ANGLO AMERICAN PLATINUM LIMITED

### **SUPPLEMENTARY REPORT 2018**





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# **PURPOSE:** RE-IMAGINING MINING TO IMPROVE PEOPLE'S LIVES

#### **Unlocking our full potential**

As unprecedented challenges in the global mining industry continue, Anglo American Platinum (Amplats) has proven its resilience and ability to manage change with a focused strategy that is unlocking our full potential and positioning our group for a sustainable future.

We are concentrating on elements within our control and building the foundations for continuous improvement. Our strategic focus is on value. We have therefore shaped our business to operate successfully in a fundamentally changed market – driving the transformation that will make us more robust, responsive and competitive. We have refined our portfolio by exiting certain assets and focused on continuous improvement as well as developing international markets for our products. Importantly, we are building strong relationships with all our stakeholders as our operations concentrate on optimising their potential.



## ABOUT THIS REPORT

This supplementary report expands on the financial, social and environmental performance disclosed in the 2018 integrated report of Anglo American Platinum Limited (Amplats or the company). As with the integrated report, content has

- been guided by GRI standards (index on page 109) and grouped under our pillars of value. This report should be read with the integrated report
- on www.angloamericanplatinum.com/investors/annual-reporting/2018.

Our suite of reports is aimed at a broad range of stakeholders for a fuller view of our activities in the past year and progress against sustainability-related goals. Where relevant, readers are referred to more information in another report. This facilitates an informed assessment of the value Amplats creates in society and of the company's long-term sustainability.

With longer-term comparatives, readers should note that 2014 performance reflects a five-month strike at about 60% of our operations and completed disposals in 2016 and 2017, skewing year-on-year comparisons.

We welcome your feedback on this report which should be addressed to cosec.platinum@angloamerican.com.

#### **KEY SUSTAINABILITY INDICATORS**

2 fatalities

**34%** improvement in total case frequency rate

R14.9 billion

**78%** 

of management comprises historically disadvantaged South Africans

**4.1Mt** 

GHG emissions, CO2 equivalent

24.4Mm<sup>3</sup>

new water used for primary activities (production and process)

20 million GJ

O level 3, 4 and 5 environmental incidents – target achieved

R264.16 million corporate social investment\*

We were pleased with feedback from FTSE4Good on our 2017/2018 environmental, social and governance (ESG) ranking. Amplats outperformed all other PGM producers, with a score of 4.6 compared to the sector average of 3.3 and above the mining industries' average of 2.5.

We were also proud to achieve the second-highest sustainability practices score in the metals and mining sector category of the Corporate Responsibility Review 2018 by ISS-Oekom, one of the world's leading ESG research and rating agencies.

#### **HOW WE ARE DOING**

oekom research

Top 2 mining company globally in ISS-Oekom Corporate Responsibility Review 2018



Inclusion in FTSE4Good index since June 2015



Top 30 in JSE Responsible Investment index

<sup>\*</sup> Excluding overheads and including Unki.

The Bench Marks Foundation launched Policy Gap 13 "Coping with unsustainability (2)", which entailed a critical analysis of Amplats Sustainable Development reports from 2003 to 2015. The Bench Marks Foundation report made assertions that Amplats failed to deliver on promises made in these Sustainable Development reports. Amplats decided to review progress made on promises made in the Integrated and Supplementary report 2017, to demonstrate that the company is committed to delivering on promises and towards improvement, in line with our vision of re-imaging mining to improve people's lives.

#### PROMISES, COMMITMENTS AND PROGRESS

LEVEL OF PROGRESS

#### Promises and commitments

**Supplementary report:** Given the scale of change in our group (workforce, metrics and reporting standards), we have not provided comprehensive targets for 2018. We will do so in the next report.

#### **Progress**

We have provided targets for key elements of our business.



#### Promises and commitments

**Developing our sustainability strategy:** We will develop an Amplats sustainability strategy aligned to the group strategy while considering our context and external environment.

#### **Progress**

The sustainability strategy is discussed in the integrated report 2018.



#### Promises and commitments

**Safety performance:** We are moving away from reporting lost-time injury frequency rate (LTIFR) as the safety lagging indicator to total recordable case frequency rate (TRCFR), which includes medical treatment cases, lost-time and serious injuries. From 2018, we will only report TRCFR per 1 million hours worked.



#### Progress

In 2018, we started measuring our TRCFR per million hours worked to align with best practice. Pre-2018 date was measured per 200,00 hours worked and has been restated. Our total recordable case frequency rate (TRCFR), which includes any injury needing more than first-aid treatments, dropped a commendable 34% in 2018, but missed our internal stretch target of 2,73. TRCFR is our preferred leading indicator, as its a better measure of preventative actions.

#### Promises and commitments

**Modernisation/mobility:** We will initially focus on capturing and using workplace information through mobile devices to eliminate double handling of data and improve efficiency. Immediate functionality will include the ability to capture visible felt leadership (VFL) interactions, planned task observations, inspections and incidents and upload this to the central platform. Mobile devices will also provide access to standards, job cards, training material and dashboards.

In the longer term, we are looking at digitising lock-outs, daily bookings, logbooks, sending warnings, measuring critical control effectiveness and monitoring health information via wearable devices. We will also investigate the efficacy of drones for monitoring activities.

#### Progress

The introduction of new mining technologies and methods gives Amplats a significant opportunity to improve performance efficiency and safety.

The future of work in line with the so-called fourth industrial revolution indicates that work will be:

- Deploying digitally enabled hardware tools to perform or improve activities that have traditionally been carried out manually or with human-controlled machinery
- Using connected mobility, and virtual and augmented reality to empower field, remote and centralised workers in real time
- Linking operations, IT layers and devices or systems that are currently separate
- Leveraging algorithms and artificial intelligence to process data from sources in and beyond the traditional value chain, to provide real-time decision support and projections.

The employee of the future is defined within the Amplats landscape, dictating that they will work with:

- Immediate, remote expert assistance and real-time guidance
- Indepth technical knowledge of machinery
- Data-rich analysis and interpretation
- Cognitive and visio-spatial abilities
- Ability to apply more complex skills by monitoring equipment and problem-solving
- Advanced technology design, engineering and maintenance
- Strong analytical and technological skills.



#### Promises and commitments

Managing HIV/Aids and TB: In 2017, 80% (20,173) of employees know their status. We will continue to focus on the level of participation and, as part of the 2018 review, seek to identify and remove any barriers to participation.

Amplats is committed to playing an active role in the fight against HIV and achieving global and national targets.

#### **Progress**

- To fight the stigma of HIV and TB, employees' active participation in wellness campaigns and World Aids Day events clearly
  demonstrates effective partnerships. Onsite managers, wellness ambassadors, unions and communication teams, supported by
  the corporate SHE team, organise wellness campaigns with executives and senior managers participating in wellness screening,
  and those who are TB survivors sharing their experiences with fellow workers good examples of visible felt leadership
- At healthcare facilities, doctors and nurses share the responsibility to offer group counselling to employees in waiting areas at the
  outpatient department or occupational health clinic. The escalation process adopted for HIV counselling is another example of a
  shared responsibility between mining and healthcare professionals.
- One of the UN Sustainability Development Goals identified in the group sustainability strategy is health and wellbeing (SDG3).
   Including this goal offers an opportunity to collaborate with other functions and to develop innovative solutions and partnerships for community health initiatives
- Our work on TB has been shared with other Anglo American business units, the mining industry and UNAIDS. Although strengthening
  the health system was initially intended to support HIV and TB programmes, it naturally tends to permeate the entire delivery system
   – a knock-on benefit.



#### Promises and commitments

**HIV and TB prevention and 90:90:90 (wellness):** We are committed to innovative HIV and TB prevention initiatives and to the 90:90:90 target.

#### **Progress**

- After adopting test-and-treat guidelines, 86% of all known HIV-positive employees are on ART
- In 2018, TB rate has decreased to around 400 per 100,000
- For clinical programmes, continuous monitoring and evaluation drives programme enhancement and assesses progress against expected targets. From inception, we have used detailed review and analysis to fully understand the nature of the problem and the context. Analysis showed that, despite well-entrenched HIV and TB programmes, our inability to proactively identify and follow-up on HIV-positive employees and the lack of integrated clinical pathways were major constraints to managing these diseases. Given that this intervention covered all our business units, the analysis was not limited to clinical parameters, but also covered a site-by-site review of healthcare arrangements including medical insurance cover and the unique features of various healthcare settings (for example, the Eastern Limb region is remote, with few facilities falling under medical aid networks so this requires managed-care processes and interventions)
- Our healthcare facilities have infection-control measures such as UV lights and bacteriocidal filters, reducing the number of active TB cases significantly and thus the risk of workplace transmission. As proof, no case of workplace-acquired TB has been reported in the last two years.





