effectiveness.

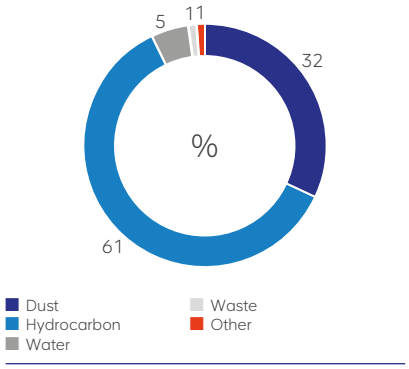
We adhere to the Anglo American approach of classifying incidents on five levels, according to the actual and/or potential impact. Any level 3 to 5 (ranging from moderate to high impact) incidents would be featured in the Chief Executive's report to the Board. Any incident that could have resulted in more serious impacts is recorded as an environmental high-potential incident (HPI).

The quality of our reporting and investigating of environmental incidents and of identifying, reporting and addressing environmental hazards at our operations, continues to improve across our sites. The identification and reporting of environmental hazards, including high-potential hazards (HPHs) – a substandard condition that can potentially lead to a level 4 or 5 incident – provides valuable leading indicators to inform remedial actions to prevent incidents. In 2021, a total of 280 HPHs and 564 hazards were reported, exceeding our internal targets. We assess our progress against a baseline of data established in 2020. The majority of the HPHs and hazards reported are related to dust, hydrocarbon, and water management, which correlates with the environmental incidents reported. We continue to encourage the use of section 54 and 23 work stoppages when unsafe environmental conditions and activities are identified.

For over six consecutive years, there have been no level 3 to 5 incidents at our operations, indicating effective risk monitoring and management. We recorded 97 level 1 (low-impact incidents) incidents in 2021, compared to 139 in 2020, and zero level 2 incidents (2020: one), with none classified as high-potential incidents.

Incidents related to hydrocarbon spillages continue to account for the majority (61%) of incidents reported. We are, however, encouraged by the steady reduction in the number and extent of the incidents (including spillages) in recent years. In driving our progress, we continue to implement a hydrocarbon management action plan at the mines to reduce the risk of hydrocarbon spillages, both engineering and behavioural, including proactive maintenance of HME equipment hydraulic systems, with progress tracked by the SHE steering committee.

Environmental incidents at Kumba in 2021



97 incidents, all level 1

In 2021, we received one environmental complaint, related to vibration due to blasting at Kolomela. All complaints are investigated and feedback provided to the complainants, with remedial action taken where required. Regular forums are held with stakeholders, including meetings with farmers, at which concerns and grievances are raised and addressed.

Materials stewardship and the circular economy

As a responsible product steward, we seek to positively influence the environmental and social impacts of our materials and resulting products across the value chain and throughout their life-cycles. We ensure that our products our produced safely and responsibly, and we are enhancing our beneficiation process through UHDMS technologies. We are also applying circular economy principles as we seek to create greater value through more circular activities.

Environmental management continued

We seek to create and supply a product of consistent and reliable quality (supported by ISO 9001, 14001 and 17025 laboratory certification). Kumba has the highest average iron (Fe) content (at 64.1%) and Lump:Fine production ratio (at 67:33) relative to the industry.

Towards circularity

The circular economy is about minimising waste in all its forms and making the most of what we have, natural resources included. It advocates reusing, re-designing, sharing, repairing, refurbishing, re-manufacturing and recycling – consuming fewer resources in the first place and using them for longer. At a more fundamental level, it is about creating new models for businesses to promote and incentivise resource efficiency.

Our approach to circularity is reflected in the following ways:

- In our operations – by optimising the use of resources, eliminating physical waste and maximising process efficiency, we aim to achieve a neutral or even NPI on the environment and, in turn, help create thriving communities through the implementation of our waste management strategy.
- Throughout our value chains and across our marketing business – we work to ensure that the value of our products is maximised across their full life-cycle. We also support the development of technological innovation that can serve to advance this goal.
- Through holistic business transformation – providing a lens to re-imagine mining by growing our business in ways that adapt to and shape the change around us.

Responsible stewardship of materials

Responsible stewardship is crucial for preserving our reputation and our ability to market products. Our approach focuses on ensuring responsible production, meeting regulatory obligations, and responding to growing demand from our customers for assurance that the metals they buy are produced responsibly.

As part of Anglo American, we are members of ResponsibleSteel™, sharing in the vision that steel's contribution to a sustainable society is maximised, and that the responsible sourcing, production, use and recycling of steel is enhanced. We are also committed to another multi-stakeholder standard and certification programme, the Initiative for Responsible Mining Assurance's (IRMA) Standard for Responsible Mining, in keeping with our SMP and stretch goals. In 2021, Sishen and Kolomela completed IRMA site assessments and conducted preliminary virtual audits against the voluntary standard due to Covid-19 restrictions. A full audit will be conducted later in 2022.

Meeting regulatory obligations

In demonstrating responsible product stewardship, our starting point is to ensure regulatory compliance for products across our business. This includes implementation of the UN's Globally Harmonized System of Classification and Labelling of Chemicals, and the EU's Registration, Evaluation, Authorisation and Restriction of Chemicals as well as variants emerging in other jurisdictions. Comprehensive systems are in place to ensure ongoing compliance, establishing a continuous process of product testing, hazard assessment and communication via safety-data sheets. We do not have products that are deemed to be "dangerous goods" and requiring relevant packaging, labelling and consignment procedures to be met.

All our sites are also required to comply at a minimum with our group hazardous-materials management technical standard. Our practices are reviewed on page 109. We also apply our operational risk management approach to the review of product risks, taking steps to strengthen controls where necessary.

→ **Details of process materials purchased are provided in the performance data table** on page 115.

Climate change and energy management

Highlights	Learnings/challenges	Focus for 2022 and beyond
3.6% decrease in total CO_2 intensity and 4.5% decrease in energy intensity, year-on-year Refined our site-specific energy and carbon projects and finalised targets to achieve the group goals of 30% reduction in energy intensity and absolute GHG emissions by 2030 (baseline 2016) Feasibility study in progress to develop a 60 MW to 80 MW solar PV plant at Sishen Participating in an Anglo American initiative to develop a renewable power network in South Africa	Rising energy costs will increase capital and operating costs Long-term security of reliable and adequate supply of electricity from Eskom is a major risk for our operations Emissions along iron ore value chain activities (scope 3) account for 99% of Kumba's total GHG emissions, which are outside our direct control	Develop and implement our road map to achieving carbon neutrality by 2040, through focusing on: (i) eliminating scope 2 emissions by 2030 through implementation of large scale renewable projects; and (ii) displacing the use of diesel in our operations through the adoption of hydrogen powered haulage for HME, electrification of other fleet and potentially alternative green fuels by 2040 Investigate options to reduce scope three emissions by improving product qualities and collaborating with key steel producers in support of decarbonising the steel value chain Collaborate in advancing a regional renewable energy network

Climate change is the defining challenge of our times. Our underlying principle is to reduce carbon going into the atmosphere and we are continuing to develop and refine our pathway towards achieving carbon neutrality at our operations. Equally, our premium-quality iron ore products are well positioned to help our customers produce steel with less carbon emissions

Our approach

The challenge that climate science sets, as was clearly stated in the August 2021 Inter-governmental Panel on Climate Change report, is to decarbonise the global economy as quickly as possible. At Kumba, we are committed to playing our part, by decarbonising our operations and playing a broader role in decarbonising the steel value chain.

Our approach to climate change adheres to Anglo American's climate change policy and management approach. This includes building internal agility and resilience to climate change, understanding and responding to risks and opportunities related to the carbon life-cycle of our products, and developing and implementing collaborative solutions with our stakeholders. Our strategy takes into account a range of risks and opportunities that climate change poses to our business.

Our response to climate change is firmly entrenched in the group sustainability goals that inform our GHG emissions and energy intensity reduction targets. In line with the goals laid out in the Paris Agreement and Glasgow Climate Pact, Anglo American has committed to achieving carbon neutrality (scope 1 and 2) across its operations by 2040, supported by clear intermediate targets. This year we have advanced our project planning and achieved encouraging stepping stones in actioning the decarbonisation roadmap we developed in 2020, informed by detailed work at each of our sites. The deployment of FutureSmart Mining™ is central to reducing energy demand and delivering the step-change innovation required for avoiding emissions. Developing solar energy generation capacity and low-carbon operational solutions, notably hydrogen-fuelled solutions to substitute diesel for mining activities, is another focus. This work dovetails with our collaborative efforts in South Africa to promote an enabling policy environment and co-create opportunities to accelerate a just energy transition, including through harnessing the transformative potential of green hydrogen.

Our management systems, structures, governance and engagement processes ensure that climate change is considered in all our business decisions. Responsibility for managing climate change is delegated throughout the organisation, with the Social, Ethics and Transformation Committee (Setco) of the Board assuming ultimate responsibility.

Risk impact, mitigation and tracking elements are embedded in our Operating Model to help us understand what we need to put in place to achieve our targets. Our initiatives to reduce our carbon emissions will also reduce our exposure to evolving climate change regulatory requirements and increases in energy costs.

Climate change and energy management continued

Our Chief Executive's scorecard includes performance on energy and carbon. Kumba's general managers are financially rewarded for achieving operation-level energy-reduction targets. In future, we may incentivise individuals based on their team's performance against climate, energy and water targets. This will contribute to the whole workforce being incentivised to meet our GHG targets.

We recognise the evolving interests and expectations of investors in understanding our thinking on climate change, and are committed to the transparent disclosure of climate-related risks and opportunities for our business in line with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD).

→ **Further information is provided in the Anglo American Climate Change Report 2021. A TCFD-linked index is provided** on page 92.

Ensuring resilience to climate change

Understanding our climate-related risks and opportunities

Our business is exposed to a spectrum of risks from climate change, including physical, regulatory, market, and legal. Physical climate-related risks include extreme weather conditions such as excessive, shorter rainfalls and extreme heat. Security of energy supply, rising energy prices and the carbon tax in South Africa are also material risks for our operations.

Our risk management approach enables us to identify and manage both risks and opportunities, helping to ensure the resilience of our portfolio. Our quantitative scenario analysis work, reviewed below, has reinforced this approach and is a key input in our strategic planning processes.

Two key processes guide how we manage climate change risks: for projects, we use our investment development model (IDM), and for operations, we follow our ORM programme. The ORM guides operations on how to assess and integrate climate risk management at each level of activity. As part of our ORM, the investment model process and evaluation criteria ensure that climate change risks and opportunities are embedded into investment design. This includes giving consideration to alternative low-carbon energy sourcing, and carrying out the necessary adaptation required for extreme weather and long-term climate change.

A climate risk and adaptation assessment (CRA) is embedded within our ORM. The CRA process will evaluate identified climate change risks to establish root causes, financial and non-financial impacts, and likelihood of occurrence.

Understanding how climate change may affect our operations and markets for our product is critical to our strategic decisions. It also gives us confidence in the resilience of our business. Scenarios help us imagine how the world might develop in response to different assumed conditions. While the exact future pathway is uncertain, we expect climate change to affect the mining industry through risks and opportunities in two broad areas:

- Physical impacts: the potential impact on our operations and surrounding communities from both acute extreme weather events and chronic shifts in climate patterns
- Transition impacts: The potential impact on demand for different products, given assumptions on regulatory, technological and behavioural changes in the transition to a low-carbon economy

To anticipate these potential impacts and formulate strategic responses, we have developed scenarios for possible future worlds that represent combinations of a potential set of outcomes.

Our resilience to physical risks

Our operations are vulnerable to extreme weather events and we ensure that we have plans in place at our sites to reduce their exposure to climate risks. In recent years, we have engaged with climate change research teams in the private sector and at academic institutions to assist us in understanding the physical implications of climate change for our operations and neighbouring communities and identifying appropriate adaptation responses. Key elements of our approach include: building climate scenarios using the best available science; using our Operating Models to identify vulnerability and exposure; and integrating critical controls into operational risk management.

We are progressively applying climate-related tools such as climate risk assessments and scenario planning to inform the implementation of our climate change strategy. These tools enable us to deepen our thinking and develop our response to emerging climate change risks and opportunities. The outcomes of these processes further empower us to implement the recommendations of the TCFD. This is central in meeting the growing demand from our stakeholders for greater transparency and stronger accountability on our climate change response.

Recognising that climate change has the potential to alter the rainfall patterns, and potentially cause shortages of easily accessible groundwater or rainwater in our host communities, Sishen and Kolomela provide supporting water infrastructure to build resilience in the communities (see page 96).

In 2021, like many mining companies in South Africa, Kumba was impacted by extreme weather. At Sishen, where heavy rainfall presented problems, we responded by deploying our shovel fleet to drier areas, shortening haulage routes and bringing forward scheduled maintenance.

Portfolio resilience

Iron ore is essential for the production of steel. In turn, steel is a critical foundational material for almost all infrastructure and will provide the backbone of the low-carbon economy and wider, long-term socio-economic development. Steelmaking is currently carbon intensive. As the iron ore market embraces the need for decarbonisation, China and other countries with traditional steelmaking furnaces are reducing emissions by using Lump ore instead of Fine ore, which significantly reduces overall emissions. This trend is expected to benefit Kumba, given the competitiveness of our share of Lump ore and the high Fe content of our products.

Kumba is one of the largest iron ore producers that beneficiates its ore prior to sale. In 2021, we beneficiated approximately 69% of our ore (2020: 69%). Through beneficiation, the physical properties of the finished product are enhanced, removing impurities and improving product quality, which in turn reduces downstream emissions associated with steelmaking.

Carbon tax liability

Sishen and Kolomela comply with requirements under national GHG emission reporting regulations and the new carbon tax.

Most of Kumba's scope 1 emissions are from diesel and petrol consumption; Kumba pays a direct tax on this, at the pump, which totalled R17.8 million in 2021. Consequently, our operations did file a carbon tax return for 2021, with a small additional amount payable.

The current structure of the carbon tax has not been changed and will continue until December 2025. In the second phase of the tax scheme (2026 to 2030), the state-owned electricity supplier, Eskom, which generates electricity from coal, may pass the carbon tax to electricity consumers.

We have assessed the potential carbon tax liability for our business and included carbon pricing in our budget guidance and project evaluations.

We are progressing with the validation process to enable us to secure carbon credits through certified emissions reductions for the Kathu Solar Park (100 MW concentrated solar thermal plant with energy storage capability) we helped to develop. As of January 2021, the carbon offset administrator has issued the extended letter of approval for the Kathu Solar Park. Once the credits are transferred to the Carbon Offset Administration System, Kumba will be the owners of those credits which can be used within South Africa for any offsetting purposes.

Our decarbonisation journey

In 2020, Kumba developed a carbon-neutral model, which projects our energy intensity and carbon emissions over time to track the pathway to carbon neutrality. This process was informed by detailed work to identify the priority energy and carbon-reduction options at Sishen and Kolomela and model different scenarios. This year sites have worked closely with Anglo American on technical work to refine the details of our pathways. The model is dynamic and will evolve in line with developments. We continue to update and revise the model given the further extension to the life-of-mine at Sishen in particular to 2039 (vs 2032 base line in 2017).

Aligned with this approach, we have set 2030 targets to improve energy intensity and reduce absolute GHG emissions by 30%, against a 2016 baseline. These stretch goals were informed by the South African government submission to the 2015 Paris Agreement. A number of projects are currently in different phases of implementation to get us closer to our 2030 targets and progress towards achieving carbon neutrality (scope 1 and 2) by 2040.

Each operational site is tracked on its monthly energy consumption and CO_2e GHG emissions. These are reported against targets to meet annual and longer-term energy and carbon-intensity reductions.

Optimising energy sources

Fossil fuels (mainly diesel) for load and haul account for about 82% of our total energy consumption, with electricity (mainly used in processing) accounting for about 18% (the majority of scope 2 emissions). The unit cost of both is expected to continue to increase; the former is amplified by the climate change policy measures. Optimising our use of energy sources is an ongoing priority.

In recent years, we have achieved significant energy savings through a range of emission reduction and fuel efficiency initiatives across our haulage and loading fleet. Principal projects have included payload improvement project for the haul trucks, drill low-idle optimisation, contractor mining monitoring and targeting and improved shovel truck matching. We also ensure high-standard maintenance and optimal engine calibrations. The progressive implementation of mine digitisation at our operations will enable us to realise greater energy savings through these interventions.

Current energy-efficiency improvement projects focus on addressing energy inefficiency areas, notably through haulage traction. As part of our Smartroads initiative, we are improving the conditions of our haul roads and treating them with dust-limiting surfacing technologies, aimed at reducing the rolling resistance and reducing diesel consumption. During 2021, we did not realise consistent performance improvements; we continue to experience challenges related to the behavioural component in ensuring the effectiveness of our efficiency improvement initiatives.

The focus going forward is on innovations in reducing energy use and alternatives for increasing our use of renewable energy and ensuring alignment with ISO requirements.

Displacing the use of diesel

To unlock the carbon neutral pathway, a significant focus is on the ability to reduce and displace our diesel consumption with alternative greener options. Several solutions are being investigated including the hydrogen fuel-cell truck which is being piloted at Anglo American Platinum, electrification of smaller fleet as well as green fuel sources. We aim to significantly address our scope 1 emissions by 2030 by adopting a combination of these technologies.

Transitioning to renewable energy use

Reducing our reliance on national power utility Eskom, which is heavily reliant on coal for energy generation, is a priority in our pathway to carbon neutrality. South Africa is enduring an ongoing electricity security crisis; Eskom continues to have high levels of unplanned outages and the system remains unpredictable and unreliable. As an industrial customer, our operations are not significantly affected by the power outages caused by load shedding. However, in response to Eskom emergency load curtailment requests, we reduce our consumption accordingly. Our operations have protocols in place to minimise the impact on production. As Kumba does not have underground operations, there is very little safety risk to employees during power outages.