Fully achieved



#### PROMISES, COMMITMENTS AND PROGRESS

LEVEL OF PROGRESS

#### Promises and commitments

**Nkululeko financial wellness programme:** This was initiated in 2015 to empower our workforce to take ownership of their financial wellness. The programme was implemented to assist in mitigating high levels of over-indebtedness that has affected the mental wellness of employees. We will relaunch Nkululeko with a broader scope of services for employees, including:

- Educational training on budgeting through this time of economic pressure
- Provide tools for those employees currently managing their debt to prevent possible indebtedness later.

These tools include: credit checks, investments, savings, budgeting and managing spend through a web-based app "6 cents"

- Proactive assistance in planning for emergencies, ie savings accounts, insurance and funeral cover
- · Educate against borrowing from family and ways of effective budgeting to minimise impact on family.

#### Progress

The focus for the review period was on financial wellbeing, including debt relief, financial wealth creation and skills development:

- 4,253 employees have signed up on the programme including 286 debt-relief solutions (on average, employees using these solutions are paying R3,259 (51%) less every month towards their debt commitments, largely due to reduced interest rates ranging from 28% to 7%)
- Affordable debt savings of R48 million on reduced instalments, with average interest rates dropping from 26% to under 3% and an
  average saving of 24%
- An average of 52% of net income added back into employees' households, resulting in savings/refunds of R2.3 million
- 14,730 employees have attended financial wellness induction sessions
- 10,216 interactions with employees recorded informal engagements/enquiries
- 2,154 provisional tax submissions administered.

#### Step-change initiatives in 2018:

- 1,635 employees participated in financial wellness and skills development events to create awareness on individual financial assessments, debt health and smart-banking workshops
- 806 employees participated in a smart-banking workshop to empower them to bank better and plan for their future
- 408 employees attended a debt power workshop that 'in-powered' them to settle their unsecured debt and helped them to become
  debt free
- 386 employees attended the debt-repair workshop that created awareness and understanding of risks linked to indebtedness.



#### Promises and commitments

**Using water responsibly:** In 2018 we will continue to reduce our fresh-water consumption and incrementally improve water efficiency.

#### Progress

- Site plans include provision for water security, water-use efficiency, tailings water recovery projects and a mine dewatering strategy, stormwater management and discharge management, complemented by a monitoring programme
- We are implementing an integrated water plan (conservation and demand management) to mitigate related security risks. This
  includes a focus on shifting further to non-potable process water; investing in water-treatment and relevant technology innovation to
  improve operational water efficiencies; constructing on-site storage at Mogalakwena, Amandelbult and Rustenburg; rolling out the
  regional water strategy development for Limpopo; and ensuring strategic alignment, partnership and technical support to local and
  regional water authorities
- We are increasingly reducing fresh-water consumption at our operations, and partner in several regional bulk-water resource and water-efficiency initiatives.
- Total water withdrawal intensity improved by 6% to 5.42m³ (2017: 5.74m³).
- Potable water-use intensity from an external source improved by 33% to 1.36 m³ (2017: 2.0m³).



#### Promises and commitments

**Transformation:** The company is committed to creating and maintaining an environment that provides equal opportunities to all employees, particularly historically disadvantaged groups.

#### **Progress**

- By end of 2018, 78% of our managers were HDSAs (2017: 76%), exceeding the South African mining charter 2 (2014) or 40% of each management level and 40% of core and critical skills.
- At the end of 2018, women made up 24% of management (2017: 23%), and 18% of the total workforce (2017: 17%).



LEVEL OF PROGRESS

#### Promises and commitments

**Meaningful engagement:** We are committed to working with our stakeholders to understand their legitimate needs and concerns, and integrate these into our business to create an organisation that is sustainable and shares the value generated.

All our operations have functioning community engagement forums, leadership forums or task teams (in the case of Mogakwena), nominated and elected by communities and meeting at least quarterly. In addition, we have established business forums in our communities, which engages with the mines on business issues and opportunities. We continually monitor the quality or our engagement, structures and the communication channels in place especially at community level, to ensure these are effective.

#### **Progress**

Amplats engagements with communities in 2018, is detailed on pages 10 and 15 of the 2018 Integrated Report.



#### Promises and commitments

Social licence to operate (SLO): We are committed to delivering on these value levers to increase levels of trust and improve our SLO.

Our social license to operate depends on our ability to ensure our stakeholders participate in the economic benefits we generate, and that our activities leave our host governments and communities with a firm foundation for a sustainable future. The fact that we are a major mining company raises particular expectations. Through our core activities – employing people, paying taxes to governments and procuring from host communities – we make our significant contribution to the South African and Zimbabwean economies.

In South Africa, Amplats invested R271 million (2017: R295 million) in community developments.

#### **Progress**

In 2018, Amplats contributed R599.1 million to total social investment in South Africa and R9.95 million towards corporate social investment in Zimbabwe. Refer to pages 54 and 55 of the 2018 Integrated Report and pages 57 to 73 of this report for further details of Amplats' measures to improve our SLO.



#### Promises and commitments

**Mining charter scorecard:** Although the current charter's reporting period ended in early 2015, Amplats remains committed to its principles and continues to report against it.

#### Progress

AAP will report against the new charter in FY19. Please refer to page 76.



#### Promises and commitments

**Environmental stewardship:** We are committed to minimising our impact on the natural world by integrating environmental considerations through research, planning and responsible management.

#### Proaress

- Our environmental strategy aligns with the Anglo American sustainability strategy in articulating our commitment to demonstrating leadership in environmental stewardship
- We are building the foundations to guide our progress in setting and achieving ambitious goals for 2030 on water, climate change and biodiversity performance
- Many of the technological innovations we will apply to achieve the desired step-change in our water and energy performance are at
  various stages of development. The journey is underpinned by best-practice policies, performance standards and business processes,
  investing in internal capacity, capability and technological innovation, as well as partnerships and collaboration with stakeholders.
- Amplats also outperformed its peers in the FTSE/JSE Responsibilities Investment Index Series, achieving 4.5 out of 5 for our environmental performance, and 4.6 out of 5 as an overall ESG score.
- Amplats is proud to report that we ranked second globally in metals and mining sector of ISS-Oekom Corporate Responsibility Review for 2018, scoring 1 (the lowest risk score) out of 10 for our environmental performance. JSS-Oekom is one of the world's leading ESE-research rating agencies.



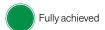
#### Promises and commitments

Managing air quality: Rustenburg Platinum Mines Limited (RPM) remains committed to achieve compliance with the 2020 MES.

#### Progress

- Rustenburg Base Metals Refinery (RBMR) and Precious Metals Refinery (PMR), which are responsible for product delivery and
  compliance to external requirements, have environmental management systems certified against the new ISO 14001:2015 standard.
- The compliance status of our operations is consistent with prior years at 96% for mining (including concentrators) and remains 96% for progress since 2018 audit results are not available yet, (smelters and refineries).







# **OUR APPROACH (CREATING VALUE)**

Amplats unlocks its full potential by integrating and embedding sustainability into our differentiated value proposition, through focusing on elements within our control and building the foundations for continuous improvement.

Overseen by the executive committee, we viewed the launch of the Anglo American sustainability strategy in March 2018 as an opportunity to challenge our sustainability imperatives against the vision of a sustainable future we are co-creating with our stakeholders.

Our sustainability narrative weaves the threads of integration from our parent's strategy and sustainability strategy into the Amplats strategy and demonstrates how we incorporate our sustainability approach throughout our business and beyond – into our products that have so many beneficial applications in the 21st century.

Driven by our purpose, re-imagining mining to improve people's lives, our transformational sustainability approach has broadened our focus from individual projects to an overriding and overarching

ambition, by embedding sustainability into our business processes and operational plans and then challenging our performance against that ambition.

As a commercial business, Amplats is responsible for creating value. That responsibility extends equally to the business of sustainability. To further enhance our value proposition and understand our broader societal contribution, we mapped our 2017 societal contributions to the United Nations Sustainable Development Goals (SDGs) (page 62), allowing us to gauge our contribution to the global call for a 'better and more sustainable future for all'. While this provided a limited view of our contribution to natural, social, human and manufactured capital, as embodied by the SDGs, it has allowed us to reflect on current activities and future opportunities in the context of our operations and our products.

# CASE STUDY: BENCH MARKS FOUNDATION REPORT

The Bench Marks Foundation published Policy Gap 13 Coping with Unsustainability (2), Critical Analysis of Anglo American Platinum Corporation Sustainable Development Reporting (SDR) from 2003 to 2015. The Bench Marks Foundation is a non-profit, faith-based organisation that focuses on corporate social responsibility (CSR) and monitoring corporate performance against an international measuring instrument. The South African entity is part of an international coalition with partners in Australia, Hong Kong, Canada, the USA, Colombia and the United Kingdom.

After analysing our sustainability reports for a period of 12 years, Bench Marks presented some valuable insights and recommendations. However, its report also contained some conclusions and assessments of our economic, social and environmental impact that we do not agree with. Amplats compiled a comprehensive response to the report and invited the Bench Marks Foundation to ongoing engagement on sustainability reporting.

This case study summarises our responses to three main themes: benefits to shareholders, lack of local beneficiation and community consent.

#### Benefits to shareholders versus benefits to community

The Bench Marks report suggested that over 2003 to 2015, we focused on shareholder returns at the expense of our

workers and communities. To further this argument, the report selectively chose economic data for analysis such as benefit to shareholders, workers and communities instead of a robust value-add analysis, which shows the value added to employees, government, providers of capital and reinvested in the company.

In response, we conducted an aggregated investigation of our value-added statements over a 14-year period from 2004 to 2017. This indicated the total value-added contribution to South Africa was R310 billion, of which the majority (45.6%) went to employees, 17.4% was paid to government in the form of taxes and royalties, 19.6% was reinvested in the group and 17.5% was distributed to providers of capital and shareholders as interest and dividends (refer to table).

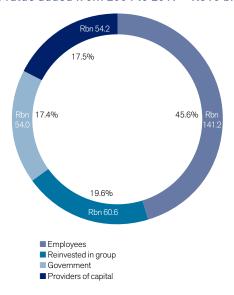
Importantly, the value flow to shareholders has been substantially lower since 2012, with dividends only paid once to shareholders in a nine-year period, resuming again in February 2018. Employees and communities continued to benefit throughout the 14-year period. The Bench Marks report overlooked contributions Amplats made to community infrastructure, health and other social benefits by implying that the company was driven only by profits and shareholder value rather than delivering positive, tangible benefit to communities.

Amplats believes in generating shared value for all stakeholders through our value-driven strategy. Implemented over the last five years, this value-driven strategy has turned around a company that was on the path to a potential complete failure, with associated

negative implications for government (taxes and royalties), employees (salaries), communities (social investment and increased unemployment), broader society (procurement of goods and services) and, lastly, providers of capital (investment in our business). Today, Amplats is a stable, competitive and profitable business that will be sustainable in the long term and will deliver value to all stakeholders through safe production, all in support of the Anglo American purpose of *Re-imagining mining to improve people's lives*.

## Analysis of value added statements from 2004 to 2017

#### Total value added from 2004 to 2017 = R310 billion



#### Lack of local beneficiation

In its report, Bench Marks decries that only 14% of the world's supply of autocatalysts comes from South Africa, suggesting that almost all global autocatalysts should be manufactured in South Africa.

In our response, we highlighted that South Africa's catalytic converter industry is a global exception as production is largely exported, given that the quantities produced materially exceed local vehicle production. We further outlined the significant investment Amplats has made in market-development activities aimed at expanding PGM demand with benefits for the whole of South Africa's PGM industry. In parallel to stimulating global demand, the company promotes localisation of internationally manufactured products and reinforces the development

of local skills and local intellectual property, as well as supporting local jewellery manufacturers.

#### **Community consent**

The Bench Marks Foundation noted that our sustainability reports did not explain how consent is obtained for community development programmes. In our response, we highlighted the methods we use to secure stakeholder consent through a variety of community structures and stakeholder forums. We noted that as communities are not homogenous entities, the process of obtaining consent is often complicated when segments of the community do not recognise established societal structures, for example in the event of chieftaincy disputes or when legal representatives in the same community and communities themselves create their own claimed representative forums for each problem that arises. Individuals then use these forums to achieve more personal objectives and not the broader objectives that should underpin decisions on the community's development.

In addition, we continue to strive to improve our engagement methods with our communities through initiatives such as our field workers programme (page 66) and faith-based initiatives.

#### The way forward

While Amplats is proud of its sustainability performance over the years, we are equally committed to continuously improving the quality of our sustainability reporting to reflect both our accomplishments and challenges.

A significant outcome from the Bench Marks report is tracking promises and commitments made in our integrated and sustainability reports and providing updates on progress. We acknowledge that in past reports, we did not, in some instances consistently report on all commitments made in previous years. In this year's supplementary report, we have sought to clearly demonstrate this as part of our focus on accountability and acknowledge where we are experiencing challenges. In 2019 and beyond, we will continue to engage with the foundation and other external stakeholders to improve our sustainability performance and reporting practices, through our materiality process and other initiatives aimed at greater transparency.

## **OUR MATERIAL ISSUES**

Our integrated report details the process of determining materiality and our material issues in the review period. These are summarised below and cross referenced to detailed commentary.

PILLARS OF **VALUE** 

#### MATERIAL ISSUE AND ASSOCIATED TOPICS

**READ MORE** 



#### **Health and safety**

- Employee and community health and safety
- Fire risk and explosives management
- Tailings storage facility failure
- · Reduction of airborne pollutants and inhalable hazards



health





#### **Market conditions**

- Future demand and supply of PGMs
- Economic growth prospects in South Africa
- Price and exchange rate volatility
- Global commodity prices
- Electrification of the automotive drive train
- Market development; focused on jewellery demand, supporting hydrogen economy and enhancing platinum investment products



### **Financial**

#### Delivering maximum potential of our operating assets

- Expansion of Mogalakwena
- Sustainability of Unki
- Social impact of mechanisation at Amandelbult
- · Repositioning assets towards value optimisation
- · Failing to make secure investments and grow our leadership



political/

financial





#### Political and regulatory uncertainty

- New mining charter: procurement challenges, applicability to the Precious Metals Act, enhanced community expectations
- · Land access and resettlement
- · Expropriation of land and SA land policy
- Regulatory compliance risks

PILLARS OF VALUE

#### MATERIAL ISSUE AND ASSOCIATED TOPICS

READ MORE



#### Sociopolitical/ people

#### Social licence to operate

- Employee and labour relations
- Transformation
- BEE procurement
- Alchemy community empowerment initiative
- Human rights assessment
- Employee and community ownership
- Relationships with stakeholders
- · Local economic development
- Local procurement and supplier development
- Community unrest

#### **Creating resilient mining communities**

• Planning for local economic activity and social sustainability post life of mine

#### **Ethical leadership and culture**

- Internal fraud and corruption
- Fraud and corruption at national level
- Company code of conduct
- Improved cooperation with NGO and religious leaders



#### Talent development, attraction and retention

- Women in mining
- Leadership succession
- Education and training
- Re-envisioning talent management in the digital age



#### Production/ cost

#### **Technology and innovation**

- Mechanisation and modernisation
- Beneficiation and recycling of PGMs
- Technology developments downstream
- Using data-driven insights to create value

#### Responsible use of resources



- **Environment**
- Water infrastructure and management
- · Energy infrastructure and management
- Emissions reduction
- Waste management
- Biodiversity
- · Concurrent rehabilitation and mine-closure provision
- Climate change

# PILLARS: PRODUCTION, COST, FINANCIAL



## **OUR STRATEGY - THE NEXT FIVE YEARS**

With our portfolio largely reshaped, our focus now turns to extracting further value – fuelled by operational excellence – to deliver sustainable returns.

In recent years, we have taken the difficult decisions and made progress with the 'hard' work to improve the resilience and earnings potential of our business. We continue to invest for the future, ensuring we influence our destiny by facilitating market development for PGMs and completing project studies that increase optionality, synergies and cash flow. We are modernising our business through innovation, ensuring we have an engaged workforce and supportive stakeholders.

Given that, the pricing and operating environments remain challenging. We continue to run our business for the current price environment. We believe we have the portfolio to generate superior returns for our stakeholders and optionality to benefit from improving PGM fundamentals.

The performance review, beginning with the chairman's letter on page 32, details our progress and summarises strategic plans to continue creating value.

#### PURPOSE: RE-IMAGINE MINING TO IMPROVE PEOPLE'S LIVES



#### Our strategic priorities



Extracting the full potential from our operations through our people and innovation



Investing in our core portfolio that delivers industry-leading cash flows and returns



Facilitating the development of the market for PGMs to increase demand

#### ... delivered in a safe, values-driven and socially responsible way

ZERO HARM - Safety, health and environment

Organisational culture anchored on a significant leadership style and values orientation

Best practice, modernisation and innovation across our value chain

**Building leading** community and stakeholder relationships, and making a lasting contribution

#### Built on our pillars of value



**FINANCIAL RETURNS** 

PFOPI F





**PRODUCTION** 

**SAFETY AND** 



**ENVIRONMENT** 



COST



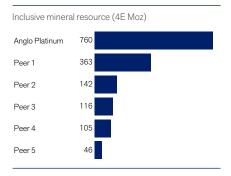
## HOW WE CREATE VALUE

We will achieve our value proposition by implementing the next value-enhancing phase of our strategy (summarised below and detailed from page 56).