We have been assessing and pursuing opportunities for implementing renewable energy projects, both to support a transition to sustainable energy sources that reduce carbon emissions and to provide predictable cost and energy efficiency. At present, the most suitable technology delivering

Climate change and energy management continued

the greatest impact for operations in the Northern Cape is solar PV. In the first phase of implementing our decarbonisation pathway, we will focus on achieving solar PV self-sufficiency, aiming provisionally to reduce our carbon emissions by 20% by 2026. In 2020, we identified suitable locations for solar PV plants and we continued in 2021 with the feasibility studies. The initial scope is to generate solar energy for power generation of 60 MW to 80 MW at Sishen and at Kolomela. We are collaborating with Anglo American in public-private sector initiatives to accelerate renewable energy generation and the hydrogen economy in South Africa. Through Anglo American's integrated strategy for its South African operations to enable access to 24/7 renewable energy through wheeled wind, solar PV and pumped hydro storage, we aim to displace 100% of Eskom electricity by 2030.

These efforts are supported by positive developments in the renewable energy and hydrogen economy landscape in South Africa. In unlocking renewable energy potential, the government's structural reform allowing companies to create electricity-generating facilities of up to 100 MW without a licence, is an important step benefiting our solar PV project aspirations. Amid growing recognition of green hydrogen as an essential component of South Africa's energy transition, the production, transport, storage and use of green hydrogen has been the subject of numerous policy updates and public and private sector commitments in the country, especially in the last year. Positive outcomes will be supported by the R131 billion in grant and concessional finance offered to South Africa to accelerate its transition to clean energy projects, announced following the recent UNFCCC COP26 in Glasgow.

We support the development of low-carbon technologies through partnerships, including with the Industrial Development Corporation (IDC) and government and as an industry partner in university research projects. In recent years we have implemented several small-scale carbon offset projects. These have included installing domestic solar powered water heaters in houses, and undertaking a camel thorn tree preservation project aimed at creating an offset area to preserve vegetation. Solar powered facilities installed at our Heuningkranz exploration site enable the site to operate "off the grid".

Decarbonising our value chains

We are committed to playing our part to mitigate the impact of our scope 3 emissions along our value chain, recognising the importance of advocating for and influencing change to drive down emissions to help limit global temperature rise to 1.5°C. Most of our scope 3 emissions relate to our iron ore sales into the steel value chain. Our ability to significantly reduce our scope 3 emissions is dependent both on the steel sector decarbonising and a supportive global policy environment. With the right policy framework, we believe steel makers will be able to accelerate towards less carbon intensive methods of production, which would translate into a significant reduction of our scope 3 emissions.

Anglo American has a stated ambition to achieve a 50% reduction in scope 3 emissions across the portfolio by 2040. Kumba recognises the importance of high grade iron ore as the world progresses towards net zero and believe our products have a role to play in this transition.

As part of an Anglo American initiative, we have assessed the evolution of the steel industry in the coming decades, and believe there is significant opportunity to reduce our scope 3 emissions. Further details are provided in the Anglo American Climate Change Report 2021. To support a 1.5°C pathway, the steel industry must greatly accelerate the shift in steelmaking from the traditional method using a blast furnace and basic oxygen furnace to less carbon intensive approaches based on feeding electric arc furnaces with either direct reduced iron or recycled steel. We are working with customers and technology partners on low-carbon steelmaking technologies. Low-carbon hydrogen will play a significant role to replace fossil fuels in the steel sector. Our focus on unlocking the hydrogen value chain to enable a swift transition to a more sustainable energy mix, will assist in facilitating green steelmaking.

While we have some influence, we must partner with others in order to deliver change at scale. Our participation in industry forums, whereby we work indirectly with our customers and other stakeholders at a value chain level, is crucial in enabling systemic change. In the steelmaking field, as part of Anglo American we are a member of Responsible Steel, the steel industry's first global multi-stakeholder standard and certification initiative, which has the objective to enhance the responsible sourcing, production, use and recycling of steel. Initiatives such as this one provide a platform to engage with other like-minded players on low-carbon technological innovation, share knowledge and find greater co-operation opportunities.

Our performance in 2021

Although Kumba's total energy consumption (direct energy plus indirect energy) increased to 8.73 million GJ in 2021, compared to 8.11 million GJ in 2020 due to increased production. Our energy use intensity decreased by 4.5% from 0.22 GJ per tonne product, in 2020 to 0.21 GJ per tonne product.

Kumba continues to benefit from section 12L energy-related tax-deduction incentives for businesses that demonstrate measurable energy savings. The Company's tax allowance claim exceeded R4.4 million in 2021.

In 2021, Kumba's operations were responsible for 0.99 million tonnes of (scope 1 and 2) CO_2-equivalent emissions (Mt CO_2e) from electricity purchased, and the combustion of fossil fuels within the mining operations, a 9% increase year-on-year due to increasing energy requirements. Our scope 1 and scope 2 emissions are independently assured. Our carbon emissions intensity decreased by 3.63% from 0.025 tonnes CO_2 per tonne product to 0.024 tonnes CO_2 per tonne product.

In 2021, we assessed our scope 3 emissions based on 2020 data, as part of an Anglo American group initiative.

Due to the complex nature of this data our reporting will lag with one year going forward.

→ The full methodology is published on Anglo American's website: www.angloamerican.com/scope-3-methodology-report.

For Kumba, scope 3 emissions along iron ore value chain activities – upstream, midstream and downstream activities – account for 97% of our total GHG emissions, of which processing sold products (iron and steelmaking) accounts for 90%.

2020 data	Scope 3 emissions ($MtCO_2e$)
Purchased goods and services	0.934
Capital goods	0.632
Upstream transportation and distribution	0.009
Fuel and energy emissions not in scope 1 and 2	0.165
Waste generated during operations	0.002
Business travel	0.001
Employee commuting	0.003
End of life treatment	–
Downstream transportation and distribution	1,174
Processing of sold products	33.992
Total ($MtCO_2e$)	36.912

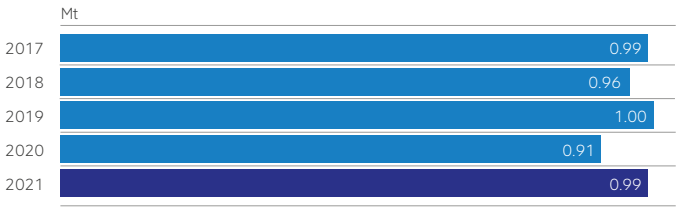
→ **Further details on our operations' direct and indirect GHG emissions (scope 1, 2) are provided in the performance table** on page 116.

Climate change indicators

	Unit	2021	2020	2019	2018	2017
Scope 1 CO_2 emissions (direct – fossil fuels/ non-renewable)	Mt	**0.53**	0.49	0.53	0.54	0.54
Scope 2 CO_2 emissions (indirect)	Mt	**0.46**	0.42	0.47	0.42	0.46
Total scope 1 and 2 CO_2 emissions	Mt	**0.99**	0.91	1.00	0.96	0.99
Scope 3 CO_2 emissions (indirect – electricity purchased)	Mt					
Energy from fossil fuels consumed	Million GJ	**7.16**	6.65	7.16	7.23	7.28
Electrical energy consumed	Million GJ	**1.57**	1.46	1.62	1.57	1.65
Total energy consumption	Million GJ	**8.73**	8.11	8.78	8.85	8.94

Scope 1 emissions: direct operational emissions on-site
Scope 2: indirect emissions from purchasing electricity generated by the national power utility, Eskom, for site use
Scope 3: all indirect emissions (not included in scope 2) that occur in our value chain, including both upstream and downstream emissions.

CO_2 emissions



CO_2 emissions intensity

Total energy consumption

Energy intensity

Climate change and energy management continued

Disclosure related to the recommendations of the TCFD

Respecting society's increasing expectations for greater transparency around climate change, our management and reporting approach follows the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). Kumba's response to the risks posed by climate change is multi-disciplinary and is covered throughout our reporting suite including in our sustainability report and Anglo American plc's disclosures. The table below offers guidance on where to find information relating to each of the TCFD's recommendations.

Recommended disclosures	References	Page
Governance		
Disclose the organisation's governance around climate-related risks and opportunities.		
(a) Describe the Board's oversight of climate-related risks and opportunities.	Corporate governance	IR 40
	Governance and management approach	SR 24 to 31
	Climate change	SR 87 to 91
(b) Describe management's role in assessing and managing climate-related risks and opportunities.	Material risks and opportunities	IR 76
	Governance and management approach	SR 24 to 31
	Climate change	SR 87 to 91
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning, where such information is material.		
(a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Climate change	SR 87 to 91
(b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	Climate change	SR 87 to 91
	→ Anglo American Climate Change Report 2021	13 to 14
(c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2oC or lower scenario.	→ Anglo American Climate Change Report 2021	15 to 19
Risk management		
Disclose how the organisation identifies, assesses, and manages climate-related risks.		
(a) Describe the organisation's processes for identifying and assessing climate-related risks.	Material risks and opportunities	IR 76
	Climate change	SR 87 to 91
	→ Anglo American Climate Change Report 2021	13 to 14
(b) Describe the organisation's processes for managing climate-related risks.	Climate change	SR 87 to 91
(c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Climate change	SR 87 to 91
	→ Anglo American Climate Change Report 2021	13 to 14
Metrics and targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.		
(a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Climate change	SR 87 to 91
(b) Disclose scope 1, scope 2, and, if appropriate, scope 3 GHG emissions, and the related risks.	Climate change	SR 87 to 91
	Climate change	SR 91
(c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Climate change	SR 87 to 91

Water

Highlights	Learnings/challenges	Focus for 2022 and beyond
Restated our baseline water data since 2015 to assist in informing site-specific targets in water management plans. Ensured zero level 3 to 5 water discharge incidents for the sixth year 79% reduction in limited impact water-related incidents (level 1) recorded – five compared to 24 in 2020	Overwhelming of stormwater management systems due to heavy rains resulted in overflow and discharge of water to neighbouring farmers 75% recycling target challenging as we operate water positive mines, to significantly increase our level of recycling requires construction of new infrastructure for storage or restating of recycling target Continue to manage issues of concern among certain local farmers regarding mine dewatering that potentially affects the availability of groundwater and some excess water discharged into neighbouring farms WULs do not allow our operations to supply excess water directly to communities	Confirm site specific water saving projects and long-term water saving and recycling targets in line with revised baseline data Ongoing construction and upgrading of stormwater management and focus on optimal operation of existing infrastructure (bowtie developed) Aim to identify and implement additional water projects to increase water reuse rate Ensure zero level 3 to 5 water discharge incidents Work towards full compliance with conditions of WULs Collaborate in developing infrastructure to support direct supply of water from our operations to local communities

Water is fundamental for our operations and surrounding communities. We embrace our role as water stewards, and as our approach continues to evolve, we incorporate learnings and technology. We take a catchment-wide, risk-based approach to water management, addressing the risks of flooding, discharge, water scarcity, mine dewatering and contamination.

Principal water-related risks

Our mines are in the water-stressed Northern Cape, where arid conditions and municipal potable water supply constraints underscore the need for responsible water management. To maintain our licence to operate, we take all reasonable steps to ensure that we do not degrade water quality or compromise the access rights of other users.

Kumba's operations are not exposed to water security risk; they are net water providers in the catchments where we operate. Our principal water-related risk relates to increased dewatering (to ensure safe mining) resulting in some water being spilled into the environment in cases where the local water service provider, Sedibeng Water, was unable to accommodate the current excess volumes. Other water-related risks we focus on are: improper stormwater management; the risk of a spillage of dust suppression water, which contains chemicals, with likely contamination of surface and underground water; and the risk of polluting stormwater channels at Sishen.

Key measures to address risks include:

- implementing projects to ensure effective stormwater management at Sishen and Kolomela
- conducting regular audits and prioritising the close-out of findings to ensure compliance; progress on close-out of findings is tracked monthly
- implementing a hydrocarbon management plan, analysing incidents, and putting mitigation measures in place
- engaging regularly with affected stakeholders and authorities
- providing compensation to affected farmers with grazing subsidies and water

As part of our group-wide risk management framework, we assess water-related risks each year.

→ **Our approach to managing climate-related risks is discussed** on page 88.

Our strategic approach

We take a risk-based approach to water management, both within our own operations and on a regional level. This is guided by the Anglo American group water policy and water management standard. Our water policy focuses on reducing our water risks to ensure water resilient operations, while reducing our water footprint. The standard addresses all aspects of water management, including supply and security, water for operations, hydrology and hydrogeology, mine dewatering, water collection, storage, uses and discharge, closure, post-closure, water quality and potential environmental impacts, including sustainable and socially responsible water use, for sites and projects. Implementing the standard ensures that critical controls and best practices are implemented to manage risks at all levels of the value chain, and to find opportunities for collaborative solutions with communities, based on a detailed understanding of ground and surfacewater aspects.

Water continued

Kumba's water management strategy for 2020 to 2025 is centred around the following four core elements to guide our progress. The overall implementation cost of new commitments is estimated at R90 million over five years.

- Efficient water user: Reducing operational demand for water resources, specifically clean water and prioritising recycling and reuse of grey water. We will measure and track freshwater efficiency and recycling targets and performance over five years.
- Engaged water stakeholders: Developing trust and co-operation with stakeholders to facilitate shared value within the catchment. We aim to establish water projects that enhance the long-term water independence for Kumba and key stakeholders (with closure in mind).
- Controlled water operations: Focusing on both maintenance and functionality of existing facilities to deliver performance as designed/planned. We aim to deliver operationally controlled mine water with clear responsibility/accountability, risk-based management, ensuring no legal transgressions
- Optimised and adaptive water management: Focusing on proactive management controls, systems and processes for reasonably expected water developments to ensure optimal performance and meeting the needs of future operations.

Each of our sites is implementing a water management plan that includes water security, water-use efficiency, tailings water-recovery projects and mine-dewatering strategy, stormwater management, and discharge management, complemented by a monitoring programme. The sites have Competent Persons for water management, who chair water teams established at each operation.

Water targets related to absolute reductions, intensity reductions and zero level 3 water discharges incidents are set at a Company level. These targets are then cascaded down into the organisation through the establishment of water-specific indicators that are embedded into the Chief Executive's performance contract and the performance contracts of executives and operational personnel. Long-term share incentive plan targets associated with water management are in place.

Developing roadmaps informed by improved data management

For us to monitor our progress and take appropriate action, the data on which we base our decisions must be as accurate as possible. Over the last two years we have significantly improved our water data management. Last year we established site-specific water balances, with each operation generating a water reporting data set using International Council on Mining and Metals (ICMM) metrics for all withdrawals, consumptions, discharges and reuse/recycling. We installed critical monitoring instrumentation to improves the accuracy of these water balances.

The water balances are assisting us to identify water efficiency opportunities, through the reduction of water losses and increased efficiency, in line with our commitments in the SMP. Modelling water balance scenarios significantly improves our ability to predict and quantify risks and identify infrastructure requirements to enable timely management responses to climatic variability.

Given the breadth and reach of the improvements to our water definitions, we conducted a detailed review of our mining operations' water data from 2015 to date to establish a more accurate picture of our water consumption across our operations. This was completed in 2021, ensuring that all definitions have been applied correctly. The restated baseline data for 2030 targets enables us to more accurately assess our achievements to date and understand the challenges and opportunities ahead. We have also started to incorporate water quality data as per revised International Council on Mining and Metals (ICMM) guidelines. In 2021 we have continued to implement meters for improved data recording.

Water uses and sources

The main consumptive uses of water at our operations are dust suppression, entrainment (water locked up in tailings and, to a lesser extent, in products), and evaporation from mine circuits (dams, tailings dams, other exposed areas).

Our freshwater withdrawals are dominated by Sishen, where more fresh water has to be pumped to ensure dry conditions for safe mining in the open pit. Groundwater is our primary water source, accessed through dewatering boreholes. Kumba also makes use of municipal water for domestic purposes. Operations reduce their dependency, in line with our water strategy, on imported fresh water through the use of lower-quality treated sewage water. Sishen uses treated sewerage effluent (grey water) from the Kathu wastewater treatment works, to increase the export of groundwater to the Sedibeng reservoir. We continue to sell the excess water to the Sedibeng water authority, in line with WUL conditions, to supply bulk water to farmers, to compensate for their potential losses from private boreholes. We capture rainwater for use in dust suppression.

→ **Our water withdrawal by source is detailed** on page 115.

Focus areas at our operations

Water saving initiatives

To date, much of our fresh water withdrawal reduction is due to a switch from fresh water withdrawal to the use of treated sewage effluent, as well as implementation of proper stormwater control. We minimise water losses by using a closed-loop water system. The mines effectively recycle mine-affected water for use in the process plant.

In 2019 we conducted site assessments that assisted in identifying water saving and recycling projects. Working with Anglo American, we are revising water saving and recycling targets in line with the verified, re-baselined data. Given that we operate water positive mines, we focus on reducing freshwater consumption, and optimally supplying our excess water to communities.

High impact water saving projects at both mines include optimisation of dust suppression in and around the pit and plant roads. We are trialling a new dust suppression technology that potentially requires up to 80% less water consumption than current dust suppression practices. Our stormwater infrastructure developments will enable us to increase our capturing and containing of water on-site for recirculation, which reduces our reliance on fresh water. We continue to work with various internal stakeholders to identify more opportunities.

Mitigating water discharge risks

A priority is to ensure no spillage of contaminated storm/process water and groundwater. Clean and dirty water separation at our mines ensures that there is proper management of stormwater to avoid surfacewater pollution. Kumba supplies most of its water for treatment at local water utilities; no water is discharged to fresh surface water sources unless in emergency situations due to Sedibeng water infrastructure constraints unable to accommodate the current excess volumes and in cases where we experience above average rainfall events.