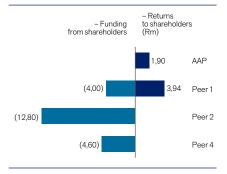
STRATEGIC PRIORITY	HOW	LONGER-TERM TARGETS
Extracting the full potential from our operations through our people and innovation	Through the operating model, delivering stable and optimised performance Achieving global best practice Setting best practice through technology and innovation	Such as:  • Mining:  - 45Mtpa shovel performance from 26Mtpa in 2018  - Steepening of open pit slope angles  • Concentrating:  - 10% throughput increase  - 83% recoveries from 81%  • Smelting and refining  - 81% operating factor from 73%  • Smelting and refining  - 81% operating factor from 73%  • Investing in technology
2 Investing in our portfolio to deliver industry-leading cash flows and returns	Investing in key value-enhancing projects	Fast-payback projects Mototolo/ Der Brochen expansion Mogalakwena expansion
3 Facilitating the development of the market for PGMs to increase demand	Investing in:  Platinum Guild International – jewellery demand  World Platinum Investment Council – investment demand  AP Ventures – industrial demand  Policy advocacy – hydrogen and fuel cells  R&D on uses for PGM	Market development

#### Strategy in action FY18

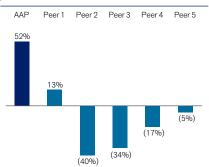
# Quality of assets Inclusive mineral resource



# Paying a dividend while industry requiring capitalisation (Rbn)



# 12-month share price performance



#### **HOW WE REWARD SUCCESS**

Fully achieved Partially achieved Not achieved

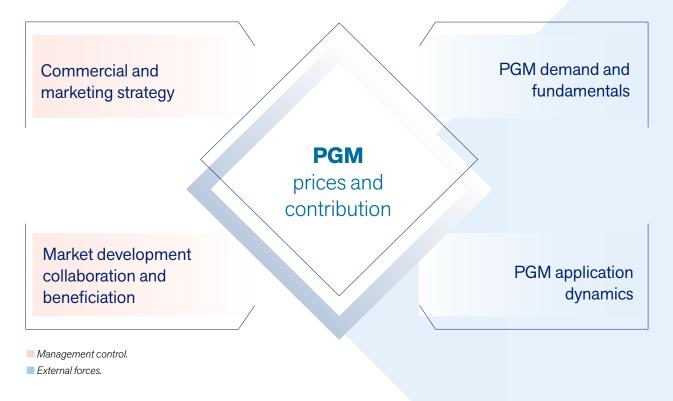
The key results areas shown below for the CEO and prescribed officers translate into measurable key performance indicators (KPIs) that determine the variable component in their remuneration (refer remuneration report from page 118). Flowing from this reward structure, Amplats' most important KPIs are summarised below.

Pillar of value	KPI	Unit	2018 target	2018 actual	Achievement	2019 target
	TRCFR	/million hrs	3.01	3.00	•	2.88
	Fatalities	Number	0	2	•	0
Safety and Health	HIV management (90:90)	%	90:90	88:90	•	90:90
	Zero level 4 and 5 incidents	Number	0	0	•	0
	Energy intensity	GJ/ton milled	0.83	0.79	•	0.81
	Total energy used	million gigajoules	19.3	20.0	•	20.5
Environmental	Water intensity	m³/tonnes milled	1.08	0.96	•	1.17
	Total water withdrawals	Megalitre	24.36	24.43	•	29.6
	Compliance to SO <sub>2</sub> emissions permits	%	100	100	•	100
Socio-political	Anglo social way	Score average 3.2	3.2	3.9	•	3.2
	PGM M&C production	koz	5,008	5,187	•	4,200 – 4,500
	Refined PGM production	koz	4,962	4,785	•	4,600 – 4,900
Production	Productivity PGM ounce per employee	PGM oz	107	108	•	
	Unit costs	R/Pt oz	19,814	20,684	•	21,000 – 22,000
	EBITDA	Rbn	10.5	14.5	•	
<b>© Financial</b>	Operating free cash flow	Rbn	4.4	11.8	•	
	Return on capital employed (ROCE)	%	14	24	•	
i manciai	Capital expenditure (capex)	Rbn	5.0	4.7	•	5.7 – 6.3
	Cash flow return	%	9	24	•	



## **OUR MARKETS**

We firmly believe long-term supply and demand fundamentals for PGMs remain attractive. Rising demand from some existing applications and new demand from those being developed, as well as stimulatory measures to develop the PGM market, will support sustainable demand and, in time, foster growth. To manage short-term price fluctuations, we operate our mines cost-effectively and profitably, exiting operations that are not strategic to our portfolio.



#### **PGM DEMAND FUNDAMENTALS**

The pricing environment was mixed for platinum group metals (PGMs) in 2018. While the platinum price struggled, other PGMs had a better year in terms of price. On average, the platinum price declined year on year, as the metal faced headwinds from weaker demand in the European light-duty diesel sector, and another challenging environment for the Chinese jewellery sector. We estimate platinum was in a moderate surplus for the year as a result.

In contrast, the prices of other PGMs strengthened significantly. Palladium climbed to a high of USD1,278 in December, driven by strong automotive demand against a backdrop of constrained supply and limited above-ground stocks, with the metal in fundamental deficit for the eighth consecutive year. Stronger automotive demand also helped the rhodium price achieve an eight-year high of USD2,600. The outlook for palladium and rhodium demand remains positive, with tighter emissions legislation likely to keep automotive demand strong for both metals. Ruthenium and iridium prices also reached multi-year highs, in response to strong industrial demand from the chemical and electrochemical sectors, among others.

#### **Platinum**

Gross global platinum demand decreased by 2.5% or 198,000 oz in 2018, primarily on the declining share of diesel cars in Western Europe. However, platinum demand in the automotive sector was supported by the heavy-duty and light-duty diesel segments outside Europe, in conjunction with increasingly tight emissions legislation. Gross automotive demand declined by only 5.4% to 2.92 million ounces. Gross demand from the Chinese jewellery sector edged lower year on year, partially offset by stronger demand from the jewellery sector in India. Net industrial demand, including the hydrogen fuel cell sector, climbed by a very healthy 14.0% year on year to 2.42 million ounces.

Global primary (mine) supply of platinum was almost flat at 6.11 million ounces, despite further rationalisation of South African production. Secondary (recycled) supplies of platinum rose 7.1% to 2.18 million ounces. Platinum recovery from end-of-life catalytic converters climbed, as expected, in response to a stronger scrap steel price. The increase in combined primary and secondary supply resulted in a fundamental surplus of around 523,000 oz.

Supply (000 oz)	2018	2017
South Africa	4,471	4,449
Zimbabwe	480	466
Russia	657	703
North America	335	328
Other	165	159
Total primary supply	6,108	6,105
Autocatalyst recycling	1,403	1,291
Jewellery recycling	777	745
Secondary supply	2,180	2,036
Gross supply	8,288	8,142
Demand		
Autocatalyst: gross	2,919	3,086
Jewellery: gross	2,364	2,401
Industrial: net	2,416	2,120
Investment	66	356
Gross demand	7,765	7,963
(Deficit)/surplus	523	179

#### **Palladium**

Gross global palladium demand increased by 0.6% or 55,000 oz from the prior year. The largest end-use sector for palladium is automotive. In 2018, this accounted for 8.63 million ounces or 90% of gross demand. This was an increase of 229,000 ounces on 2017, driven primarily by tighter vehicle emissions regulations, especially in China and Europe. Industrial demand was also higher, led by increased purchases from the chemical sector. The ongoing deficit for palladium led to further net outflows of 574,000 oz from exchange-traded funds to take profits and benefit from high lease rates for the metal.

Global mine supply of palladium increased by 519,000 oz or 8.2% year on year. South African metal sales increased slightly. Russian volumes reflected higher sales from primary producers, supported by sales of above-ground stocks from Nornickel's fund. Secondary supply of the metal rose 10.8% from the previous year, driven by higher material recycling in the industrial and autocatalyst sectors. Demand outstripped supply and palladium showed a deficit of 9,000 oz, an annual deficit that would have been very significant without the net disinvestment of 574,000 oz of palladium through the year.

Supply (000 oz)	2018	2017
South Africa	2,590	2,550
Zimbabwe	378	386
Russia	2,840	2,406
North America	939	886
Other	133	133
Total primary supply	6,880	6,361
Autocatalyst recycling	2,720	2,398
Jewellery recycling	14	21
Secondary supply	2,734	2,419
Gross supply	9,614	8,780
Demand		
Autocatalyst: gross	8,626	8,397
Jewellery: gross	166	172
Industrial: net	1,405	1,385
Investment	(574)	(386)
Gross demand	9,623	9,568
Surplus/(deficit)	(9)	(788)

## **OUR MARKETS** CONTINUED

#### **Rhodium**

Gross rhodium demand fell 3.8% from prior-year highs to 1.01 million oz in 2018. The automotive sector purchased 22,000 oz more metal than in 2017. This increase in demand was largely a response to tighter emission standards necessitating a higher PGM loading per vehicle. However, gross industrial demand for the metal weakened slightly due largely to lower purchases from the glass and chemical sectors.

Global mine production of rhodium was virtually unchanged at around 760,000 oz. Recovery of rhodium from used catalytic converters rose 10.6% or 33,000 oz. While supply and demand for rhodium were relatively balanced in 2017, it moved into a modest surplus of 92,000 oz in 2018, when excluding speculative purchasing, on the combination of stronger secondary supply and softer industrial demand.

Supply (000 oz)	2018	2017
South Africa	623	611
Zimbabwe	39	42
Russia	69	78
North America	23	23
Other	5	5
Total primary supply	759	759
Autocatalyst recycling	344	311
Gross supply	1,103	1,070
Demand		
Autocatalyst: gross	863	841
Other	149	209
Total demand	1,012	1,050
Surplus	92	19

#### **PGM** prices and contribution

Platinum was the single-largest revenue generator for Amplats, accounting for 39% of sales in 2018. Palladium's contribution increased to 30%, while rhodium accounted for 13% of net sales revenue.

The average platinum market price decreased by 7.3% to USD880 per ounce with the achieved dollar basket price increasing by 12.9% to USD2,219 (2017: USD1,966). The South African rand average rate on achieved sales 13.37 was unchanged at R13.33/USD in 2018, leading to an increase of 12.9% in the achieved rand basket price of R29,601 per ounce (2017: R26,213). The average palladium market price increased by 18.4% to USD1,029 per ounce (2017: USD869 per ounce). The average rhodium market price doubled to USD2,214 per ounce (2017: USD1,097 per ounce).

#### **PGM** market dynamics

#### **Autocatalyst**

Global light vehicle sales contracted by just 0.5% in 2018 to 94.9 million units. Sales firmed modestly in Europe and South America, but declined slightly in North America. Most importantly, the Chinese market weakened towards the end of 2018, as the economy slowed, with sales contracting 3.1%. However, tighter emissions legislation meant that overall demand for PGMs climbed.

Despite the positive European sales performance, gross automotive demand for platinum fell by 167,000 oz or 5.4%. The diesel engine's share of the light-duty vehicle sector in Europe fell sharply in 2018. Given platinum's role in diesel after-treatment, this affected automotive platinum demand despite healthy European light-duty vehicle sales and an increase in average metal loadings, driven by the ongoing move to real-world emissions testing. Growing fitment of catalytic exhaust after-treatment to heavy-duty diesel vehicles continues to contribute well to automotive platinum demand.

Gross automotive demand for palladium climbed strongly by 2.7% to 8.63 million oz, driven by ever-tightening emissions legislation around the world and despite a slight decline in global vehicle output.

Similarly, rhodium benefited from these new emission rules, with gross automotive demand for the metal climbing 2.6% year on year.

The commercial outlook for the light-duty diesel vehicle remains a key issue for platinum, with questions over its real-world emissions performance uppermost for regulators and some consumers. Although recent research shows that diesels can have excellent environmental performance – both for carbon dioxide (CO $_2$ ) and oxides of nitrogen (NO $_x$ ) – in real-world driving, media coverage of this technology remains broadly negative. The diesel engine has accordingly lost share in the European light-duty vehicle sector, with average car CO $_2$  emissions rising as a result. We continue to believe that diesel will play an important role in enabling carmakers to meet their CO $_2$  emission targets cost-effectively, with battery electric vehicles alone unable to do so adequately in their current state of development.

Additionally, palladium's price move above platinum has raised questions on whether platinum could replace palladium in some gasoline catalytic converter formulations. We believe this is likely to happen eventually if palladium moves into a more long-lived premium. However, even after the decision to substitute at least a portion of palladium is made, it would easily take upwards of 12 months before any significant change in the consumption of either metal is achieved.

#### **Jewellery**

Gross global jewellery demand for platinum declined marginally in 2018, dropping 1.5% or 37,000 oz on the previous year. Lower footfall in jewellery stores has led retailers to move from a volume strategy, where jewellery is priced by weight, to a margin strategy where profitability per piece is the focus. This has been positive for carat gold products but more challenging for 24-carat gold and plain platinum jewellery which have historically been sold by weight. The jewellery sector in China is changing its approach and some positive signs are evident, but this process will take time to complete. As a result, gross Chinese jewellery demand for platinum dropped by 4.8%.

The Indian platinum jewellery sector continues to perform well, with demand again climbing strongly in 2018. The Platinum Guild International's marketing initiatives have positioned platinum well here, with consumers keen to buy the metal for its brand values. Similarly, retailers and manufacturers have been able to realise high margins and differentiate their businesses from the mainstream by working with this metal as well as gold.

Jewellery demand for platinum was robust outside these two key markets, with demand rising marginally in Europe, Japan and North America.

#### Industrial

Platinum demand from industrial applications, net of recycling, expanded by 14.0% in 2018 to 2.42 million ounces, again significantly outpacing global economic growth. Much of this growth came from additional purchasing by the chemical and electronics sectors. Although small, demand for platinum from the fuel cell and hydrogen sector continues to rise. This has benefited from strong levels of interest in this technology from China in particular and we believe there is scope for this demand to expand more rapidly in coming years.

Industrial demand for palladium grew healthily in 2017 as the chemical sector purchased more metal to support the construction of additional capacity. This buying spree was repeated in 2018 and palladium demand edged higher by 1.4% or 20,000 oz. Rhodium demand from both the chemical sector and glass industries fell from prior-year levels, with total industrial demand dropping by 28.8% to 149,000 oz.

#### Investment

Our definition of investment demand for PGMs includes physically backed exchange-traded fund (ETF) holdings and the purchase of physical metal products such as bars and coins.

Net investment demand for platinum remained positive but declined by 81.5% or 290,000 oz from last year. ETF holdings decreased by 230,000 oz, offsetting much of the normal positive demand for platinum from Japanese investors. The World Platinum Investment Council continues to develop new investment products and these contributed to demand.

Palladium investment demand was again negative in 2018, at a net disinvestment of 574,000 oz. ETF flows were strongly negative, with holdings dropping by over 500,000 ounces. This reflects a mixture of profit-taking as palladium reached fresh highs and the ability of some investors to take delivery of palladium from ETFs and lease this metal out to capitalise on high lease rates.

#### Developing markets for the metals we mine

Growing the market for PGMs is a long-standing strategic priority for Amplats. Its importance was re-emphasised in 2018 as a key strand of our strategy. Market development is undertaken globally through a mix of initiatives in existing or near-term demand segments such as jewellery and investment; and targeted market development in longer-term growth areas, such as fuel cells, hydrogen and clean energy. South African beneficiation objectives form part of our broader market development activities.

#### **Jewellery**

Developing the global platinum jewellery market is conducted by Platinum Guild International (PGI) and focused on four major markets (China, Japan, USA, India). Initiatives in China, Japan and the USA are funded by Amplats and other primary PGM producers, while work in India is funded exclusively by Amplats. PGI stimulates demand by identifying and developing market opportunities through its network of retail and manufacturing partners, marketing platinum jewellery directly to consumers.

#### China

The next three years will be critical for platinum jewellery development in China to stimulate long-term demand growth. The market is structurally changing as consumer preferences evolve, specifically as the purchasing power of millennials grows. These consumers prefer branded jewellery collections over the generic designs prevalent in China. PGI is developing marketing programmes that both safeguard platinum's strong equity in bridal jewellery and target love-gifting occasions, a large segment for future growth – especially in China's fast-growing lower-tier cities. In 2019, PGI will also lead further innovation in jewellery by driving a bigger variety of product designs through its partnership with the majority of platinum jewellery manufacturers.

## **OUR MARKETS** CONTINUED

#### India

After successfully introducing platinum jewellery into the Indian market, PGI continues to drive the high-margin opportunity that platinum presents by encouraging retailers to upsell in the gold section. Existing programmes, such as Platinum Day of Love and Evara-branded franchises, continue to perform while retail sales by PGI's strategic partners again grew in 2018. PGI is currently working through partners to develop branded platinum jewellery for men, which in recent years has become one of the fastest-growing categories.

#### Japan

This is the most mature platinum jewellery market in the world, with the highest per-capita consumption and share of market. In 2018, PGI developed a series of Legacy collections aimed at older consumers, who hold a third of all Japanese financial assets, with a preference for platinum. These collections allow consumers to pass on their wealth to the next generation by buying a piece of jewellery for themselves now. Platinum retains its cachet as a premium metal and Japanese consumers' preferred precious metal for fine jewellery.

#### USA

Platinum sales continue to rise on the back of a strong economy and historically low platinum prices in the US. Platinum has a unique opportunity to leverage diamond jewellery sales as recognition of this metal as the most secure setting for a diamond grows. PGI's Platinum Crown initiative has boosted sales of platinum prongs by over 10% among participating partners.

#### Investment

Developing investment demand for platinum is led by the World Platinum Investment Council (WPIC), an industry body funded by several platinum producers, including Amplats. In 2018, WPIC continued to make progress against its mission and strategy, ending the year with 10 active, ounce-producing product partnership projects, including three at a very early stage in China.