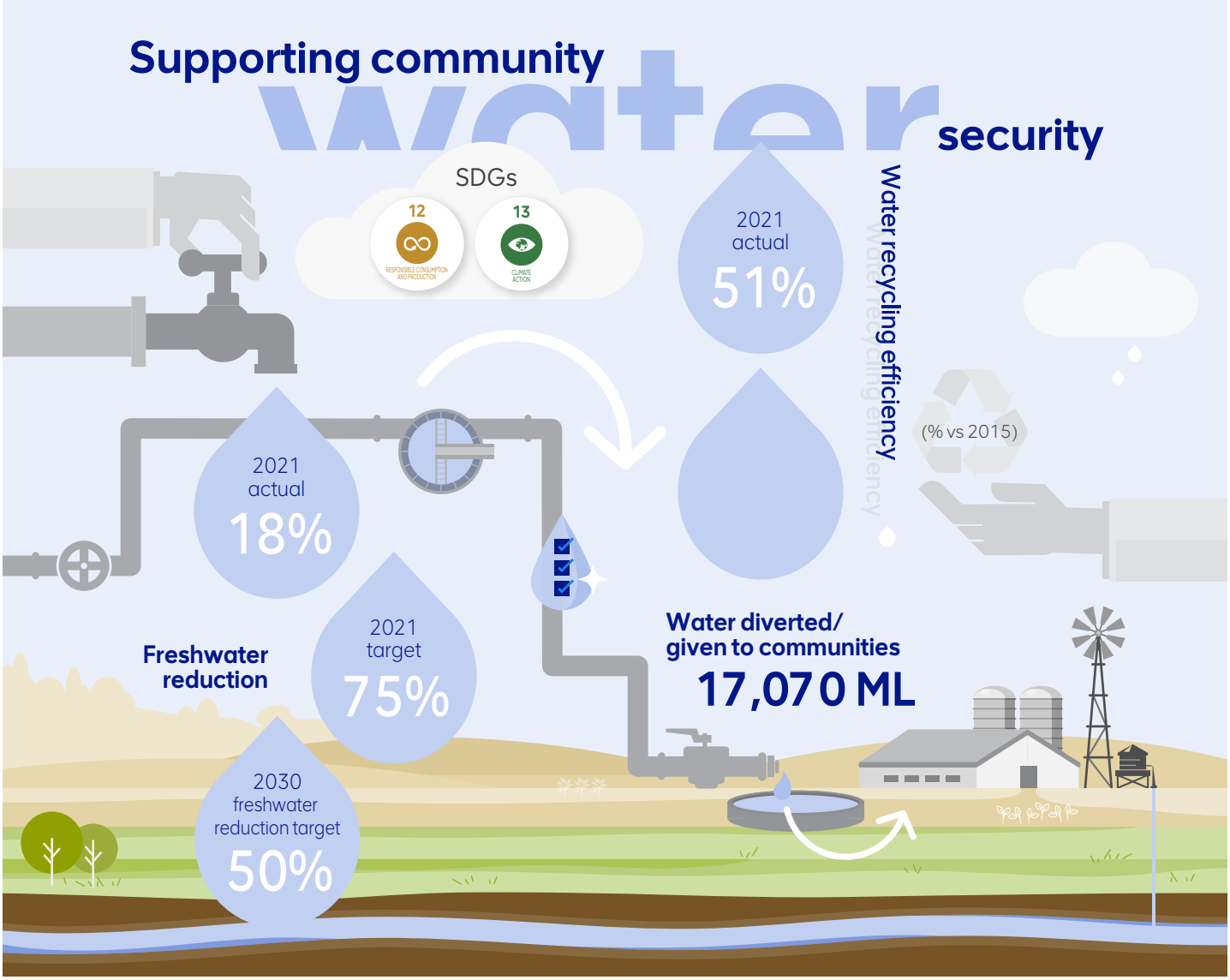
The quality of the water discharged at all of Kumba's operations is closely monitored. We engage an independent service provider to conduct monthly water quality monitoring and quarterly reports are submitted to the DWS. Where needed, corrective actions are taken to mitigate any adverse impacts on the water quality.

Climate change projections indicate that our opencast mining operations are at risk of more intense rainfall and frequent major floods. We focus on ensuring the adequacy of controls to prevent and mitigate water accumulation in operating areas, and address slope stability and tailings dam failure.

To mitigate associated risks and ensure compliance with our integrated WUL conditions, we are implementing multi-year stormwater management plans and focus on proper operation of existing infrastructure (bowtie developed). We have invested about R500 million to date in measures to improve stormwater management and will undertake further construction and upgrading in a phased approach, as agreed with the DWS, with all projects expected to be completed by 2025. This includes a stormwater harvesting dam project underway at Sishen for use at our processing plants.

In the interim we strive to mitigate risks of excess water discharged into neighbouring farms when we experience heavy rainfall. For example, at the beginning of this year, heavy rains flooded some of our pits at Sishen, overwhelming the stormwater management systems leading to overflow and discharge of water to neighbouring farmers' properties. We engaged the land owner and the DWS. We have applied for amendments to some of our licences to allow for exemptions and relaxation of some conditions including stringent water quality parameters.

Water continued



Supporting community water security

Kumba plays a critical role in alleviating water shortages by providing about a third of its water in excess of operational needs to surrounding communities, through Sedibeng Water.

We implement a pipeline system that pumps excess clean groundwater from dewatering at Kolomela and Sishen mines into the Vaal Gamagara pipeline to support the Sedibeng regional water supply, as per the conditions of our WULs. In 2021, we supplied approximately 17.0 million m^3 to the broader Northern Cape region. When there is too much water for this pipeline to transport, excess is diverted to a pump station which feeds water into boreholes outside the dewatering zone at a predetermined rate suitable to each specific borehole, thereby recharging the aquifer.

We continue working with the DWS, Sedibeng and other stakeholders to explore maximising this social benefit to an even wider region. Kolomela is engaging with the local municipality in exploring the potential construction of pipelines from the mine to the municipality to supply the local community with excess, clean groundwater. The project is at prefeasibility stage.

Sishen and Kolomela continue to manage issues of concern among certain local farmers regarding mine dewatering that potentially affects the availability of groundwater.

All complaints are investigated and appropriate remedial action is taken. Sishen is investigating solutions to prevent mine dewatering negatively impacting borehole levels. In addition to supplying bulk water through Sedibeng to compensate for potential losses from private boreholes, interventions include acquiring farms from those who are willing to sell or compensating those who have been impacted (based on evidence). Furthermore, some of our land is used for community benefit such as farming (livestock and crops).

Kolomela artificially recharges clean mine water to the underground aquifers that its operations traverse, thereby improving groundwater resources for neighbouring farmers and limiting quantities discharged into the environment. Sishen has been granted permission from the authorities to undertake a similar project and implementation will commence soon. Regular engagements are held with the DWS and all other water stakeholders in the area to ensure the surplus water is used to maximum benefit in the region.

Unit consumption rate of water (water intensity) increased to 116 ℓ/tonne of ore produced, up from 95 ℓ/tonne in 2020 due to increased production after the recovery from Covid-19-related disruptions in the prior year and improved plant availability and reliability.

Water discharges came to 17.7 megalitres. For our total operational water requirements, 51% was met by recycling and reusing water (2020: 44%).

Water consumption is the amount of water that is not recycled or discharged. In 2021, new-water consumption totalled 11.2 million m^3 (2020: 11.2 million m^3) No water source, ecosystem (e.g. Ramsar-listed wetland) or habitat was materially affected by our extraction and use of water.

We did not record any level 3 (or above) incidents. Five limited impact water-related incidents (level 1) were recorded.

→ **Details of the total water withdrawn, consumed and recycled at each of our operations are** on page 115.

Performance

Group water consumption (ML)

	2021	2020	2019	2018	2017
Water from water service providers or municipalities (1)	**382**	329	270	154	35
Waste water from other organisations (2)	**1,794**	1,127	1,830	1,180	1,830
Water from groundwater (3)	**24,892**	27,940	28,520	29,090	31,400
Water withdrawn (1 + 2 + 3)	**27,068**	29,396	30,620	30,424	33,265
Water internally recycled	**1,876**	3,820	3,440	3,410	3,120
Total water consumption	**28,944**	33,216	34,060	33,834	36,385

Andrew Nkhoma, an environmental technician working on the water systems at Sishen. The return water dam at Sishen has been expanded to carry double the capacity of the original dam. This dam receives water from the eastern and western sumps on the mine. The same water is then supplied back to the plant as well as to the town of Kathu for domestic use.

Mine closure, rehabilitation and biodiversity

Highlights	Learnings/challenges	Focus for 2022 and beyond
Good progress with rehabilitation, achieving reshaping, seeding and growth medium targets Participated in pioneering technology environmental DNA sampling and analysis at Kolomela Kumba received the top score in the Endangered Wildlife Trust's annual biodiversity performance ratings Completed 106 km of game fencing and 26 km of internal cattle fencing, providing critical support for the successful implementation of the land management strategy	Approximately 16,399 ha of land impacted by our activities, with a large proportion inaccessible for rehabilitation Several long-standing environmental focused education initiatives remained suspended due to Covid-19 restrictions and risks Uncertainty on NEMA financial provision regulations compliance.	The implementation of the land management strategy aims to set a leading example and drive a lasting legacy of responsible land utilisation Develop respective social mine closure plans in line with the Social Way and MCT Increase our rehabilitation targets, particularly at Sishen, to aggressively address rehabilitation backlog Between 2022 and 2025, we will track indicators of progress towards achieving our biodiversity NPI goal

A mine continues to have social and environmental impacts long after the end of its operational life. Through effective closure planning and rehabilitation, we strive for our mines to leave a positive, healthy and sustainable legacy. Our approach to land management integrates mine closure planning with land rehabilitation, promoting biodiversity and conservation, and using our non-operational land to benefit both the mine and our surrounding communities.

Mine closure and rehabilitation

Our approach to mine closure planning is aimed at ensuring that the full spectrum of life-of-mine opportunities, risks and liabilities is effectively identified, that plans are fully costed, and that adequate provision is made for premature closure. Integrating mine closure planning into operation strategy is the best way to address many of our mine closure-related risks and opportunities, particularly through rehabilitating land in parallel with our mining activities. All our mines are opencast operations. This makes rehabilitating the land we disturb to the level of post-mining land use agreed with stakeholders, a particularly material issue.

Management approach

Our 'cradle-to-cradle' approach begins with closure planning in the exploration phase, and continues until a sustainable post-mining legacy has been achieved. The mine closure and rehabilitation at Kumba is governed by key work streams: the Anglo American mine closure toolbox (MCT) and mine closure standard compliance (MCS), the rehabilitation strategy, and the closure liabilities and closure execution. These work streams enable us to integrate the closure planning process into operational plans in such a way that will reduce the current and future impacts of mining on the operational footprints and ensure a sustainable post-mining legacy for stakeholders.

MCT and compliance with MCS

Our updated MCT v3, launched in November 2019, is a structured, risk-based framework for planning and managing any closures. It supports our operations in achieving compliance with the 23 requirements of the group technical standard for mine closure. Our rehabilitation strategy and guideline documents set out in greater detail our expectations in relation to concurrent rehabilitation.

Sishen and Kolomela have remained fully compliant with the MCS requirements. Aligning with the closure standard also ensures alignment with our SMP. The operations made significant developments in improving closure plans to a required maturity level of competence by the end of 2021, and are working to close remaining gaps.

Mine rehabilitation

Our approach emphasises the need to manage our financial liabilities rigorously, work with stakeholders to address social impacts, and begin rehabilitating mines while they are still active. Our rehabilitation strategy upholds a commitment to reduce the backlog of our disturbed land that requires rehabilitation, during the lifetime of our current mines rather than after operations cease.

Our mine rehabilitation programme is designed to be integrated into our key business planning processes – resource development plans, life-of-asset planning and the SMP – to reduce our disturbance footprint and generate value for the group and our stakeholders. In adhering to the Anglo American group rehabilitation strategy (and associated guideline), all open-pit operations need to develop and implement five-year rehabilitation plans that outline targets, monitoring, maintenance and management programmes to drive towards relinquishment.

Performance developments

Closure plans and integrated planning

Sishen and Kolomela have current life-of-mine estimates of 18 and 13 years respectively. Both operations have closure plans that are fundamentally aligned with the toolbox requirements. In line with the requirements of the MCT, detailed closure plans are developed within five to 10 years of operational closure. Once all Kumba's life extension projects have been implemented, we aim to increase the life-of-asset to 2040.

As part of integrated closure planning, detailed design closure criteria inputs have informed life-of-asset plans for Sishen and Kolomela. The objective of the integration is to enable efficient rehabilitation by establishing and working towards short and long-term rehabilitation targets and assigning annual budgets. In addition, we aim to optimise our mining processes to reduce the environmental impact and ultimately reduce liability where possible. Kolomela and Sishen have realised significant opportunities through an integrated approach to mineral waste management which involves reducing the operational footprint by optimising the short haul in-pit dumping of pits and available space in existing wasterock piles.

In addressing social closure, Kolomela has appointed an independent consultant, and Sishen is in the process of appointing an independent consultant, to develop their respective social mine closure plans in line with the Social Way and MCT. The annual update to the DMRE in terms of financial provision does not include the social closure costs.

Closure liabilities and corresponding financial provisions

Sishen and Kolomela update their closure liabilities estimate annually, as required by legislation. The assessments are based on environmental management programmes (EMPR) and other commitments in various authorisations, as well as design closure criteria for final closure of the operations. Financial provisions are made annually, reviewed and audited in line with internal and external requirements. Financial provisions are provided once DMRE approvals of liability estimates are received.

The latest draft of NEMA financial provision regulations was published for public comment in October 2021. The final version of the regulations is yet to be published by the Department of Forestry, Fisheries and the Environment. The latest draft states that mining companies will have until end of 2023 to comply. Therefore, as stipulated in the transitional arrangement of the regulations, the 2021 closure liability submission for Kumba managed mining operations to the DMRE is done in terms of the MPRDA, given uncertainty on NEMA financial provision regulations compliance. The 2021 closure-liability assessments are based on identified closure risks (predominantly environmental) at each operation and developing a mitigation plan over the remaining life-of-mine. Every third year we use the services of an external independent consultant to update our closure estimates and financial provisions.

In 2021, Kolomela started implementing Deswik for mine closure planning and processes to address infrastructure growth and rates increase to ensure more accurate mine closure liability calculations. At the end of 2021, our immediate closure cost estimates for the two mines was R5.2 billion (2020: R4.7 billion) and financial provisions totalled R2.7 billion. At the end of 2021, the increase in closure costs resulted in a shortfall of R293 million, which will be funded by guarantees. Sishen's estimated closure cost is R3.8 billion, a 8.9% increase on R3.5 billion in 2020. Sishen is placing a focus on ensuring compliance to dump design plans, to mitigate associated closure liabilities. The year-end financial provision was R1.9 billion. Kolomela's estimated closure cost is R1.3 billion in 2021, a 9.7% increase on the R1.4 billion at the end of 2020. The year-end financial provision was R866 million.

The new NEMA financial provision regulations, once finalised and promulgated, require that the holder of a mining right do the following:

- make financial provision for rehabilitation and remediation, decommissioning and closure activities at the end of life-of-mine, and remediation
- manage latent or residual environmental impacts (latent and residual impacts and the management thereof have not been defined in detail)
- provision of immediate closure costs for three years as opposed to one year

In providing for these, important issues for consideration include water management (pumping and treatment), surrounding farmers and water supply, community housing projects implemented during the life-of-mine, and economic beneficial post-closure land use.

Rehabilitation

We focus on rehabilitating available land concurrently as we strive to return land to near initial state. This approach results in significant financial and environmental benefits and can reduce closure liabilities. Sishen and Kolomela have each developed a five-year rehabilitation plan and strategy, which is integrated into the life-of-asset planning process. A rehabilitation steering committee meets three times a year to oversee progress with implementation.

At year end, Kumba had 83,402 ha of land under its management control (2020: 92,094 ha). A total of 16,399 ha has been disturbed by mining, processing and mineral waste disposal, and supporting infrastructure (2020: 14,838 ha). Sishen has 475 ha available for rehabilitation and is addressing a backlog of 475 ha, though much of this is inaccessible. Kolomela, which started operations in 2011, has about 50 ha available for rehabilitation.

In 2021, we exceeded our rehabilitation targets (see table on the following page). A highlight was Sishen achieving 100.0 ha of reshaping. Our progress was supported by an increase in available resources, both equipment and personnel. All required rehabilitation was concluded at exploration sites.

In addressing a deficit of topsoil, we have continued to trial the suitability of different waste types as an alternative growth medium including the use of crushed waste discard material from the processing plants as well as treated contaminated soils from our bioremediation facilities. This work will continue in 2022.

Mine closure, rehabilitation and biodiversity
continued

Rehabilitation targets and performance in 2021

(Ha)	Reshaping	Seeding	Growth medium
Sishen			
Target	80.0	80.0	80.0
Actual	100.0	80.0	100.0
Kolomela			
Target	30.0	40.0	40.0
Actual	38.8	42.0	41.0
Total actual	138.8	122.0	141.0

In line with our five-year rehabilitation plans and steady progress, we are annually increasing our rehabilitation targets, particularly at Sishen, to aggressively address the rehabilitation backlog.

→ **Further data on our land management, including our operational footprint, rock mined and ore processed and rehabilitation liabilities,** is provided on pages 116 and 117.

Successful de-proclamation of the former Dingleton Town

Kumba has concluded the de-proclamation process on the first two phases of the former Dingleton Town, to enable unconstrained mining of the Sishen mine pit, making it the largest of the very few towns that have been de-proclaimed in South Africa's history. The last and final phase is expected to be completed by first half of 2022. The town and its ancillary infrastructure have been demolished, rehabilitated and handed over to Sishen.