WPIC continued its strategic investment in China's significant potential, which began in 2017 by establishing an office in Shanghai (co-located with Anglo's offices). In 2018, WPIC hosted and participated in numerous investment events in the country and engaged a significant number potential investors. In addition, it has positioned itself as an important provider of platinum market information, in the Chinese language, and has attracted key media partners (Wall Street CN, Gold Topnews and Puoke Financial) in disseminating platinum market research and investment content for Chinese investors.

In early December 2018, WPIC finalised an agreement with Bank of China, one of the world's largest banks, to collaborate across China to increase platinum investment. As the bank plans to grow its platinum investment products, the partnership will harness WPIC's expertise to assist with its existing and new platinum product development.

#### Industrial

On the industrial front, Amplats continues to support the development of PGM technologies in several ways. This includes: investing in primary research and development; investing in early stage companies commercialising PGM technologies; and by working to enable a favourable policy environment for these technologies.

In 2018, Amplats spun off its internal PGM investment programme by establishing independent fund manager AP Ventures Ilp. Partnering with the South African state pension fund manager, Public Investment Corporation (PIC), the parties committed USD100 million each to the endeavour. AP Ventures will continue with the original intention of the PGM investment programme, investing in high-growth companies developing patentable technologies that use PGMs to address some of society's biggest challenges. In December 2018, Mitsubishi Corporation became the third limited partner of AP Ventures, further endorsing the fund's mandate.

Our advocacy activities support development of a conducive policy environment for hydrogen and fuel cell technologies in the major early adopter markets of China, the European Union, United Kingdom and United States. This work is complemented by participating in demonstration projects, where appropriate, such as co-funding hydrogen-refuelling infrastructure in key locations. Further, our advocacy work involves actively participating in several industry associations including the global Hydrogen Council and the Chinese International Fuel Cell and Hydrogen Association, with Amplats being a founding member of both. Amplats is also a member of Brussels-based Hydrogen Europe, London-based UK Hydrogen and Fuel Cell Association, Washington DC-based Fuel Cell and Hydrogen Energy Association, and the California Fuel Cell Partnership. Each organisation provides a platform to engage relevant industry and government partners.

Importantly, where possible, we aim to integrate demand stimulation with developing skills and capacity building in South Africa. In 2018, we held the 19th annual PlatAfrica jewellery design and manufacturing awards in partnership with PGI India and Metal Concentrators. This year's competition attracted record entries, with 137 pieces finally selected (34 from professional jewellers and 103 from apprentices and design students). This reflects our strategy to actively grow the market for platinum jewellery in South Africa and our successful partnership with Metal Concentrators, which also continues to manage our metal financing scheme that provides platinum to local jewellery manufacturers on favourable financial terms.



# **FINANCIAL**

#### **DELIVER SUSTAINABLE RETURNS FOR OUR SHAREHOLDERS**

#### **FIVE-YEAR REVIEW**

	2018 Rm	2017 Rm	2016 Rm	2015 Rm	2014 Rm
STATEMENT OF COMPREHENSIVE	KIII	IXIII	IXIII	KIII	KIII
INCOME					
Gross sales revenue	74,582	65,688	61,976	59,829	55,626
Commissions paid	0	(18)	(16)	(14)	(14)
Net sales revenue	74,582	65,670	61,960	59,815	55,612
Cost of sales	(63,286)	(56,578)	(56,096)	(54,584)	(53,320)
Cash operating costs	(30,550)	(30,642)	(35,317)	(35,482)	(30,211)
On-mine costs	(23,278)	(24,109)	(29,615)	(29,918)	(25,391)
Smelting costs	(3,695)	(3,363)	(2,834)	(2,886)	(2,518)
Treatment and refining costs	(3,577)	(3,170)	(2,868)	(2,678)	(2,302)
Purchased metals	(29,212)	(20,763)	(13,518)	(10,247)	(12,411)
Depreciation of operating assets	(4,140)	(4,074)	(4,629)	(5,215)	(4,926)
(Decrease)/increase in metal inventories	3,591	515	187	(1,029)	(2,967)
(Decrease)/increase in ore stockpiles	466	1,761	(0.010)	(0.011)	(0.005)
Other costs	(3,441)	(3,375)	(2,819)	(2,611)	(2,805)
Gross profit on metal sales	11,296	9,092	5,864	5,231	2,292
Other net expenditure	342	(6)	(600)	(514)	(561)
Scrapping of immaterial assets	(460)	_	(22)	_	_
Insurance proceeds realised on loss of assets  Market development and promotional	(468)	0	0	0	0
expenditure	(796)	(813)	(683)	(800)	(827)
Adjusted operating profit/(loss)	10,375	8,273	4,559	3,917	904
Loss from associates (pre-taxation)	(40)	(381)	(130)	(557)	(82)
EBIT	10,335	7,892	4,429	3,360	822
Amortisation and depreciation (add back)	4,168	4,093	4,667	5,281	4,985
EBITDA	14,503	11,985	9,096	8,641	5,807
Other operating income/(expense)	(4,844)	(8,464)	(8,051)	(23,083)	(5,726)
Profit/(loss) before taxation (adjusted					
for taxation on associates)	9,659	3,521	1,045	(14,442)	81
Taxation (including taxation on associates					
earnings)	(2,666)	(1,597)	(349)	2,007	(51)
Profit/(loss) for the year	6,993	1,924	696	(12,435)	30
Basic earnings/(loss) attributable to					
ordinary shareholders	6,817	1,944	632	(12,358)	282
Headline earnings/(loss) attributable to					
ordinary shareholders	7,588	3,886	1,867	(126)	445
Notes:					
Associate earnings	(40)	(004)	(400)	(557)	(00)
Loss from associates (pre-taxation)	(40)	(381)	(130)	(557)	(82)
Tax on associates	_	19	15	28	(46)
Loss on associates post taxation (net of taxation)	(40)	(362)	(115)	(529)	(128)
ιαλαιιοι Ι <i>)</i>	(40)	(302)	(110)	(028)	(120)

# FINANCIAL CONTINUED

	2018 Rm	2017 Rm	2016 Rm	2015 Rm	2014 Rm
Reconciliation of profit before tax to					
EBITDA					
Profit/(loss) before taxation (adjusted for					
taxation on associates)	9,659	3,521	1,045	(14,442)	81
Adjusted for:					
Share-based payment expense for facilitation of			. = -		
BEE investment in Atomatic	_	_	156	_	- (0.10)
Net gain on Atlatsa refinancing transactions	_	_	_	_	(243)
Loss on acquisition of properties from Atlatsa					
Resources Corporation	_	_	1 601	_	_
Loss on disposal of Rustenburg Mine	_	_	1,681	_	_
Loss on scrapping of property, plant and equipment	21	1,699	_	10,242	480
Loss on revaluation of investment in Wesizwe	21	1,099	_	10,242	400
Platinum Limited	_	_	_	_	_
Impairment of investments in associates	1,138	2,145	283	4,082	168
Impairment of investments in associates  Impairment of non-current financial assets	234	777	111	1,792	-
Loss on disposal of Union Mine and Masa Chrome	850	_	-	775	_
Gain on step acquisition of BRPM	(336)	_	_	-	_
Profit on disposal of PGMIP	(249)	_	_	_	_
Profit on disposal of long-dated resources	(243)	(1,066)	_	_	_
Insurance proceeds realised on loss of assets	(468)	(1,000)	0	0	0
Profit on disposal of associates	(15)	(135)	_	_	_
Net investment (expense)/income	(500)	951	1,153	911	336
Amortisation and depreciation	4,168	4,093	4,667	5,281	4,985
EBITDA	14,503	11,985	9,096	8,641	5,807
	14,303	11,905	9,090	0,041	3,007
STATEMENT OF FINANCIAL POSITION					
Assets	40.000	20.507	20.574	20.000	44.007
Property, plant and equipment	40,003	36,597	38,574	39,869	44,297
Capital work-in-progress	7,780	5,361	4,892	6,548	10,736
Investment in associates	407	2,464	3,963	3,883	7,637
Investments held by environmental trusts	1,183	970	907	882	842
Other financial assets	4,109	3,507	3,326	1,023	3,120
Other non-current assets	18	39	_	_	54
Inventories	650 35 139	0	0	0 715	00.272
Current assets Non-current assets held for sale	35,138	31,318 558	26,035 0	20,715 0	22,373
					0
Total assets	89,288	80,814	77,697	72,920	89,059
Equity and liabilities					
Shareholders' equity	47,342	41,001	39,782	39,244	49,836
Long-term interest-bearing borrowings	6,038	9,362	9,398	12,124	9,459
Obligations due under finance leases	100	98	96	94	_
Other financial liabilities	762	239	219	_	_
Environmental obligations	1,925	1,693	1,938	2,404	2,110
Employees' service benefit obligations	15	17	17	14	8
Deferred taxation	8,222	7,455	7,519	7,928	10,270
Current liabilities	24,884	20,374	18,728	11,112	17,376
Liabilities associated with non-current assets held					
for sale	-	575	0	0	0
Total equity and liabilities	89,288	80,814	77,697	72,920	89,059