Biodiversity

Biodiversity emerges from a complex interaction between species and habitats, and underpins the health and function of the natural environment. Ultimately, we are all dependent on natural systems, so maintaining biodiversity thresholds is critical to the health and wellbeing of people. We have an ambitious net positive impact (NPI) target that requires us to leave the biodiversity of an area in a better state than when we arrived. Going beyond a simple "no net loss" principle, this requires a deep understanding of our operating ecosystem and a very deliberate land management strategy.

Our NPI commitment applies to significant biodiversity features impacted by activities. These can include threatened species, natural habitats, features supporting important ecological processes and/or ecosystem services essential to the wellbeing of society. Our operations are in areas of higher

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Kumba's leadership in biodiversity mainstreaming recognised in EWT's biodiversity disclosure project

Demonstrating strong management of biodiversity issues, Kumba received the top score in the Endangered Wildlife Trust's (EWT)'s third annual biodiversity disclosure project report. The conservation group assessed the biodiversity performance of all 327 JSE-listed companies and 27 South African state-owned enterprises. EWT asked eight key questions to ascertain what steps the companies follow to effectively mainstream biodiversity into their activities. The assessment was conducted using publicly available information, including company websites and 2020 annual reports. The rating is one of the first of its kind globally and is critical in comparing biodiversity performance in a scientifically rigorous and standardised way. The rating allows for comparing biodiversity performance specifically across all sectors and company sizes. Kumba (together with Anglo American and Anglo American Platinum) received the highest score of 16, up from 15.5 the previous year. Mining companies featured prominently in the top 20 ranked companies, which is testimony to the sector's efforts to reduce their impacts on biodiversity.

Measuring biodiversity at a molecular level

The use of environmental DNA (eDNA) as a tool for biodiversity surveys is a fast-developing field. The pioneering technique takes biodiversity assessment down to the molecular level. Despite its relative infancy, eDNA is proving useful for surveying a wide range of macro-organisms (animals, plants, fungi) – particularly for aquatic and riparian species where traditional capture-based methods may not detect rare species and can be time-consuming and expensive. DNA is extracted from water samples collected at sites and is sequenced, allowing identification of individual species using bioinformatics analysis. This provides an effective method of measuring biodiversity. This year we successfully piloted eDNA sampling at various water resources (including rivers and ponds) at Kolomela. The analysis of the eDNA samples collected will inform the development of the operation's biodiversity offset management plans and biomonitoring programme. The benefit of implementing eDNA is understanding the occurrence of rare and scarcely populated animal species occurring in the area and as such supporting our efforts in developing tailor-made conservation plans for our sites.

We will introduce eDNA at Sishen in 2022.

biodiversity value, increasing our responsibility to contribute to its protection and conservation. In line with the ICMM's position statement on mining and protected areas, we continue to uphold our commitment to neither explore nor develop new mines in world heritage sites, and to respect legally designated protected areas, recognising their important role in protecting biodiversity values.

Sishen and Kolomela are situated in the southern part of a protected woodland in Northern Cape province. The region hosts several protected plant species, such as camel thorn and shepherd trees, that may not be damaged or removed without permits. Our operations' expansion activities result in large areas of woodland having to be cleared. Permits have been issued on condition that an additional biodiversity offset area is provided for long-term conservation purposes.

Our approach and progress

Given the potential of mining activities to affect habitats through land disturbance, land-use change and pollution, as well as the specific risks and opportunities presented by the biodiversity-sensitive areas where we operate, Sishen and Kolomela have continued to implement biodiversity action plans (BAPs). The BAPs seek to balance ecological considerations and community needs. The BAPs are used in conjunction with land management plans to address top risks, including the effects of mine dewatering, alien and invasive species, bush encroachment and the relocation of protected species to offset areas. Research and biodiversity monitoring protocols are used to understand and measure long-term biodiversity trends.

The Anglo American biodiversity technical standard and SMP seek to ensure that, by 2030, all our sites demonstrate that they are on track to deliver NPI at closure. We aim to achieve this through implementing the mitigation hierarchy – avoid, minimise, rehabilitate/restore, compensate or offset – as well as through investment in biodiversity stewardship. The standard is supported by a biodiversity guideline for implementation, and outlines a systematic approach to identify biodiversity features, set targets for significant biodiversity features, identify actions to meet those targets, and track progress to achieve NPI through monitoring programmes.

In implementing the requirements of the standard, by the end of 2021 Sishen and Kolomela had achieved their targeted progress. The operations are working towards full compliance to the standard and are monitoring and evaluating the state of biodiversity and mitigating actions to reduce residual impacts.

To assess and determine the level of biodiversity on land where we have operations and the potential impacts of our activities, the sites have applied the Anglo American biodiversity overlay assessment tool, which helps to screen and map associated risks and liabilities as well as, importantly, biodiversity opportunities for an operation. This year sites completed their own biodiversity value assessment, which is used to identify potential significant biodiversity features that might have impacts that require applying the mitigation hierarchy and setting NPI targets. The sites have completed biodiversity baselines and plans with site-specific indicators to track progress towards NPI, which will be integrated into the SHE performance management system.

To enhance our capabilities, this year we started piloting the collection of environmental DNA (eDNA) samples at Kolomela sites (see case study below). The analysed results are adding valuable data to be incorporated into the baseline studies.

In implementing our SMPs, we aim to have approved site-specific plans with biodiversity targets by end-2022. Between 2022 and 2025, indicators will be tracked against plan on a quarterly, half-yearly or annual basis as per approved site plan.

Each operation will continue to identify opportunities for the implementation of additional conservation actions which meet the requirements of the biodiversity standard. These actions will also assist the operations in meeting their environmental authorisations conditions as they relate to biodiversity, such as alien species management, erosion control, and protected species management.

We are promoting collaboration between Sishen and Kolomela to ensure that resources are shared to the benefit of the Kathu and Postmasburg communities.

Using our land to benefit local communities

We aim to ensure that our non-mining land is used in a sustainable and optimised manner so as to benefit our mines and surrounding communities. In 2021, we conducted several technical studies to support the review of our land management strategy. Based on the findings of these studies the land management strategy will strengthen our management approach and activities. Our overall objectives are to ensure financial viability of all the agricultural ventures, optimise the social value created and protect and enhance the biodiversity value. The strategic focus areas include land production, land conservation and land restoration. Specialists in the fields of agronomy, tourism, education and training, conservation, industrial agriculture, economics, game and cattle farming assisted to identify and assess all opportunities that can be implemented in support of a sustainable land use programme. Land uses assessed for implementation include game breeding, cattle farming, conservation, eco-tourism, education, renewable energy projects, restoration of degraded land as well as associated value chain opportunities, i.e. taxidermy, feedlot, abattoir, etc. This process aims to implement a land management programme that is scientifically based, relevant to the geographic and ecological setting, and charts clear deliverables to ensure success.

Unfortunately several of our long-term environmental focused education initiatives have to be put on hold since 2020 due to Covid-19-related restrictions.

Mine closure, rehabilitation and biodiversity continued

As part of the technical studies conducted, focus areas were identified that require rehabilitation. These areas include sites that have bush encroachment, areas that have been infested with invader plants as well as areas that have been impacted by the recent veld fires. To address the identified issues rehabilitation programmes have been put in place which include eradication of alien and invasive bush species, reseeding of degraded areas and amended grazing programmes for areas undergoing restoration. Through these processes the mines will restore large areas of land over the life-of-mine.

All land management functions within Kumba has been centralised under the newly formed Kumba land management section. This allows for a holistic approach to land management, thus optimising the synergies between the operations. Kumba land management is developing rolling five-year plans for implementation of identified land management options and roll-out of the infrastructure development programme.

Kumba land management's immediate focus is to ensure that basic infrastructure, such as fences, access control and water provision, is in place and of a suitable standard to support the identified projects. During 2021 several key items of equipment have been procured that will be in support of the land management programme going forward. In addition to this a total of 106 km of game fencing and 26 km of internal cattle fencing have been completed. These projects are seen as critical support infrastructure that will enable the successful implementation of the land management strategy.

Infrastructure in support of the intensive rare game breeding programme has also been constructed at the two sites identified and has allowed Kumba land management to relocate buffalo and sable to the farm Fritz. Two farmhouses have also been restored that will accommodate management personnel. The implementation of the land management strategy will set Kumba apart from the rest and will drive a lasting legacy of responsible land utilisation.

Tamaga Lodge is one of three biodiversity conservation areas on the western side of the mine. These areas were originally livestock farms and are being carefully restored to their natural state.

Air quality

Highlights	Learnings/challenges	Focus for 2022 and beyond
Dust dashboards developed by Sishen and Kolomela with early warning systems that ensure that problematic areas are communicated to responsible line managers for rectification at source All dust exceedances now fully investigated to determine sources Interventions successfully prevented vandalism and theft at monitoring stations	Three mine-related PM10 dust exceedances recorded at Sishen and 12 at Kolomela from two stations (four allowed per station per year) Suboptimal use of water trucks to suppress dust at Kolomela contributed to dust exceedances Persistent dry and windy conditions at Sishen and Kolomela	Intensifying our dust monitoring and suppression efforts to ensure compliance with allowed exceedances Deploy additional water trucks and weekly management VFLs at Kolomela to mitigate risk of dust exceedances

Ensuring we adequately understand and control the dust and gaseous emissions we release at our operations is essential to prevent adverse impacts on host communities. We strive to minimise the negative impact of our operations on air quality and to keep our levels of emissions to air within legal limits.

Minimising our negative impacts on air quality

Dust or gaseous emissions that have the potential to impact air quality can occur at any stage of the mining life-cycle. In addition to greenhouse gases (GHGs), we monitor and manage the emission of dust (particulate emissions) from our opencast mines, and nitrogen oxides (NOx) emissions from mine vehicles and other diesel engines. There have been no issues reported.

We mine in arid areas and our most material air quality issue relates to excessive dust. Prolonged dry periods coupled with increased temperatures and winds increase the amount of dust generated at our operations.

We promote ongoing operational improvements to reduce particulate emissions and manage air quality risks by implementing the Anglo American air quality and emissions technical standard. This provides a framework for how we monitor and manage emissions of dust and gas (excluding emissions managed for occupational health impacts) from our sites that may pose a risk to humans, fauna and flora. In doing so, we reduce adverse effects on communities and the risk of non-compliance. Self-assessments at Sishen and Kolomela have confirmed ongoing compliance with all the requirements of the standard.

Dust suppression is undertaken in the mining and plant areas. For the mining area we use chemical dust binders which are mixed with water and then sprayed on the primary and secondary roads to suppress dust generated primarily by trucks transporting wasterock and ore. The dust binders also contribute towards water savings and therefore aid with achieving our water savings targets.

For the plant we normally use:
- dust extraction through wet scrubbers at the crushers
- mist sprayers/foggers for conveyors belts and ore stockpiles just before the stockpile
- chemical dust binders sprayed onto conveyor belts
- water-cannons to wet ore before reclamation
- water sprays to wash Fines into material on trucks that have been loaded to limit the potential for dust during transport to Saldanha
- gravel to cover all open areas, to trap and limit wind-blown dust

We implement a trigger action response plan (TARP) to manage daily dust events. In suppressing dust, we also ensure revegetation of barren surfaces.

Dust monitoring in general focuses on:
- PM10 (particles smaller than 10 micrometres) and PM2.5 (particles smaller than 2.5 micrometres), which are within the breathable fraction, by means of real-time monitors, and
- fallout dust monitoring, a "nuisance dust" that is picked up by wind and settles at other locations, by means of dust buckets.

The monitors measure PM10 and PM2.5 from all sources in the surrounding area. These monitoring stations are mainly located close to the borders of the mine and reflect the dust levels that "escape" the mine area. All monitoring positions have been determined either through an air dispersion model or based on sensitivity such as nearby farm houses or communities. Dust fall monitoring stations (dust buckets) are located close to potential dust sources such as the primary crusher and are used to guide management decisions to enable better dust control. The monitors also measure wind direction, wind speed, temperature and humidity. Sishen currently has two real-time monitoring stations in Kathu and Sesheng (two BAM). Kolomela has five monitoring stations (three tapered element oscillating microbalance and two e-samplers).

We continue to engage with the regulator and are committed to the regional initiatives on air quality management plan improvements. We also continue to invest in researching new technologies to mitigate dust generation. We do not use ozone-depleting compounds or persistent organic pollutants at our operations.

Air quality continued

Developments and performance

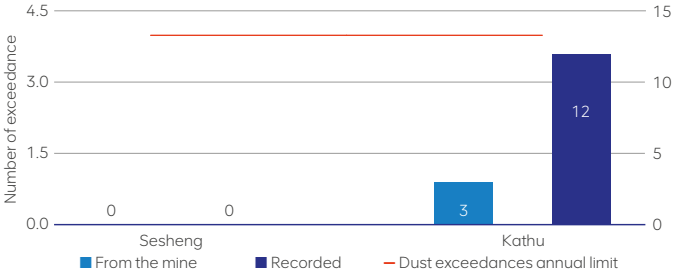
In striving to continuously improve our dust management, in 2021 we have been more proactive at both Sishen and Kolomela where we have developed dust dashboards with early warning systems that ensure that controls are in place to effectively address risks. In pursuing innovative dust suppression technology, we have been investigating a microbial dust suppression product that has multiple prospective benefits in reducing dust generated, the amount of water used, and reducing braking distance and associated diesel usage. The initial pilot process was conducted at Kolomela in 2020 and a similar study is currently underway at Sishen.

While Sishen and Kolomela continue to face dust emission challenges due to high winds and dry conditions, our performance in recent years indicates that our efforts to reduce our dust exceedances remain effective. At Sishen, controls are implemented to effectively mitigate the main contributors of dust, which are haul roads, crushing activities, and waste dump activities. This has in turn minimised dust transported to Kathu, which is approximately 2.8 km from the mine.

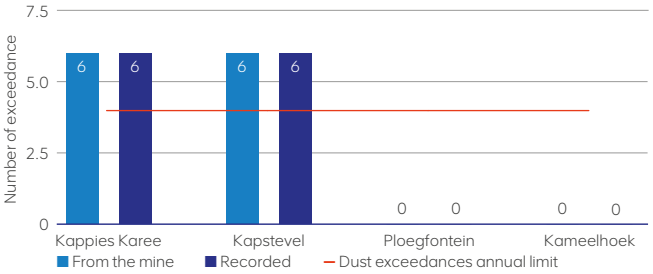
This year, monitoring results recorded a decrease in the number of PM10 dust levels that exceed legal limits (exceedances). We are allowed only allowed four PM10 exceedances a year at each station. Sishen recorded 12 PM10 exceedances at the Kathu monitoring station, and Kolomela recorded 12 at Kappies Karee and Kapstevel stations. Independent investigations concluded that three of the exceedances at Sishen were dust from the mine, with all other exceedances due to external factors including burning of waste and firewood, areas being cleared for housing and solar farms, and an increase in ore truck traffic and burning of waste by the truck drivers. At Kolomela, investigations determined that the exceedances were predominantly due to dust from Kapstevel pit and wasterock dump mining activities. Kolomela has also identified Insufficient dust suppression for the mining area at times, notably a low rate deployment of water bowsers to suppress the dust. We did not receive any air quality related complaints this year. Kolomela is located 20 km from communities.

Mitigation measures implemented include an SMS/email warning system when an hourly exceedance occurs, continuing to use a camera system at Sishen to monitor dust exceedances to allow for timeous response, deploying additional water trucks to ensure effective dust suppression, and installing live monitoring instruments for real-time dust measurements closer to the sources for speedy response. Kolomela has developed an action plan to improve its water bowser utilisation to ensure adequate and reliable capability throughout the year. This year we implemented sustainable solutions to prevent vandalism and theft at dust monitoring equipment at the Ploegfontein and Kathu monitoring stations which has effectively ensured no incidents this year.

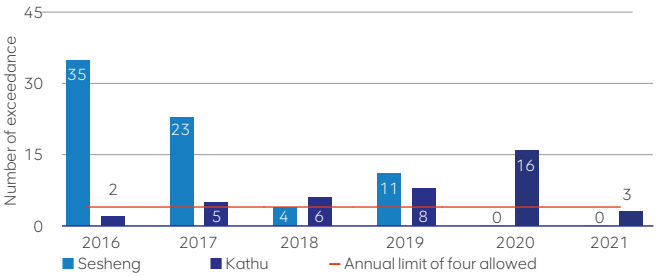
Sishen PM10 dust exceedances 2021



Kolomela PM10 dust exceedances 2021



Frequency of PM10 exceedance (at Sishen)



Mineral residue management

Highlights	Challenges	Focus for 2022 and beyond
Developed and started implementing plans to achieve compliance with the requirements of the Global Industry Standard on Tailings Management (GISTM), prioritising longer-term tasks for highest risk facilities Internal and independent assessments of Kumba's managed tailings storage facilities (TSF) confirmed no significant safety-related concerns	Slow implementation of stormwater management projects Identifying opportunities for reusing mineral waste as a resource	Ensure compliance with expectations of GISTM Reduce levels of mineral "waste" material produced by applying ultra-high DMs technology Invest in new mineral-processing technologies that are more energy- and water-efficient Complete stormwater management projects by 2024

Management and storage of wasterock and processed mineral residue is a critical issue across our industry. We continue to develop practical solutions to meet the social, safety and environmental challenges of mineral residue management while implementing leading practices at our operations.

Managing tailings and storing mineral residue

Mineral residue from mining includes both the wasterock from which we extract the ore, and "tailings", the mineral residue that remains after we process the mined ore from the host rock. The mineral residue affects the land through the establishment of TSF and wasterock dumps. A TSF is a highly engineered structure comprising one or more tailings dams, with embankments designed to permanently store the tailings.

We are an industry leader in our approach to managing tailings safely and in being transparent about our TSFs. The group mineral residue facilities technical standard addresses the risks of both tailings facilities and water-containment facilities, while risk management for waste-rock dumps and stockpiles is covered in the group geotechnical standard. The technical standard sets out requirements for design, monitoring, inspection and surveillance, which we follow as a minimum practice. While the standard is recognised as industry leading, it will continue to evolve. Anglo American is making some adjustments to ensure full alignment with the GISTM, which was launched in August 2020. The GISTM covers the entire tailings facility life-cycle and significantly raises the bar for the industry to achieve strong social, environmental and technical outcomes.

Kumba established roles and responsibilities as part of a multi-disciplinary steering committee to manage the implementation of the GISTM requirements. We have developed and started implementing plans to achieve compliance with GISTM requirements. The supporting documents to GISTM, which includes good practice guidelines and conformance protocols, were published in May 2021. We have classified each of our TSFs according to the GISTM consequence classification of structures (CCS) rating and are prioritising efforts to meet GISTM expectations that facilities rated "very high" and "extreme" comply with requirements by August 2023 and facilities rated "low", "significant" and "high" comply by August 2025.

We take a holistic approach to the safety of our tailings dams, which includes the way that we communicate with people living near the dams. As part of our Social Way management system, we have site-specific safety and emergency preparedness plans in the event of a catastrophic release of tailings, both for employees and contractors, and for stakeholders outside the mine. All our TSFs are operated in line with the national mandatory code of practice on mine residue deposits as stipulated by the DMRE. Our mineral residue deposits and stockpiles are subject to a broad range of licensing requirements, regulations and standards, under the Waste Act. We comply with all provisions and have the required licences in place.

Our mineral residue storage footprint

Kumba manages four TSFs: one is constructed as a water retaining structure, at Kolomela, and three are located at Sishen using the upstream method of construction. These are used on a rotation basis. Upstream tailings dams are generally considered to be an appropriate design for facilities in dry and seismically stable regions with flat topography, including the locations of our managed TSFs. Kumba does not have an ownership interest in any other TSFs, and we do not have any slag dumps. In 2019 we conducted a comprehensive assessment of our TSF risks, management and controls. The details on all these facilities are published on our website and underscore our confidence in the integrity of our managed storage facilities. To ensure that our disclosure information remains current, accurate, and to demonstrate our progress achieved, in 2021 we updated the disclosure information.

Risk management processes

TSFs are subject to a rigorous risk management programme. We have various internal and external review and assurance programmes that ensure that priority unwanted risks are identified and that adequate critical controls are in place to manage them.

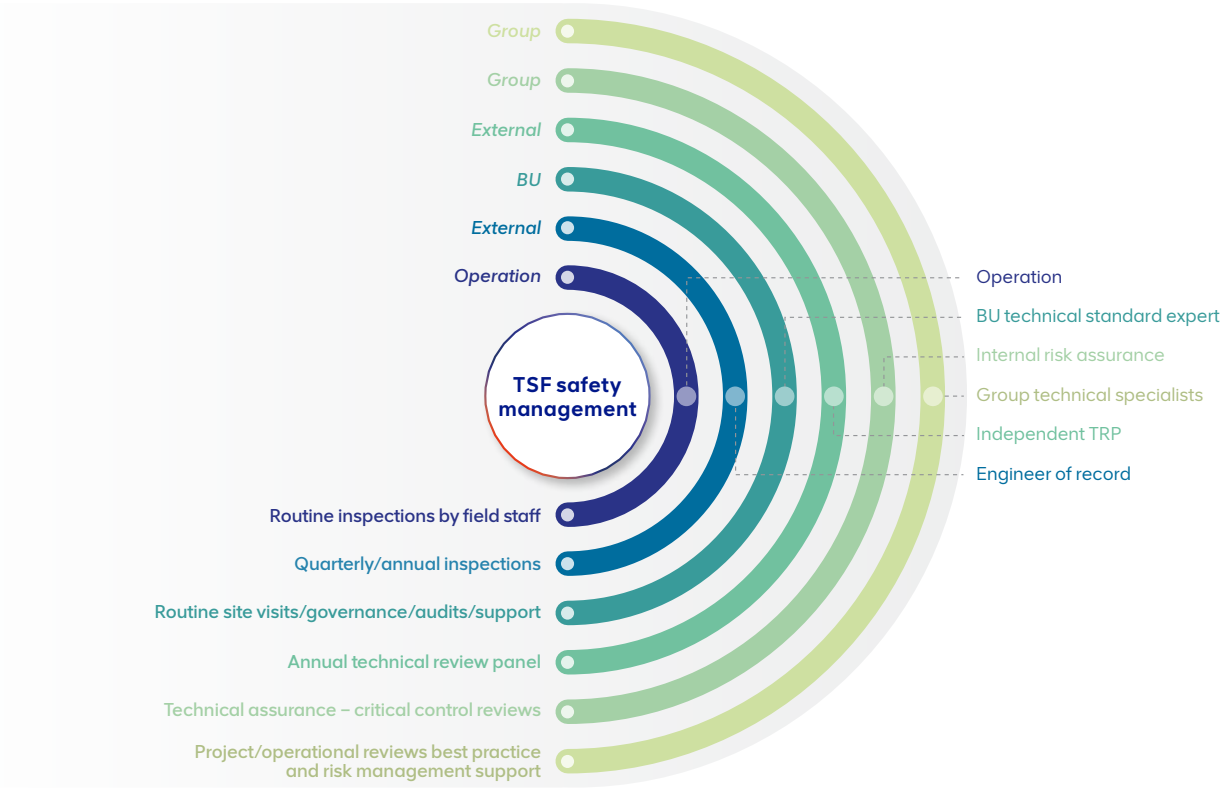
Mineral residue management continued

Our operations implement the mandatory technical standard and track their progress in meeting all its requirements through self-assessments. By year-end, levels of compliance with the standard were tailings dams 96%, surface flooding 78% and return water dams 73%. All TSFs have a CCS rating based on the consequences of credible failure modes. We base planning, design, monitoring and surveillance requirements on this rating. Major or high-rated CCS TSFs have a Competent Person in charge, meeting the competencies set out in the standard, and an external Engineer of Record (EoR), working continuously with the owners, to ensure the structure is constructed and operated according to the design intent, and that it performs as expected.

Risk assessments are conducted at all stages of mineral residue facility management. A dedicated team of group engineering specialists provides strategic direction and technical support. Local site-based operational personnel conduct regular inspections. An EoR conducts formal dam safety reviews at all managed sites on a quarterly, semi-annual or annual basis. A technical review panel conducts an independent review of critical facilities at least once per year.

Technology has a vital role to play in strengthening the monitoring of tailings dams. Kumba uses automated vibrating wire piezometers to generate big, real-time data to better monitor tailings facilities, including for ground movement and seepage. Drones are used to monitor environmental and critical controls and document inspections through photos and video. The increasing use of drones for monitoring of tailings dams proved particularly valuable during the lockdown restrictions. Kumba plans to adopt other innovative technologies that will reduce the amount of water used in tailings transport, deposition and storage, minimising water losses and maximising water reuse.

TSF safety management



Safety assessments of our mineral residue facilities are undertaken at least annually and trigger action response plans (TARPs) are in place to guide an effective response to different potential scenarios. As part of our holistic approach to the safety of our tailings dams, we make sure to engage and communicate with people living nearby. Our Social Way management system requires sites to develop emergency-preparedness plans and run evacuation drills with local communities where relevant. In modelling zone of influence simulations to determine the extent of the tailings impact from Sishen's active TSF in the unlikely event of a disastrous incident, at final dam height there would be some impact on the public or public property. The modelling estimates that the slimes would take five hours to reach the public and/or public property, allowing adequate time to evacuate the affected people. The emergency preparedness plans were discussed with communities near Sishen during 2021.

The risk management of waste dump and stockpiles is based on the industry standard on guidelines for mines waste dump and stockpile design. This includes a stability rating and hazard classification system to assist in identifying the level of effort required for site investigation, analysis, design, construction and operation. The waste dump and stockpiles at our operations fall into the "very low" and "low" hazard categories. Operational measures that include design, construction and monitoring are in place to ensure risks are managed by following the level of effort required per hazard class. In ensuring ongoing improvement in our risk management of waste dump and stockpiles, Kumba implements its ArcGIS mine residue deposit management system. The system ensures there is ongoing spatial risk management of mineral residues throughout the mining life-cycle from design, operations and mine closure.

Tailings (residue waste)

We have never had any significant tailings management related incidents at our operations.

Waste mined at Kolomela was 13% higher at 63.3 Mt (2020: 56.2 Mt), and 2% lower at Sishen at 146.1 Mt (2020: 148.5 Mt).

→ **For additional environmental performance tables** please refer to page 117.

Tailings are one of the major-consequence waste types that mining companies produce in terms of volume and potential toxicity. In striving to reduce the levels of residue waste that we generate, we have started constructing an UHDMS plant at Sishen. The technology will enable us to process low grade ore (C-grade material), which would have been classified as waste and contributed to our wasterock dump footprint. This project supports our circular economy agenda where waste is regarded as a resource.

Non-mineral waste management

Highlights	Challenges	Focus for 2022 and beyond
Waste management strategy finalised and being implemented Steady improvements in diverting waste from landfill; diversion rate at the end of 2021 was 68% Progressed with implementing opportunities to support our progress towards achieving zero waste to landfill (ZW2L) Launched a collaborative initiative to establish a waste tyre recycling facility at Kathu Established a biodigester plant at Sishen to generate biogas from organic waste	32% of waste generated was sent to landfill Address physical waste in a way that is aligned with the circular economy Identifying sustainable waste tyre management solutions that promote circular economy and socio-economic benefits Waste segregation is a challenge at our sites, with people still mixing different types of waste Limited waste mitigation opportunities with suppliers and communities realised to date	Implement a roadmap to achieve ZW2L at Kolomela and Sishen by end 2023 with a focus on community improvement and circular economy value Focus on waste separation at source Identify partnership waste management projects with suppliers and community-based initiatives Downsize all pre-levy tyres and implement ongoing tyre recycling facility in Kathu

We are progressing towards realising our vision of achieving and sustaining zero hazardous and general waste to landfill. We strive to minimise and manage non-mineral waste streams to minimise effects on human health and the environment, and to align with circular economy principles.

Towards achieving zero waste to landfill

Kumba's waste management strategy is aimed at achieving zero hazardous and general waste to landfill by the end of 2023, while pursuing circular economy and community upliftment opportunities. The strategy applies to all our owned and managed sites and activities. The scope includes all non-mineral waste and excludes mineral waste (wasterock dumps and tailings), tyres and asbestos containing waste. Our approach ensures we comply with South African waste legislation requirements.

The ZW2L project focuses on ensuring that all waste included in its scope is reused, recycled, composted, or sent to energy recovery. It is about keeping waste out of landfills and reducing demand for waste that is typically thrown away, and forms part of a bigger philosophy, the circular economy, where waste becomes a resource. A circular economy, or closed-loop system, is a regenerative alternative to a linear economy. It is a strategy that aims to diminish overconsumption and eliminate waste by making the most of resources through reuse and recycling.

Kumba embarked on its ZW2L journey in 2015, promoting the waste management hierarchy – avoid, reduce, reuse and recycle – in waste management procedures. The journey to achieve ZW2L is underpinned by a progressive shift in our approach to waste management, supported by awareness campaigns and improved waste-stream sorting and recycling to drive behavioural change across the Company. This includes providing recycling boxes, designated skips or cages, sorting stations with different coloured bins and implementation and operation of recycling and hazardous waste compounds/yards.

Our progress has been primarily achieved through initiatives implemented at Kolomela. Recognising that we need a step-change in our practices at Sishen, we have appointed a new specialist waste management company to support the identification and implementation of reuse and recycling solutions. The graph overleaf illustrates our measured progress towards achieving ZW2L.

Although recycling efforts and other initiatives implemented have supported a 50% reduction in the amount of waste disposed of to landfill since 2014, there is still a significant amount of waste disposed of to landfill.

Our road map to achieving ZW2L focuses on seven key areas, each underpinned by success factors:

- setting and reporting against waste targets and management milestones
- improved monitoring and waste data reporting
- awareness and training campaigns
- sourcing and procurement, a critical area for waste avoidance and minimisation initiatives
- community and circular economy projects, such as cost-effective reuse and recycling business ventures with community-based initiatives
- contractor management
- strategic partnerships

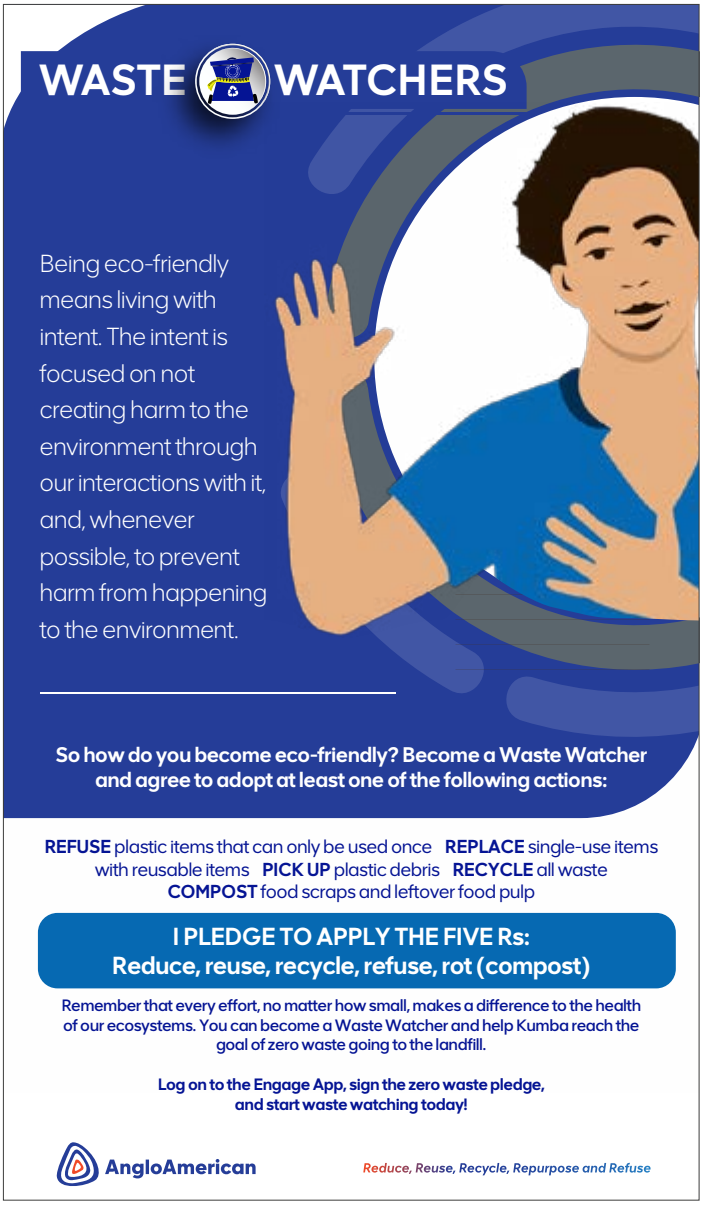
A focus going forward is to identify recycling/reuse off-takes for certain challenging waste streams. Not all our waste can be recycled or reused because the technology is not yet available to do so. We remain abreast of changes in waste management options and will continue to communicate with the relevant experts and authorities.

Key initiatives and developments at operations

During the ZW2L project, we have prevented many types of waste from going to landfill including scrap metal, plastic, paper, cardboard, tin cans, glass, and used oil.

In reducing hazardous waste, a key initiative is the implementation of bioremediation plants at our operations which rehabilitate soil affected by hydrocarbon spills so that it can safely be reused in land rehabilitation. We also recycle fluorescent tubes and air filters at both sites.

In striving to embed a waste to value culture, this year we rolled out a six week awareness programme called Waste Watchers. This included information on the impact of bad waste management and on proactive responsible waste management practices at work and home.



We continue to find innovative solutions to the waste challenge. This year, for example, Sishen constructed a biodigester plant (a brick-and-cement structure), to generate biogas through the sustainable treatment of biodegradable (food) waste generated at the mine. The controlled anaerobic breakdown/fermentation/decomposition of these organic materials by bacteria generates environmentally friendly, clean and efficient biogas fuel. The gas will be used for cooking energy demands on-site. Other viable options for the renewable gas will include generating electricity. A similar plant will be established at Kolomela in 2022. The technology can also be transferred to the community to provide cheap, renewable energy for cooking and lighting, and reduce demands on firewood or gas.

In empowering community members and avoiding disposal, we engage a local supplier to clean the oil drums we use, approximately 210 to 240 each month, and sell them back to the mine.

Kumba has a manager in charge of pursuing sustainable solutions to used tyres at our operations. There is currently no sustainable solution for the disposal of tyres in South Africa. To proactively address the challenge and deliver on our longer-term objectives, Kumba is collaborating in an Anglo American led initiative to explore and implement sustainable solutions to waste tyres. Since May 2021, the group has been engaging with tyre manufacturer Michelin and other mining companies, in implementing an initiative aimed at reducing the impact of tyres on the environment by increasing the recycled content in tyres. We are proposing establishing a tyre recycling facility in Kathu and undertaking an EIA to authorise the site to process tyres. The programme will involve downsizing the massive mining tyres into smaller blocks, for shredding and potentially granulation and moulding. We are investigating opportunities for secondary industries within communities. There are approximately 50,000 tonne of tyres currently stored across Sishen and Kolomela, creating storage constraints. The facility is designed to be able to treat about 10,000 tonne per month.

Hazardous waste management

Managing hazardous substances is strictly regulated and controlled at our operations, and at receiving-waste facilities, which are regularly audited by external parties. Hazardous waste can only be stockpiled for a certain period and is not an alternative to sending to landfill. Waste disposal by reputable waste management service providers is tracked and safe disposal certificates are kept. We audit suppliers from time to time. None of our waste is exported outside South Africa. Each mine records the amount of waste disposed, and associated certificates are retained.