	2018 Rm	2017 Rm	2016 Rm	2015 Rm	2014 Rm
STATEMENT OF CASH FLOWS					
Net cash from operating activities	15,580	13,121	11,400	8,264	4,645
Net cash used in investing activities	(8,214)	(7,118)	(5,829)	(6,064)	(7,398)
Purchase of property, plant and equipment	(0,2::/	(1,110)	(0,020)	(0,001)	(1,000)
(including interest capitalised)	(6,964)	(4,969)	(5,018)	(5,152)	(6,863)
Other	(1,250)	(2,149)	(811)	(912)	(535)
Net cash from/(used in) financing				, ,	, ,
activities	(7,168)	(2,103)	(1,786)	(1,730)	2,793
Proceeds from/(repayment of) interest-					
bearing borrowings	(4,889)	(1,659)	(1,668)	(1,487)	3,204
Other	(2,279)	(444)	(118)	(243)	(411)
Net increase/(decrease) in cash and					
cash equivalents	198	3,900	3,785	470	40
Cash and cash equivalents at beginning					
of year	9,357	5,457	1,672	1,202	1,162
Foreign exchange differences on Unki cash					
and cash equivalents*	(14)	0	0	0	0
Cash and cash equivalents at end of					
year	9,541	9,357	5,457	1,672	1,202
RATIO ANALYSIS					
Gross profit margin (%)	15.1	13.8	9.5	8.7	4.1
Adjusted operating profit as a % of average					
operating assets	16.6	14.0	7.7	6.3	1.4
Return on average shareholders' equity (%)	15.8	4.8	1.8	(27.9)	0.1
Return on average capital employed (ROCE)					
(%)	23.8	17.6	8.9	5.8	1.3
Return on average attributable capital					
employed (%)	26.7	19.0	9.4	6.1	1.4
Current ratio	1.4:1	1.5:1	1.4:1	1.9:1	1.3:1
Gearing ratio (net debt to total capital) (%)	(7.4)	4.3	15.5	24.5	22.7
Interest cover – EBITDA	15.7	9.8	6.4	6.8	5.4
Debt coverage ratio	2.9	1.4	1.1	0.8	0.5
Interest-bearing debt to shareholders'					
equity (%)	13.3	27.3	32.1	36.8	31.7
Net asset value as a % of market capitalisation	32.8	43.2	55.8	78.5	54.2
Effect tax (%)	27.6	45.6	(34.3)	(13.7)	14.3
Effective cash tax paid	18.3	49.2	106.1	(12.6)	7,811.4
SHARE PERFORMANCE					
Number of ordinary shares in issue (millions)	262.3 <sup>†</sup>	262.2 <sup>†</sup>	262.0 <sup>†</sup>	261.7 <sup>†</sup>	261,2
Weighted average number of ordinary shares					
in issue (millions)	262.3 <sup>†</sup>	262.2 <sup>†</sup>	261.9 <sup>†</sup>	261.4 <sup>†</sup>	261,1
Headline earnings/(loss) per ordinary share				(15)	
(cents)	2,893	1,482	713	(48)	170
Dividends per share (cents)	11.25	3.49	_		
Interim Final	374 7.51	240	-	-	_
Market capitalisation (R million)	7.51 144,544	94,911	71,307	49,983	91,994
Net asset value per ordinary share	144,544 176.2	152.7	148.3	49,983 146.4	186.3
Number of ordinary shares traded (millions)	64.2	82.1	113.9	140.4	67.2
Highest price traded (cents)	54,650	42,000	48,780	40,526	53,000
Lowest price traded (cents)	30,500	26,512	15,646	15,905	30,620
Closing price (cents)	53,793	35,346	26,441	18,534	34,112
Value traded (R million)	25,755	26,974	39,336	28,154	29,117
Tallo tradou (Terrimon)	10,700	20,017		20,107	20,111

<sup>†</sup> Net of 978,316 (2017: 1,162,483) shares held in respect of the group's share scheme, the 6,290,365 shares issued as part of the community economic empowerment transaction and, in 2014 and prior years, 356,339 shares held by the Kotula Trust (the group employee share participation scheme).

# PILLAR: SAFETY AND HEALTH





# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES

#### SAFETY AND HEALTH

#### **MANAGEMENT APPROACH**

The safety, health and wellbeing of our employees remain a top priority and core value for Amplats. Our vision is to ensure that every employee and contractor at our operations returns home unharmed after each day's work.

Tragically, two colleagues died at our operations in 2018
 (refer page 25). Any loss of life is unacceptable and we are committed to eliminate fatalities, injuries and any adverse effects on human health.

We are encouraged by the significant decrease in the number and severity of injuries at our operations, but much more still needs to be done and we are taking decisive steps to cultivate our desired safety culture.

In managing health risks, within and beyond the workplace, we have maintained a strong performance through ongoing improvements. Recognising the interplay between managing safety and health risks and promoting employee wellbeing, we are driving greater cross-functional collaboration to ensure a more integrated approach. Our aim is to build and instil a company and, ultimately, industry culture that protects people from harm and improves their health and wellbeing.

# Resilient management systems

Anglo American plc's safety, health and environment (SHE) way integrates related expectations and performance standards into a single management system aligned to achieving zero harm.

Launched in 2017, this system has clarified expectations and requirements for our SHE risks, giving us better visibility of gaps, associated action plans and whether these were completed timeously.

In 2018, our operations conducted self-assessments against the system's requirements, establishing a performance baseline. Each site is developing SHE management improvement plans. The benefit of integrating health and safety into our operating model is already evident in improved planning and scheduling of work and tasks.

# Effective risk management

The better a company is at managing risk, the more consistent and competitive its performance is likely to be. Risk management is therefore a critical component of our future success.

By implementing operational risk management (ORM), front-line managers are able to identify, prioritise and control risks that threaten their ability to meet objectives. The main purpose of ORM is to ensure we manage all forms of operational risk, including safety and health, effectively and consistently to better understand their cumulative impact. ORM targets form part of management incentives, and embedding this system will be prioritised over the next few years.

# Incident management

Reporting and investigating incidents is an essential part of managing risks and tracking progress in hazard prevention and control measures. We are building internal capacity to learn from incident investigations and promote reporting on high-potential incidents (HPIs) to heighten awareness, facilitate organisational learning and effect more robust controls.

# Engagement and collaboration

Safety performance in the South African mining industry has regressed over the last two years, which is deeply concerning to all stakeholders.

In 2018, the sector recommitted to the shared goal of zero harm. After the Minerals Council launched its national day of safety and health in mining 2018 campaign in August, we held a dedicated safety and health day at all operations to support the recommitment and remind every manager and employee that this is the foremost priority.

Amplats plays a leading role in the industry's initiatives to improve safety and health, and to achieve and sustain zero fatalities. Our CEO Chris Griffith chairs the industry CEOs' zero-harm forum, a platform to openly share experiences, determine challenges and drive collaborative action for a step-change in performance.

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

# Engagement and collaboration (continued)

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. This forum has done much over the past decade to improve the health and safety of miners in the country through collaborative and transparent stakeholder engagement.

Amplats has built constructive relationships with regulators such as the DMR 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 to embed the mining charter's health and safety commitments and to implement the five-pillar cultural transformation framework developed by the Minerals Council's Mine Health and Safety Council (MHSC). We participate in industry health and safety forums and report on our progress internally and externally. Key developments across the leadership, risk management, leading practices and technology pillars of the framework are summarised in this section.

For Amplats, regulatory compliance is a minimum standard. We have also adopted several voluntary standards, (see page 75).

#### **ASSURANCE AND TRANSPARENCY**

In line with our culture of assurance and transparency, regular external assurance is undertaken across our operations. In 2018, key health, safety, environmental and social indicators were again independently assured, split between the more-onerous reasonable and limited levels of assurance.

REASONABLE
Total work-related fatal injuries
Fatal-injury frequency rate (FIFR)
Total recordable case frequency rate (TRCFR)
Total new cases of noise-induced hearing loss (NIHL)
Total CO <sub>2</sub> Scope 1 emissions
Total CO <sub>2</sub> Scope 2 emissions
Total energy used
Total number of level 3, 4 and 5 environmental incidents reported
Corporate social investment spend
Total employee turnover excluding VSPs
Employment Equity as per the Mining Charter

LIMITED Workers p

Workers potentially exposed to inhalable hazards above the exposure limit

Workers potentially exposed to carcinogens above the exposure limit

Hazardous waste to landfill

Non-hazardous waste to landfill

Refer to page 106 to 108 for the independent assurance report.