Our sites comply with the Anglo American hazardous-materials management technical standard, as verified through internal audits. The standard covers planning and design, systems implementation and management, and performance monitoring related to all aspects of hazardous materials used in mining and processing, and includes local legal compliance. It does not set explicit targets on reducing or substituting the use of hazardous materials. In managing hazardous materials, we implement defined minimum mandatory critical controls for each site to ensure fatal risks are proactively managed. We implement a group software platform for control of all hazardous materials.

Non-mineral waste management continued

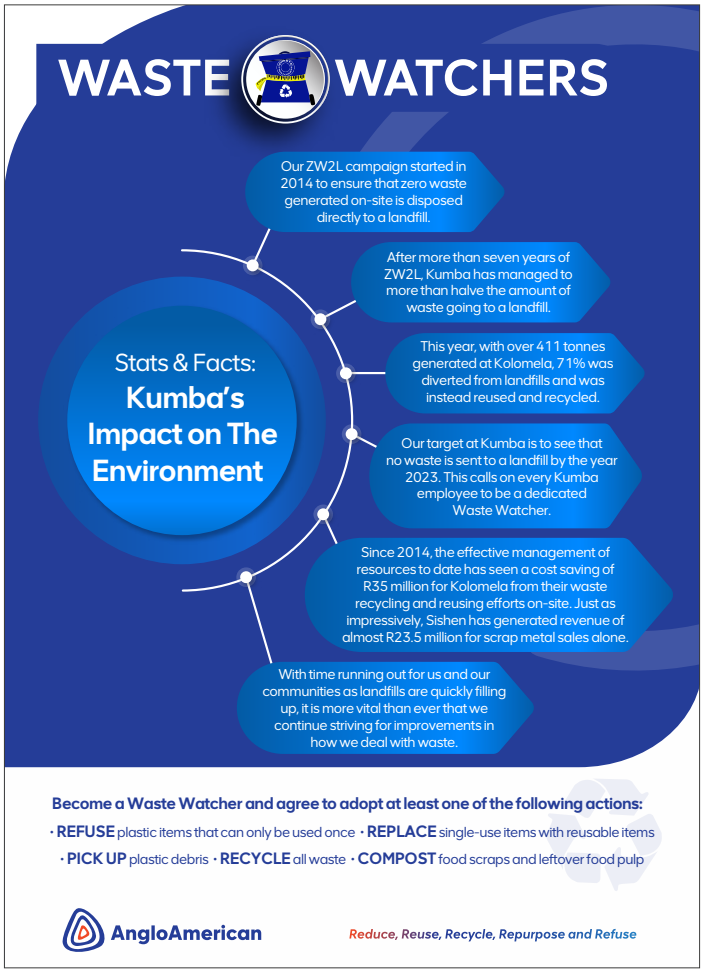
Measuring our performance

Waste streams are sorted on-site and weighed when leaving each operation. Large non-mineral waste streams include tyres, oils and greases, rubble and office consumables. We report hazardous and non-hazardous waste separately and against targets. Detailed monthly reports indicate the types and quantities of waste recycled, reused and disposed. We track and report our monthly and year-to-date performance against key performance indicators.

We have achieved good progress in increasing levels of recycling including scrap metal and oil especially at Sishen. Our waste recycling initiatives accounted for about 68% of our total waste recycled in 2021.

Since 2014, Kolomela has achieved cost savings of R35 million through waste recycling and reusing efforts on-site. Sishen has generated revenue of almost R23.5 million from scrap metal sales alone.

In 2021, Kumba's operations treated about 827 tonnes of contaminated soil at our bioremediation facilities (2020: 193 tonnes), which would have otherwise gone to the landfill.



Performance tables

Economic value added

Value added statement

Salient features for the year ended 31 December

Rand million	2021	%	2020	%	2019	%	2018	%
Value added by operating activities	**73,433**	**98.9**	51,672	98.8	38,517	98.0	24,713	98.0
Revenue	**102,092**		80,104		64,285		45,725	
Less: Cost of materials and services	**28,659**		28,432		25,768		21,012	
Value added by investing activities								
Finance income	**779**	**1.1**	624	1.2	792	2.0	497	2.0
Total value added	**74,212**	**100.0**	52,296	100.0	39,309	100.0	25,210	100.0
Value distributed								
Distributed to employees	**5,620**	**7.6**	5,006	9.6	4,953	12.6	4,627	18.4
Salaries, wages, medical and other benefits	**5,396**		4,863		4,806		4,510	
Share-based payments	**224**		143		147		117	
Distributed to providers of finance								
Finance costs	**285**	**0.4**	258	0.5	351	0.9	195	0.8
Distributed to the state	**21,215**	**28.6**	13,146	25.1	10,355	26.3	5,061	20.1
Income tax	**16,603**		10,146		7,783		4,078	
Royalties	**4,612**		3,001		2,572		983	
Communities CED expenditure	**258**	**0.3**	264	0.5	171	0.4	121	0.5
Distributed to shareholders	**48,208**	**64.9**	15,049	28.8	19,640	50.0	12,459	49.4
Dividends to owners of the Company	**36,718**		11,463		14,983		9,505	
Dividends to non-controlling interests	**11,490**		3,586		4,657		2,954	
Value reinvested	**4,377**	**5.9**	2,836	5.4	2,496	6.3	2,702	10.7
Depreciation, amortisation and impairment	**5,050**		4,970		4,538		4,269	
Deferred stripping capitalised	**(1,725)**		(2,502)		(2,634)		(1,669)	
Net discounting finance cost	**110**		96		83		87	
Share of profit/(losses) of associates and joint ventures	**—**		—		—		—	
Deferred taxation	**942**		272		509		16	
Value (distributed)/retained	**(5,750)**	**(7.7)**	15,737	30.1	1,343	3.4	46	0.2
Attributable to owners	**(4,387)**		12,006		1,025		35	
Non-controlling interest	**(1,363)**		3,731		318		11	
Total value distributed	**74,212**	**100.0**	52,296	100.0	39,309	100.0	25,210	100.0

Performance tables continued

People

Occupational levels (permanent, excluding FTEs)

	Male				Female				Foreign nationals		Total		
Group	**A**	**C**	**I**	**W**	**A**	**C**	**I**	**W**	**Male**	**Female**	**Male**	**Female**	**Total**
Top management	1	1	1	1	1	—	—	—	2	—	6	1	**7**
Senior management	29	4	3	44	13	2	3	7	2	—	82	25	**107**
Professionally qualified and experienced specialists and mid-management	151	41	4	124	119	20	6	56	7	4	327	205	**532**
Skilled technical and academically qualified workers, junior management, supervisors, foremen, and superintendents	886	585	1	382	219	154	4	119	8	2	1,862	498	**2,360**
Semi-skilled and discretionary decision-making	1,505	479	1	40	479	178	—	27	1	—	2,026	684	**2,710**
Unskilled and defined decision-making	—	—	—	—	—	—	—	—	—	—	—	—	**—**
Total	**2,572**	**1,110**	**10**	**591**	**831**	**354**	**13**	**209**	**20**	**6**	**4,303**	**1,413**	**5,716**

Per South African classification:
A – African
C – Coloured
I – Indian
W – White

Women-in-mining

	Women employed (%)		Women in core mining (%)	
	2021	2020	**2021**	2020
Kumba Board	**45**	36	**—**	—
Corporate office	**46**	47	**34**	23
Sishen	**21**	20	**17**	17
Kolomela	**31**	31	**28**	28
Group	**25**	24	**20**	19

Employment by locals (%)

	2021	2020	2019
Sishen	**78**	86	89
Kolomela	**80**	78	69

Age profile of employees (%) (permanent, FTEs, mining contractors and learners)

2021	**Sishen**	**Kolomela**	**Corporate office**	**Group**
<30	**17**	**18**	**20**	**17**
30 to 50	**74**	**76**	**62**	**74**
>50	**9**	**6**	**18**	**9**

Average age of employees (full-time permanent/full-time equivalent)

2021	**Age**
Corporate office	**43**
Sishen	**39**
Kolomela	**37**
Group	**38**

Staff turnover by operation (permanent positions, excluding FTEs)

2021	Corporate office	Sishen	Kolomela
Total number of separations	23	248	67
Resignations	4	53	26
Redundancies	—	98	17
Dismissals	—	27	8
Other reasons for leaving	19	70	16

Employment equity (core mining: permanent, excluding FTEs)

2021	Total in service	Total HDSA employees	% HDSA
Level			
Top management	7	4	57
Senior management	108	62	57
Middle management	533	398	75
Junior management	720	564	78
Core and critical skills	4,348	4,071	94
Total	5,716	5,099	89

Group safety performance

	2021	2020	2019	2018
Work-related loss of life	0	0	0	0
Fatal injury frequency rate (FIFR)	0	0	0	0
Lost-time injuries (LTIs)	8	18	17	21
Lost-time injury frequency rate (LTIFR)	0.32	0.80	0.69	0.92
Total recordable case frequency rate (TRCFR)	0.80	1.74	2.06	1.80
Total first aid cases (FAC)	56	51	95	120
Total medical treatment cases (MTC)	12	21	34	20
Total recordable cases	20	39	51	41
Visible felt leadership activities	24,613	35,692	41,279	45,222
High-potential hazards	4,541	4,120	3,635	3,471
Voluntary safety stoppages	872	590	448	172

New cases of occupational disease

	2021	2020	2019
New cases of noise-induced hearing loss	0	0	0
Chronic obstructive airways disease	0	0	0
Occupational tuberculosis	0	0	1
Occupational asthma	0	0	0
Musculoskeletal disorder	0	0	5
Occupational dermatitis	0	0	0
Occupational cancers	0	0	0
Other occupational diseases	0	0	2
Venous thromboembolism	0	0	0
Repeat cases of noise-induced hearing loss	0	0	0
Total	0	0	8

Performance tables continued

HIV statistics

	2021	2020	2019
Number of employees at the time of the HIV counselling and testing (HCT) campaign	**6,540**	6,650	6,536
Estimated HIV prevalence rate (%)	**4.6**	4.8	4.8
Estimated number of HIV-positive employees	**306**	322	314
Total number of employees who know their HIV status	**5,914**	5,852	6,034
Percentage of HIV counselling and testing done for permanent employees	**90**	88	92
Total number of new HIV infections	**2**	14	24
Employees on HIV disease management programmes	**263**	285	274
HIV positive employee enrolment in HIV wellness programmes (%)	**100**	100	87
Employees on ART	**263**	285	274
HIV positive on ART (%)	**100**	100	87
Ill health early retirements	**0**	0	0
Aids deaths (including TB deaths)	**0**	0	0
Contractor HCT cases	**5,750**	4,210	5,917
Number of dependant HCT cases	**0**	10	112
Number of dependants enrolled in HIV wellness programmes	**9**	11	10
Number of dependants on ART	**9**	11	10

Note: The total number of employees and contractors participating in HCT can exceed the number of employees at year end due to fluctuations during the year.

TB statistics

	2021	2020	2019
Number of permanent employees screened for TB	**6,008**	n/a	n/a
Number of permanent employees at the time of the TB screening campaign	**6,540**	n/a	n/a
Percentage of permanent employees screened for TB	**92**	75	80
New pulmonary TB cases	**8**	10	9
New extra-pulmonary TB cases	**1**	0	0
Cumulative number of new TB cases	**9**	10	9
TB deaths (must be proven)	**0**	0	0
Annualised TB incidence rate per 100,000 population	**138**	146	177
New multi-drug-resistant (MDR) TB cases	**0**	0	0
New extremely drug-resistant (XDR) TB cases	**0**	0	0

Environment

Process materials purchased

	Diesel (ML)			Explosives (000t)		
	2021	2020	2019	**2021**	2020	2019
Sishen	**149.8**	136.2	147.6	**63.5**	118.2	22.9
Kolomela	**48.1**	47.4	50.2	**28.6**	59.8	34.2
Group	**197.9**	183.6	197.8	**92.1**	178.0	57.1

	Lubricants (000l)			Tyres (t)		
	2021	2020	2019	**2021**	2020	2019
Sishen	**3,167.2**	2,537.3	2,741.0	**2,503.1**	3,521.0	3,898.7
Kolomela	**947.0**	1,031.2	832.7	**556.8**	697.0	518.0
Group	**4,114.2**	3,568.5	3,573.7	**3,059.9**	4,218.0	4,416.7

Total water withdrawals (ML)

	2021	2020	2019
Potable water from third-party supplier			
Sishen	**382.00**	328.84	270.25
Kolomela	**—**	—	—
Group	**382.00**	328.84	270.30
Non-potable water from third-party supplier			
Sishen	**1,794.00**	1,127.21	1,683.76
Kolomela	**—**	—	—
Group	**1,794.00**	1,127.21	1,683.76
Total water from third-party supplier	**2,176.00**	1,954.01	1,721.73
Groundwater abstracted			
Sishen	**13,584.60**	14,547.03	14,545.77
Kolomela	**11,307.10**	13,393.58	13,975.30
Group	**24,891.70**	27,940.61	28,521.07
Total water abstracted	**27,067.70**	29,894.62	30,242.80

Total water consumption (ML)

	2021	2020	2019
Other consumptive use (dust suppression, facilities, etc)			
Sishen	**1,235.84**	1,293.45	1,625.61
Kolomela	**1,224.28**	1,196.43	1,153.36
Group	**2,460.12**	2,489.88	2,778.97
Evaporation			
Sishen	**—**	—	0
Kolomela	**—**	—	37.24
Group	**—**	—	37.24
Entrainment (moisture locked up in tailings, products, etc)			
Sishen	**252.00**	274.97	761.24
Kolomela	**121.00**	—	409.37
Group	**373.00**	274.97	1,170.61
Total water consumption	**2,833.12**	2,764.85	3,986.82

* More accurate readings after installation of water meters in 2018.

Performance tables continued

CO_2e emissions (Mt)

	2021	2020	2019
Total scope 1 emissions (direct – fossil fuels)			
Sishen	**0.40**	0.37	0.40
Kolomela	**0.13**	0.13	0.135
Group*	**0.53**	0.50	0.530
Total scope 2 emissions (indirect – electricity purchased)			
Sishen	**0.38**	0.35	0.40
Kolomela	**0.08**	0.07	0.07
Group*	**0.46**	0.42	0.47
Total scope 1 and 2 emissions			
Sishen	**0.78**	0.72	0.80
Kolomela	**0.21**	0.20	0.20
Group*	**0.99**	0.92	1.00

* Group includes non-mining facilities, e.g. head office.

Energy consumption (million GJ)

	2021	2020	2019
Energy consumed from fossil fuels (direct)			
Sishen	**5.42**	4.93	5.34
Kolomela	**1.74**	1.72	1.82
Group	**7.16**	6.65	7.16
Energy consumed from electricity purchased (indirect)			
Sishen	**1.30**	1.22	1.37
Kolomela	**0.27**	0.24	0.25
Group	**1.57**	1.46	1.62
Total energy consumed (direct and indirect)			
Sishen	**6.72**	6.15	6.71
Kolomela	**2.01**	1.96	2.07
Group	**8.73**	8.11	8.78

Operational footprint (ha)

	Company managed land	Total land altered for mining and commercial activities, and supporting infra-structure	Land fully re-habilitated but not yet meeting agreed land use objectives	Area available for re-habilitation	Re-habilitation target for 2021	Reshaping completed YTD 2021	Growth medium con-struction completed YTD	Seeding completed YTD 2021
Sishen	36,144.17	13,870.64	291.4	475	80	100.0	100	80
Kolomela	47,257.97	2,528.69	107.0	50	30	38.8	41	42
Group	**83,402.20**	**16,399.30**	**398.4**	**525**	**110**	**138.8**	**141**	**122**

Immediate closure costs at 31 December (Rm)

	2021	2020	2019
Sishen	**3,826**	3,513	3,360
Kolomela	**1,341**	1,222	680
Group	**5,167**	4,735	4,040

Rock mined and ore processed (Mt)

	Total tonnes mined		Waste mined		Final product	
	2021	2020	2021	2020	2021	2020
Sishen	**184.0**	184.7	**146.1**	148.5	**28.0**	25.4
Kolomela	**77.4**	71.6	**63.3**	56.2	**12.8**	11.7
Group	**261.4**	256.3	**209.4**	204.7	**40.8**	37.1

Mineral waste (Kilo tonnes)

	2021	2020	2019
Mineral waste accumulated			
Tailings dams (active and inactive)	**224.94**	256.17	330.17
Rock dumps	**211,166**	14,538	246,854
Non-mineral waste generated			
Hazardous to landfill	**0.92**	0.63	16.72
Hazardous bio remediated	**0.86**	37.74	0.81
Non-hazardous to landfill	**4.60**	2.00	2.40
Recycled	**12.39**	0.19	10.56

Socio-economic and transformation indicators

Ensuring full compliance with government's policies and legislative requirements is the cornerstone of Kumba's commitment to delivering shared value and promoting socio-economic transformation. This is an overview of Kumba's performance against socio-economic transformation objectives of the Mineral and Petroleum Resources Development Act (MPRDA) and our internal targets based on the recommendations contained in the Broad-Based Black Socio-Economic Empowerment Charter for the South African Mining and Minerals Industry (Mining Charter III).

Indicator	Performance
Ownership: Existing mining rights	In 2006, Kumba completed a BEE ownership transaction at a Company level, resulting in 26% BEE ownership. The ownership consisted of a community trust and the Envision ESOP, each holding 3%. Exxaro Resources, created out of the unbundling of Kumba's iron ore assets in 2006, held 20%. The Envision ESOP schemes matured in 2011 and 2016, respectively. Exxaro, Kumba's primary empowerment partner, replaced its BEE structure in 2017. Post this transaction, Exxaro is 30% BEE owned. At the end of 2021, Kumba had transformed at least 32.6% of its attributable capacity to HDSA-owned and controlled entities. Under the ESOP Karolo, launched in 2017, some 5,500 employees are awarded R20,000 worth of free Kumba shares on an annual basis for three years, with a three-year vesting period. Participants receive dividends over the vesting period.
Mine community development (R million)	Kumba develops and implements five-year social and labour plans (SLPs) in accordance with national legislation and executes SLP projects that form part of local Integrated Development Plans. During 2021, mine community development spend totalled R257.5 million of which R108.6 million was spent on SLPs and the balance on corporate social investment, including our response to Covid-19. → **For more information** refer to page 75.
Inclusive procurement Mining goods (%)	During 2021, 44% of goods were purchased from HDP companies, 6% of purchases were from women or youth-controlled companies and 79% of purchases were from BEE compliant companies.
Inclusive procurement Mining services (%)	During 2021, 83% of services were procured from HDSA companies, 36% were from women-controlled businesses, 8% from youth-controlled businesses and 106% of services were procured from BEE compliant companies.
Research and development (R million)	During 2021, R0.9 million (100% of total spend) of research and development costs were spent on SA-based companies.
Processing of samples (R million)	During 2021, R260.2 million (100% of total spend) of processing costs were spent on SA-based companies.
Enterprise and supplier development	During 2021, Kumba spent R4.1 billion with host community suppliers. Kumba partners with Anglo American Zimele to promote inclusive supplier and enterprise development. → **For more detailed information** refer to pages 72 to 73.
Employment equity	→ **For more detail on Kumba's employment equity plans and outcomes for 2021,** refer to pages 60 to 61.
Human resource development	During 2021, Kumba spent R232 million on skills development which amounted to 5.4% of payroll at Sishen and 5.9% of payroll at Kolomela.
Housing and living conditions	Since 2007, Kumba has constructed more than 4,200 homes for employees. In 2020 Kumba developed a new housing strategy and policy aimed at mitigating the housing shortage at Kolomela. → **For more information** refer to page 77.
Beneficiation	Kumba is one of the largest haematite ore producers to beneficiate its run-of-mine material (ROM) before marketing it as a niche high-grade product to the local and international markets. The beneficiation process involves converting the ROM material by upgrading the element that is of interest and removing unwanted "gangue" (waste), material before further processing stages. While Kumba has predominantly used DMS and "Jigging" (Jig) as the mechanisms for refining the ore, the Company has recently embraced a new technology known as UHDMS to extract the maximum potential from its ore resource, as well as ensure operational longevity. The adoption of UHDMS is evidence of Kumba's long-term strategy to utilise the latest technology to not only enhance the beneficiation of its current resource but also to extend the life-of-mine of its Sishen and Kolomela operations. In 2021, we beneficiated approximately 69% of our ore.
B-BBEE scorecard for Sishen Iron Ore Company Proprietary Limited	The latest B-BBEE certificate can be accessed on our website.

Summary GRI table

GRI standard	Disclosure number	Disclosure title	Disclosure (page)
General disclosures			
Organisational profile	102-1	Name of the organisation	Kumba Iron Ore
	102-2	Activities, brands, products, and services	SR: 16, 17
	102-3	Location of headquarters	SR: Back cover
	102-4	Location of operations	SR: 11
	102-5	Ownership and legal form	SR: 11
	102-6	Markets served	SR: 16
	102-7	Scale of the organisation	SR: 10, 11
	102-8	Information on employees and other workers	SR: 112
	102-9	Supply chain	SR: 67, 71 to 73, 86
	102-10	Significant changes to the organisation's size, structure, ownership and its supply chain	None
	102-11	Precautionary principle or approach	SR: 83
	102-12	External initiatives	SR: 2, 26, 71
	102-13	Membership of associations	SR: 25, 26
Strategy	102-14	Statement from the most senior decision-maker	SR: 18, 19
	102-15	Key impacts, risks, and opportunities	SR: 16, 17, 21, 22
Ethics and integrity	102-16	Values, principles, standards, and norms of behaviour	SR: 10, 28
	102-17	Mechanisms for advice and concerns about ethics	SR: 29
Governance	102-18	Governance structure	IR: 40
	102-19	Delegating authority	SR: 24
	102-20	Executive-level responsibility for economic, environmental, and social topics	SR: 24
	102-21	Consulting stakeholders on economic, environmental, and social topics	SR: 32 to 34
	102-22	Composition of the highest governance body and its committees	IR: 34 to 37
	102-23	Chair of the highest governance body	IR: 34
	102-24	Nominating and selecting the highest governance body	IR: 42
	102-25	Conflicts of interest	SR: 29
	102-26	Role of highest governance body in setting purpose, values, and strategy	SR: 24
	102-27	Collective knowledge of highest governance body	IR: 34 to 37
	102-28	Evaluating the highest governance body's performance	SR: 25; IR: 43, 44
	102-29	Identifying and managing economic, environmental, and social impacts	SR: 24 to 27; IR: 76 to 89
	102-30	Effectiveness of risk management processes	SR: 28, IR: 76
	102-31	Review of economic, environmental, and social topics	SR: 24, 25
	102-32	Highest governance body's role in sustainability reporting	SR: 1, 24
	102-33	Communicating critical concerns	SR: 24, 25
	102-34	Nature and total number of critical concerns	SR: 27; IR: 76 to 89
	102-35	Remuneration policies	IR: 116
	102-36	Process for determining remuneration	IR: 116 to 119
	102-37	Stakeholders' involvement in remuneration	IR: 116
	102-38	Annual total compensation ratio	IR: 117 to 119
	102-39	Percentage increase in annual total compensation ratio	IR: 125

Summary GRI table continued

GRI standard	Disclosure number	Disclosure title	Disclosure page
General disclosures continued			
Stakeholder engagement	102-40	List of stakeholder groups	SR: 32 to 34
	102-41	Collective bargaining agreements	SR: 61
	102-42	Identifying and selecting stakeholders	IR: 72
	102-43	Approach to stakeholder engagement	IR: 72 to 75
	102-44	Key topics and concerns raised	SR: 32 to 34 IR: 72 to 75
Reporting practice	102-45	Entities included in the consolidated financial statements	SR: 1
	102-46	Defining report content and topic boundaries	SR: 2
	102-47	List of material topics	SR: 1
	102-48	Restatements of information	None
	102-49	Changes in reporting	None
	102-50	Reporting period for the information provided	2021
	102-51	Date of most recent report	2020
	102-52	Reporting cycle	1 January to 31 December
	102-53	Contact point for questions regarding the report	SR: 2
	102-54	Claims of reporting in accordance with the GRI Standards	SR: 2
	102-55	GRI content index	SR: 119 to 123
	102-56	External assurance	SR: 124 to 126
Management approach	103-1	Explanation of the material topic and its boundary	SR: 2
	103-2	The management approach and its components	SR: 2, 24 to 31, 38 to 63, 66 to 79, 82 to 110
	103-3	Evaluation of the management approach	SR: 2, 24 to 31, 38 to 63, 66 to 79, 82 to 110
Economic performance	201-1	Direct economic value generated and distributed	SR: 78, 79, 111
	201-2	Financial implications and other risks and opportunities due to climate change	SR: 88, 89
	201-3	Defined benefit plan obligations and other retirement plans	IR: 117
	201-4	Financial assistance received from government	None
Market presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	SR: 59; IR: 16
	202-2	Proportion of senior management hired from the local community	SR: 63, 101
Indirect economic impacts	203-1	Infrastructure investments and services supported	SR: 77
	203-2	Significant indirect economic impacts	SR: 69 to 77
Procurement practices	204-1	Proportion of spending on local suppliers	SR: 72
Anti-corruption	205-1	Operations assessed for risks related to corruption	SR: 29
	205-2	Communication and training about anti-corruption policies and procedures	SR: 29
	205-3	Confirmed incidents of corruption and actions taken	SR: 30
Anti-competitive behaviour	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	None

GRI standard	Disclosure number	Disclosure title	Disclosure page
Environmental performance			
Materials	301-1	Materials used by weight or volume	SR: 115
	MM11	Programmes and progress relating to materials stewardship	SR: 85, 86
	301-3	Reclaimed products and their packaging materials	Not material
Energy	302-1	Energy consumption within the organisation	SR: 90, 91, 116
	302-2	Energy consumption outside of the organisation	SR: 90
	302-3	Energy intensity	SR: 90
	302-4	Reduction of energy consumption	SR: 90, 91
	302-5	Reductions in energy requirements of products and services	SR: 90, 91
Water	303-1	Water withdrawal by source	SR: 115
	303-2	Water sources significantly affected by withdrawal of water	SR: 94 to 96
	303-3	Water recycled and reused	SR: 97
Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SR: 101
	304-2	Significant impacts of activities, products, and services on biodiversity	SR: 101
	MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	SR: 99, 116
	MM2	The number and percentage of total sites identified as requiring biodiversity management plans, and the number (percentage) of those sites with plans in place	SR: 101
	304-3	Habitats protected or restored	SR: 101, 102
Emissions	305-1	Direct (scope 1) GHG emissions	SR: 91, 116
	305-2	Energy indirect (scope 2) GHG emissions	SR: 91, 116
	305-3	Other indirect (scope 3) GHG emissions	SR: 91
	305-4	GHG emissions intensity	SR: 91
	305-5	Reduction of GHG emissions	SR: 90, 91
	305-6	Emissions of ozone-depleting substances (ODS)	ODS are not used
	305-7	NOx, SOx and other significant emissions	SR: 103, 104
Effluents and waste	306-1	Water discharge by quality and destination	SR: 95, 97
	306-2	Waste by type and disposal method	SR: 105 to 110
	MM3	Total amounts of overburden, rock, tailings, and sludges (in tonnes) and their associated risks	SR: 117
	306-3	Significant spills	None
	306-4	Transport of hazardous waste	SR: 109
	306-5	Water bodies affected by water discharges and/or run-off	SR: 95, 97
Environmental compliance	307-1	Non-compliance with environmental laws and regulations	None
	MM10	Number and percentage of operations with closure plans	SR: 99
Supplier environmental assessment	308-1	New suppliers that were screened using environmental criteria	SR: 67, 68
	308-2	Negative environmental impacts in the supply chain and actions taken	SR: 68

Summary GRI table continued

GRI standard	Disclosure number	Disclosure title	Disclosure page
Social performance			
Employment	401-1	New employee hires and employee turnover	SR: 63, 113
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SR: 38, 59
Labour/management relations	402-1	Minimum notice periods regarding operational changes	SR: 62
	MM4	Number of strikes and lock-outs exceeding one week's duration, by country	None
Occupational health and safety	403-1	Workers' representation in formal joint management – worker health and safety committees	SR: 43
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	SR: 41, 54, 113, 114
	403-3	Workers with high incidence or high risk of diseases related to their occupation	SR: 50, 51
	403-4	Health and safety topics covered in formal agreements with trade unions	SR: 43
Training and education	404-2	Programmes for upgrading employee skills and transition assistance programmes	SR: 58, 59
	404-3	Percentage of employees receiving regular performance and career development reviews	SR: 59
Diversity and equal opportunity	405-1	Diversity of governance bodies and employees	SR: 61, 112; IR: 34, 35
	405-2	Ratio of basic salary and remuneration of women to men	SR: 61; IR: 116
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	SR: 30
Freedom of association and collective bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	None
Child labour	408-1	Operations and suppliers at significant risk for incidents of child labour	None
Forced or compulsory labour	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	None
Security practices	410-1	Security personnel trained in human rights policies or procedures	SR: 31
	411-1	Incidents of violations involving rights of indigenous peoples	None
Human rights assessment	412-1	Operations that have been subject to human rights reviews or impact assessments	SR: 31
	412-2	Employee training on human rights policies or procedures	SR: 31
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Not material

GRI standard	Disclosure number	Disclosure title	Disclosure page
Social performance continued			
Local communities	413-1	Operations with local community engagement, impact assessments, and development programmes	SR: 66 to 77
	413-2	Operations with significant actual and potential negative impacts on local communities	SR: 66 to 68
	MM5	Total number of operations taking place in or adjacent to IPs' territories, and number and percentage of operations or sites where there are formal agreements with IPs' communities	None
	MM6	Number and description of significant disputes relating to land use, customary rights of local communities and IPs	SR: 68
	MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and IPs, and the outcomes	SR: 68
	MM8	Number (and percentage) of company operating sites where artisanal and small-scale mining takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks	None
	MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process	SR: 68
Supplier social assessment	414-1	New suppliers that were screened using social criteria	SR: 67, 68
		Negative social impacts in the supply chain and actions taken	SR: 67, 68
Public policy	415-1	Political contributions	None
Customer health and safety	416-1	Assessment of the health and safety impacts of product and service categories	Not material
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	None
Marketing and labelling	417-1	Requirements for product and service information and labelling	Not material
		Incidents of non-compliance concerning product and service information and labelling	None
	417-3	Incidents of non-compliance concerning marketing communications	None
Customer privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	None
Socio-economic compliance	419-1	Non-compliance with laws and regulations in the social and economic area	None

Independent Auditor's assurance report on the selected sustainability information in Kumba Iron Ore Limited's Sustainability report 2021

To the directors of Kumba Iron Ore Limited

We have undertaken a limited and reasonable assurance engagement on selected key performance indicators (KPIs), as described below, and presented in the Sustainability report of Kumba Iron Ore Limited (the "Company", "Kumba") for the year ended 31 December 2021 (the Report). The selected sustainability information described in this report has been prepared in accordance with Kumba's selected reporting criteria for sustainability assurance (Reporting criteria).

Our reasonable assurance opinion

In our opinion, Kumba's Sustainability performance information in table A and included on pages 20 to 117 of the Sustainability report for the year ended 31 December 2021 is prepared, in all material respects, in accordance with the reporting criteria and the basis of preparation set out in the section of the Sustainability report titled "Approach to reporting".

We do not express an assurance conclusion on information in respect of earlier periods or on any other information included in the Sustainability report 2021 or linked to from the Sustainability information or from the Sustainability report 2021.

Our limited assurance conclusion

Based on the procedures we have performed as described under the "Assurance work performed" section and the evidence we have obtained, nothing has come to our attention that causes us to believe that Kumba's selected sustainability performance information as set out in table B and on pages 20 to 117 of the Sustainability report for the year ended 31 December 2021 is not prepared, in all material respects, in accordance with the reporting criteria.

We do not express an assurance conclusion on information in respect of earlier periods or on any other information included in the Sustainability report 2021 or linked to from the Sustainability information or from the Sustainability report 2021.

Subject matter

We have been engaged to provide a reasonable assurance opinion on the KPIs listed in Table A below and a limited assurance conclusion on the KPIs listed in Table B on page 125. The selected sustainability information described in this report has been prepared in accordance with Kumba's reporting criteria.

The selected KPIs to be published in the report are set out in the tables below and are collectively referred to as the "selected sustainability performance information".

Table A – reasonable assurance

Number	Selected Sustainability Performance Information	Unit of measurement	Boundary	Page
KPIs prepared in accordance with the GRI Guidelines				
1	Total work related fatal injuries	Number	Kumba Iron Ore Limited	20, 41 and 113
2	Fatality injury frequency rate (FIFR)	Rate	Kumba Iron Ore Limited	41 and 113
3	Total recordable case frequency rate (TRCFR)	Rate	Kumba Iron Ore Limited	20, 41 and 113
4	Total number of employees with percentage loss of hearing (PLH) shift of 10% or more on diagnostic audiometry	Number	Kumba Iron Ore Limited	51 and 113
5	Total number of employees potentially exposed to inhalable hazards (Silica and Respirable dust) over the occupational exposure limit	Number	Kumba Iron Ore Limited	51
6	Total number of employees potentially exposed to carcinogens (Diesel particular matter, Silica dust and Respirable dust) over the occupational exposure limit	Number	Kumba Iron Ore Limited	51
7	Total number of level 3, 4 and 5 environmental incidents reported	Number	Kumba Iron Ore Limited	20
8	Total scope 1 of CO_2 emissions	$MtCO_2e$	Kumba Iron Ore Limited	91
9	Total scope 2 of CO_2 emissions	$MtCO_2e$	Kumba Iron Ore Limited	91
10	Land Rehabilitation – Reshaping: Land Rehabilitation – growth material construction completed and Land Rehabilitation – seeding completed	ha (hectares)	Kumba Iron Ore Limited	100
11	Total number of new occupational illnesses	Number of cases	Kumba Iron Ore Limited	20
12	Total amount spent on corporate social investment (CSI) projects	Rand million	Kumba Iron Ore Limited	76
13	Voluntary labour turnover	%	Kumba Iron Ore Limited	20
14	Host community procurement spend	Rand billion	Kumba Iron Ore Limited	20 and 72

We have been engaged to provide a limited assurance conclusion in our report on the KPIs listed in the table below. The selected sustainability information described below has been prepared in accordance with the Company's reporting criteria.

Table B – limited assurance

Number	Selected Sustainability Performance Information	Unit of measurement	Boundary	Page
KPIs prepared in accordance with the GRI Guidelines				
1	Total water recycled/reused per annum	ML (Mega litres)	Kumba Iron Ore Limited	97
2	Water withdrawals (including, groundwater, surface water and third-party water)	ML (Mega litres)	Kumba Iron Ore Limited	20, 97 and 115
3	Number of social complaints and grievances	Number	Kumba Iron Ore Limited	67
4	Total number of employees who know their HIV status	Number	Kumba Iron Ore Limited	114
5	Percentage of HIV counselling and testing (HCT) done for permanent employees	%	Kumba Iron Ore Limited	20 and 114
6	Number of permanent employees at the time of the HCT campaign	Number	Kumba Iron Ore Limited	114
7	TB incidence rate per 100,000	Number	Kumba Iron Ore Limited	53 and 114
8	Percentage of permanent employees screened for TB	%	Kumba Iron Ore Limited	53 and 114
9	Number of permanent employees at the time of the TB screening campaign	Number	Kumba Iron Ore Limited	114

Inherent limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the subject matter and the methods used for determining, calculating, sampling and estimating such information. The absence of a significant body of established practices on which to draw allows for the selection of different but acceptable measurement techniques which can result in materially different measurements and can impact comparability. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements. The precision of different measurement techniques may also vary. Furthermore, the nature and methods used to determine such information, as well as the measurement criteria and the precision thereof, may change over time.

In particular, where the information relies on carbon and other emission conversion factors derived by independent third parties, our assurance work will not include examination of the derivation of those factors and other third-party information.

Kumba's responsibilities

The directors of Kumba are responsible for:

- Selection or establishing suitable criteria for preparing sustainability performance information
- The preparation of the sustainability performance information in accordance with the Criteria (Kumba's reporting criteria)
- Designing, implementing and maintaining internal control over information relevant to the preparation of the Sustainability information that is free from material misstatement, whether due to fraud or error

Auditor's responsibilities

We are responsible for:

- Planning and performing the engagement to obtain limited assurance whether the Sustainability information is free from material misstatement, whether due to fraud or error
- Forming an independent opinion and conclusion, based on the procedures we have performed and the evidence we have obtained; and
- Reporting our opinion and conclusion to the directors of Kumba

As we are engaged to form and independent conclusion on the Sustainability information as prepared by management, we are not permitted to be involved in the preparation of the Sustainability information as doing so may compromise our independence.

Professional standards applied

We performed a limited assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised), *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, and, in respect of greenhouse gas emissions included in the Sustainability information, in accordance with *International Standard on Assurance Engagements 3410 Assurance Engagements on Greenhouse Gas Statements*, issued by the International Auditing and Assurance Standards Board.

Independence and quality control

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Our work was carried out by an independent and multidisciplinary team. We remain solely responsible for our assurance opinion.

Independent assurance report continued

Summary of work performed

a. Basis for our reasonable assurance opinion

A reasonable assurance engagement involves performing procedures to obtain evidence about the selected sustainability performance information and related disclosures in the report. The nature, timing and extent of procedures selected depend on the auditor's professional judgement, including the assessment of the risks of material misstatement, whether due to fraud or error, of the selected sustainability performance information.

In making those risk assessments we have considered internal control relevant to the Company's preparation of the selected sustainability performance information. A reasonable assurance engagement also includes:

- Assessing the suitability in the circumstances of the Company's use of the applicable reporting criteria as a basis for preparing the selected sustainability information
- Evaluating the appropriateness of quantification methods, reporting policies and internal guidelines used and the reasonableness of estimates made by the Company
- Evaluating the disclosures, and overall presentation of the selected sustainability performance information

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our reasonable assurance opinion

b. Basis for our limited assurance conclusion

A limited assurance engagement undertaken in accordance with ISAE 3000 (Revised), and ISAE 3410, involves assessing the suitability in the circumstances of the Company's use of its reporting criteria as the basis of preparation for the selected sustainability performance information, assessing the risks of material misstatement of the selected sustainability performance information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the selected sustainability performance information.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

We are required to plan and perform our work to address the areas where we have identified that a material misstatement of the Sustainability information is likely to arise. The procedures we performed were based on our professional judgement and included inquiries, observation of processes followed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Interviewed management and senior executives to obtain an understanding of the internal control environment, risk assessment process and information systems relevant to the sustainability reporting process
- Inspected documentation to corroborate the statements of management and senior executives in our interviews
- Tested the processes and systems to generate, collate, aggregate, monitor and report the selected sustainability performance information
- Performed a controls walkthrough of identified key controls
- Inspected supporting documentation on a sample basis and performed analytical procedures to evaluate the data generation and reporting processes against the reporting criteria
- Evaluated the reasonableness and appropriateness of significant estimates and judgments made by the directors in the preparation of the selected sustainability performance information
- Evaluated whether the selected sustainability performance information presented in the report are consistent with our overall knowledge and experience of sustainability management and performance at the Company

Other matter

Our report includes the provision of limited assurance on the selected sustainability performance information for the current year as indicated below. The following indicator was included in our prior year engagement letter and our current year engagement letter, however, has since been excluded from the assurance audit for the year ended 31 December 2021.

- ECO_2MAN energy reduction

Our report does not extend to any disclosures or assertions relating to future performance plans and/or strategies disclosed in the report.

The maintenance and integrity of Kumba's website is the responsibility of Kumba's directors. Our procedures did not involve consideration of these matters and, accordingly we accept no responsibility for any changes to either the information in the report or our independent assurance report that may have occurred since the initial date of presentation on Kumba's website.

Restriction of liability

Our work has been undertaken to enable us to express a reasonable assurance opinion and a limited assurance conclusion on the selected sustainability performance information to the directors of Kumba in accordance with the terms of our engagement, and for no other purpose. We do not accept or assume liability to any party other than Kumba, for our work, for this report, or for the conclusion we have reached.

NexiaSAB&T

Nexia SAB&T

Ayisha Ramasike
Chartered Accountant (SA)
Registered Auditor
Director

14 April 2022

119 Witch-Hazel Avenue
Highveld Technopark
Centurion

Selected reporting criteria for sustainability assurance

As determined by the Board of directors these are the reporting criteria that define the selected sustainability information that was assured by Nexia SAB&T:

KPIs	Definition
Work-related fatal injuries	A death resulted from a work-related injury
Fatal injury frequency rate (FIFR)	Fatal injury frequency rate (calculated) rate of fatalities per 1,000,000 hours worked (total fatalities x 1,000,000/total hours worked)
Total recordable case frequency rate (TRCFR)	Total recordable case frequency rate (calculated) is the number of recordable injuries (fatalities + lost-time injuries + medical treatment cases) per 1,000,000 hours worked (TRC x 1,000,000/total hours worked)
Total number of employees with PLH shift of 10% or more on diagnostic audiometry	Age corrected average hearing shift in either ear of greater than or equal to 10 dB at 2,000, 3,000 and 4,000 Hz when compared to baseline, coupled with a greater than or equal to 25 dB average hearing level in the same ear at 2,000, 3,000 and 4,000 Hz
Total number of employees potentially exposed to inhalable hazards (silica and respirable dust) over the occupational exposure limit	Total number of employees exposed to inhalable hazards (silica and respirable dust) above the occupational exposure limit
Total number of employees potentially exposed to carcinogens (diesel particular matter, silica dust and respirable dust) over the occupational exposure limit	Total number of employees exposed to carcinogens (diesel particular matter, silica and respirable dust) above the occupational exposure limit
Total number of level 3, 4 and 5 environmental incidents reported	Environmental incidents are unplanned or unwanted events that result in negative environmental impacts. • A level 1 incident results in minor impact • A level 2 incident results in low impact • A level 3 incident results in medium impact • A level 4 incident is considered to be a significant incident, that results in high impact • A level 5 incident is considered a significant incident that has a permanent impact on the environment
Total scope 1 CO_2 emissions	Total CO_2 emissions from fossil fuels – sum of diesel, petrol, liquid petroleum gas, natural gas, heavy fuel oil, light fuel oil, coal for heat and energy generation, coal for metallurgical processes, coal for directly reduced iron, used oil for combustion, paraffin, petcoke, tailgas and non-renewable waste fuel
Total scope 2 CO_2 emissions	Total CO_2 emissions from electricity purchased
Total amount spent on CSI projects	The sum of donations for charitable purposes and community investment (which include cash and in-kind donations and staff time) as well as investment in commercial initiatives with public benefit (such as enterprise development), and including an amount of R8.0 million contributed to the Anglo American Chairman's Fund
Land rehabilitation, reshaping, growth material construction completed and seeding completed	Total hectares reshaped during the current year, total hectares where the relevant growth medium has been constructed to date in the current year and total hectares seeded and/or planted in the current year
Total number of new occupational cases	Sum of occupational diseases due to asbestosis, NIHL, silicosis, coal-workers' pneumoconiosis, pneumoconiosis due to other fibrogenic dusts, chronic obstructive airways disease, occupational tuberculosis, occupational asthma, hand-arm vibration syndrome, musculoskeletal disorders, dermatitis, occupational cancers and other occupational diseases
Voluntary labour turnover	Number of permanent employee resignations as a percentage of total permanent employees
Host community procurement spend	A host supplier has a 51% or more black ownership, actively involved in the business with management control, residing and operating their business in the following municipal areas in the Northern Cape, for a period of not less than 36 months: Gamagara, Ga Segonyana, Joe Morolong, Tsantsabane, Kgatelopele and Griekwastad
Total water recycled or reused per annum	The total volume of water reused or recycled during the year
Water withdrawals (including groundwater, surfacewater and third-party water)	The total volume of water pumped from open-pit mining operations, this is water intercepted by excavations and includes any dewatering for slope stability, water abstracted or collected by the operation from surfacewater sources, e.g. from rivers, creeks, dams, lakes, pans, etc. and water obtained from a third party (e.g. local authority, municipality, or utility provider)

Selected reporting criteria for sustainability assurance continued

KPIs	Definition
Number of social complaints and grievances	Social complaint and grievances received from our surrounding communities
Total number of employees who know their HIV status	The sum of all employees who are known to be HIV-positive on the medical records (irrespective of year of testing or testing facility) plus the HIV non-reactive employees who tested during a calendar year
Percentage of HCT done for permanent employees	Number of employees who have participated in HIV voluntary counselling and testing (VCT) during the reporting period and who, through this process, have established or re-established their HIV status. If VCT has been obtained outside of a Company operated or approved facility, then reasonable proof of compliance with the Company definition of VCT must be produced. Participation in VCT includes those who are known to be HIV-positive and participate in HIV wellness programmes, regardless of whether they actually test or not. Calculated as a percentage of total permanent employees, employed by Kumba, at the time of the testing
Number of permanent employees at the time of the HCT campaign	Total number of permanent employees employed by Kumba at the time of the testing campaign
TB incidence rate per 100,000	The incidence rate of TB is the number of new TB cases in one year per 100,000 of the population
Percentage of permanent employees screened for TB	Number of permanent employees who have participated in TB screening, calculated as a percentage of total permanent employees employed by Kumba at the time of testing
Number of permanent employees at the time of the TB screening campaign	Total number of permanent employees employed by Kumba at the time of the testing campaign

Glossary and terms of acronyms

Icons throughout this report

Stakeholders

- Government and political groups
- Employees and trade unions
- Communities, business and development partners, media and civil society (e.g. NGOs)
- Shareholders and investment community
- Customers
- Suppliers

Measuring performance (value creation)

- Safety and health
- Environment
- Social
- People
- Production
- Cost
- Financial

Value propositions

- ESG excellence
- Capital discipline
- Margin performance
- Life-of-mine extension

Sustainability strategy

- Trusted corporate leader
- Thriving communities
- Healthy environment

Covid-19

- Covid-19 reporting

Sustainable development goals

1 NO POVERTY
3 GOOD HEALTH AND WELLBEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS

Glossary of icons, terms and acronyms continued

AA1000SES	Global Stakeholder Engagement Standard
ABET	Adult basic education and training
AFS	Annual financial statements
AMA	American Medical Association
AMCU	Association of Mineworkers and Construction Union
ART	Antiretroviral treatment
B-BBEE	Broad-based black economic empowerment
BEE	Black economic empowerment
BHV	Bullying, harassment and victimisation
BMI	Body mass index
BMS	Berm monitoring system
CAG	Community action group
CCMA	Commission for Conciliation, Mediation and Arbitration
CCS	Consequence classification of structures
CED expenditure	The sum of donations for charitable purposes and community investment (which include cash and in-kind donations and staff time) as well as investment in commercial initiatives with public benefit (such as enterprise development)
CO_2	Carbon dioxide
CoGTA	Department of Cooperative Governance and Traditional Affairs
Covid-19	Coronavirus (SARS-CoV2) disease of 2019
CRD	Collaborative regional development
CSI	Corporate social investment
dB(A)	A-weighted decibels
DBE	Department of Basic Education
DMRE	Department of Mineral Resources and Energy
DMS	Dense media separation
DoH	Department of Health
DWS	Department of Water and Sanitation
EAP	Employee assistance programme
EBITDA	Earnings before interest, tax depreciation and amortisation
ECD	Early childhood development
EE	Employment equity
EMPR	Environmental management programme
EMS	Environmental management system
EOF	Elimination of fatalities
EoR	Engineer of Record
ESG	Environmental, social and governance
Exco	Executive Committee
FAC	First aid cases
FAMSA	Family South Africa
FIFR	Fatal injury frequency rate, rate of fatalities per 1,000,000 hours worked
FTE	Full-time equivalent employee
FTSE4GOOD	FTSE4Good index measures the environmental, social and governance practices of companies
GBV	Gender-based violence
GEI	Gender-Equality Index
GHG	Greenhouse gas
GISTM	Global Industry Standard on Tailings Management
GMC	Group Management Committee
GRI	Formerly Global Reporting Initiative – now known as GRI
HCT	HIV counselling and testing

HDP	Historically disadvantaged persons
HDSA	Historically disadvantaged South African
HIV	Human immunodeficiency virus
HME	Heavy mobile equipment
HPH	High-potential hazard
HPI	High-potential incident
HR	Human resources
ICMM	International Council on Mining and Metals
ICT	Information and communications technology
IDC	Industrial Development Corporation
IDM	Investment development model
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
INH	Isoniazid
IR	Integrated report
IRMA	Initiative for Responsible Mining Assurance
ISAE	International Standard on Assurance Engagement
ISO	International Organisation of Standardisation
JSE	Johannesburg Stock Exchange
KING IV	King IV Report on Corporate Governance™ for South Africa 2016
KPI	Key performance indicator
KSS	Kapstevel South
LDV	Light duty vehicle
LFI	Learning from incident
LTI	Lost-time injury
LTIFR	Lost-time injury frequency rate
LTIP	Long-term incentive plan
LTISR	Lost-time injury severity rate
MCDP	Municipality capacity development programme
MCT	Mine closure toolbox
MDR	Multi-drug-resistant
MHSC	Mine Health and Safety Council
MoU	Memorandum of understanding
MPRDA	Mineral and Petroleum Resources Development Act
MPR	Minimum permitting requirements
MTC	Medical treatment cases
Mt CO_2e	Million tonnes of CO_2 equivalent
Mt	Million tonnes
NAEIS	National atmospheric emission inventory system
NEMA	National Environmental Management Act
NGO	Non-governmental organisation
NIHL	Noise-induced hearing loss
NPI	Net positive impact
NUM	National Union of Mineworkers
OEL	Occupational exposure limits
OHSAS	Occupational Health and Safety Assessment Series
ORM	Operational risk management
ORMR	Ore reserves and mineral resources
P101	Asset productivity programme to shift our key operational processes to benchmark and then beyond, exceeding industry best practice productivity at our operations and deliver our full potential

Glossary of icons, terms and acronyms continued

PCR	Polymerise chain reaction
PIT	Professional in training
PLH	Percentage loss of hearing
PM10	Particles smaller than 10 µm
POPIA	Protection of Personal Information Act
PPE	Personal protective equipment
PRISM	Computer software system used to measure a person's fatigue levels and alertness score
PUE	Priority unwanted event
Remco	Human Resources and Remuneration Committee
SABS	South African Bureau of Standards
SAMREC	South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves
SANS	South African National Standards
SARS	South African Revenue Service
SDGs	UN Sustainable Development Goals
SED	Socio-economic development
SENS	Securities Exchange News Service
SETA	Sector education and training authorities
Setco	Social, Ethics and Transformation Committee
SHE	Safety, health and environment
SIOC	Sishen Iron Ore Company Proprietary Limited
SIOC-CDT	Sishen Iron Ore Company community development trust
SLAM	Stop and think, look for and identify hazards, assess the effect of hazards, manage the hazards so that they are eliminated or controlled
SLP	Social and labour plan
SMP	Sustainable mining plan
SR	Sustainability report
STS	Standard threshold shifts
TARP	Trigger action response plan
TB	Tuberculosis
TCF	Tax Control Framework
TCFD	Task Force on Climate-Related Financial Disclosures
TRC	Total recordable cases
TRCFR	Total recordable case frequency rate, rate of recordable cases per 1,000,000 hours worked
TSF	Tailings storage facility
TVET	Technical and vocational education and training
UGM	Ulysses Gogi Modise (wellness clinics)
UHDMS	Ultra-high density media separation
UIF	Unemployment Insurance Fund
UN	United Nations
UNAIDS	United Nations Programme on HIV/Aids
UNSDG	United Nations Sustainable Development Goals
VAT	Value added tax
VCT	Voluntary counselling and testing
VFL	Visible felt leadership
VPs	Voluntary principles on security and human rights
WESSA	Wildlife and Environmental Society of South Africa
WIM	Women-in-mining
WHO	World Health Organisation
WOW	World of wellness
WUL	Water use licence
XDR	Extremely drug-resistant
YES	Youth Employment Services
ZW2L	Zero waste to landfill

Administration

Company registration number

2005/015852/06
JSE share code: KIO
ISIN code: ZAE000085346

Company Secretary and registered office

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Forward looking statements

Certain statements made in this report constitute forward looking statements. Forward looking statements are typically identified by the use of forward looking terminology such as "believes", "expects", "may", "will", "could", "should", "intends", "estimates", "plans", "assumes" or "anticipates" or the negative thereof, or other variations thereon, or comparable terminology, or by discussions of, for example, future plans, present or future events, or strategy that involves risks and uncertainties. Such forward looking statements are subject to a number of risks and uncertainties, many of which are beyond the Company's control and all of which are based on the Company's current beliefs and expectations about future events. Such statements are based on current expectations and, by their nature, are subject to a number of risks and uncertainties that could cause actual results and performance to differ materially from any expected future results or performance, expressed or implied, by the forward looking statement. No assurance can be given that future results will be achieved; actual events or results may differ materially as a result of risks and uncertainties facing the Company and its subsidiaries. The forward looking statements contained in this report speak only as of the date of this report and the Company undertakes no duty to update any of them and will not necessarily do so, in light of new information or future events, except to the extent required by applicable law or regulation.

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