#### SAFFTY HIGHLIGHTS

SALETT HIGHEIGHTS	
HIGHLIGHTS	LOWLIGHTS/CHALLENGES
A <b>34%</b> improvement in total recordable case frequency rate (TRCFR), year-on-year from 2017 to 2018.	Loss of life of <b>2</b> of our employees.
Reporting and learning from high-potential incidents has improved.	Continued improvement needed on operational risk management.
Regulatory stoppages reduced from 29 in 2017 to 23 in 2018.	Supervisory turnover and skills retention.
Ongoing implementation of life-saving technology and modernisation.	
Safety management and improvement plans are now informed by a broader scope of data and information sources.	
In 2017, a revised safety strategy was co-created with management, union and employees.	
In conjunction, significant effort and investment has been made on safety in our organisational culture transformation.	

As we strive for zero harm, being nonnegotiable about safety is vital. We train, equip and empower our employees to work safely every day. We collaborate, we guide, we watch over each other. Above all, we care.

We also recognise our performance is not yet where we would like it to be. We invest continuously to build safety leadership and a culture of safety consciousness and operational discipline.

#### **OUR PERFORMANCE**

We deeply regret that two of our colleagues lost their lives at Amandelbult's Dishaba Mine in 2018:

- Johannes Maimela, a contractor, suffered fatal injuries after being attacked by a swarm of bees on 12 February
- Emmanuel Thato Segale, a full-time employee, died in a fall-of-ground on 18 October.

We extend our sincere condolences to their families, friends and colleagues. We continue to provide meaningful, long-term care and compensation to bereaved families, including: group insurance cover for funeral expenses and benefits paid out to the family; specialised trauma counselling for dependants and co-workers; employment offered for at least one close family member; ongoing financial assistance for schooling children of the deceased (from pre-school to tertiary level). In addition, follow-up visits to families are undertaken at least annually to monitor their wellbeing and school performance.

All fatal incidents are subject to rigorous investigation and management action to prevent repeats.

For 2018, our fatal-injury frequency rate was 63% better than 2017 (see below). This excludes a non-recordable loss of life at our Unki concentrator when Manuel Murandu died in an incident involving company-provided transport on 30 July. As noted, eliminating fatalities is a business imperative.

#### Loss of life and FIFR\*



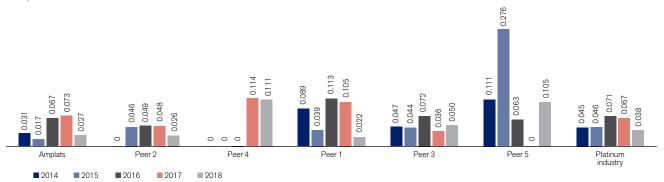
\* Fatal-injury frequency rate per million hours worked.

**Ensuring safety** at South African mines is an ongoing issue across the industry. Despite two fatalities at Amplats this year, we have performed well relative to the industry, reinforcing our resolve to reach zero harm.

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

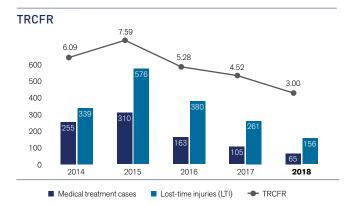
#### Comparing Amplats to platinum industry

FIFR per million man hours



Our sustained expenditure and focus on safety initiatives, technical solutions and training are reflected in significant year-on-year improvements in most of our leading and lagging performance indicators, with only a small portion attributable to divestments. Some operations have recorded best-in-class performance while others, particularly Amandelbult's Dishaba and Tumela mines, have required additional focus and specific turnaround plans (see case study on page 27).

Our total recordable case frequency rate (TRCFR¹), which includes any injury needing more than first-aid treatment, dropped a commendable 34% in 2018 (shown below), meeting our internal 15% reduction target of 3.01 for the retained business.



Total lost-time injuries (LTIs) decreased by 40% to 156 in 2018 (shown above). Our lost-time injury frequency rate (LTIFR – a lagging (reactive) indicator) declined 34% from 3.17 to 2.10. LTIs were mostly low-level incidents, typically finger injuries associated with materials handling, and slip-trip-and-fall incidents.

Reporting and learning from high-potential incidents (HPIs) continues to improve, heightening awareness on critical controls

and promoting actions to improve their effectiveness. Any HPI exposes our employees and contractors to fatal risks, which is unacceptable. A monthly video-conference chaired by the CEO shares knowledge by reviewing and learning from two particularly significant HPIs.

In 2018, we recorded 54 HPIs (2017: 41), primarily due to uncontrolled release of energy, fire or explosion, or mobile equipment. The most prevalent contributing factors are failing to identify hazards and respect risks, not following standard operating procedures, and inadequate supervision and oversight. In most cases, controls functioned as designed, preventing or minimising the impact. Sharing lessons from HPIs has driven improvements at our operations, notably in managing explosives and mitigating fall-of-ground incidents.

We have also started reporting high-potential hazards to identify and correct conditions that may cause an incident. This reporting and analysis is under way at Mogalakwena and will be steadily introduced across our operations in 2019.

The number of regulatory (section 54) stoppages declined from 29 in 2017 to 23 in 2018, resulting in a total of 79 production days lost. Stoppages continue to be restricted to the area where the issue was observed. A total of 21 non-compliance (section 55) notices were issued across our operations (2017: 30).

Analysis of regulatory and our proactive, voluntary stoppages shows that most related to non-compliance with operating procedures and insufficiently practical standards.

# 2018 MINESAFE AWARDS OVERALL WINNER Mototolo Mine and concentrator, Mogalakwena

<sup>&</sup>lt;sup>1</sup> In 2018, we started measuring our TRCFR per million hours worked to align with best practice. Pre-2018 data was measured per 200,000 hours worked and has been restated.

CASE STUDY: SAFETY PERFORMANCE TURNAROUND AT AMANDELBULT COMPLEX



Amandelbult complex includes two mines, Tumela and Dishaba, with some 8,200 and 6,600 employees respectively. After three fatalities in 2017, we conducted a detailed analysis of fatal and high-potential incidents to understand the underlying causes.

A targeted mine-wide safety turnaround plan was implemented in the final quarter of 2017 and strictly monitored by an executive team against monthly targets. Focus areas included short-term initiatives to reduce supervisor turnover and employee absenteeism, managing change, managing overtime and ensuring appropriate risk management training.

Although this has resulted in some improvement (see table below), two employees at Dishaba died in work-related incidents in 2018. Following these fatalities, we closely monitored the status of implementing identified preventative actions to avoid repeats. These included improving rock engineering designs; rolling out cable anchors; a safety and culture assessment; elimination-of-fatalities safety risk survey at all workplaces to determine levels of compliance; digitisation and modernisation; and supervisory skills.

The action plan at Tumela yielded very encouraging results by year end, including a 25% improvement in TRCs at the mine.

At Dishaba, a more volatile environment caused by management changes and ramp-up challenges affected implementation of the plan in 2018. Encouragingly, this has stabilised in 2019 and we are confident Dishaba's plan will now gain traction.

Together, Dishaba and Tumela accounted for 69 of 98 serious injuries across our operations in 2018. In 2019, we will continue to implement the plan at both operations to achieve the desired safety turnaround.

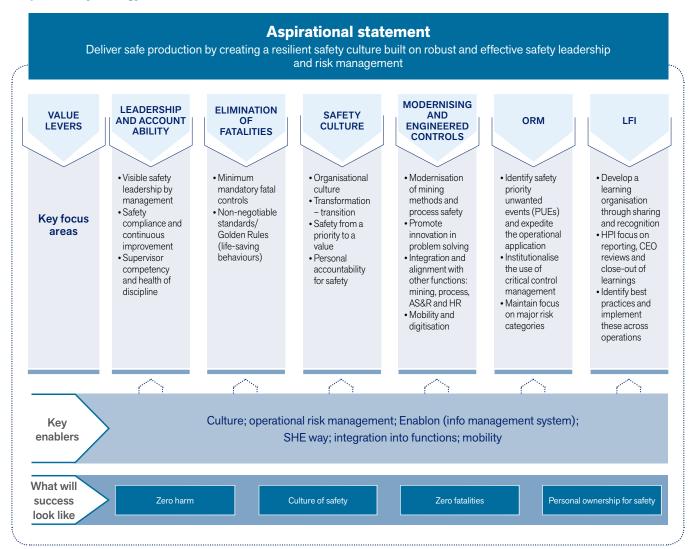
Total Dishaba and Tumela	Indicator	2017	2018
Total fatal injuries due to all causes		3	2
Total recordable cases		151	127
TRCFR, per million hours		4.63	4.02
Total lost-time injuries due to all causes		112	102
LTIFR – all causes, per million hours		3.43	3.23
Total serious injuries		75	69
Total serious injuries frequency rate, per million hours		2.30	2.18

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

#### STRATEGY AND ACTION PLANS

Our safety strategy aligns with Anglo American plc. An overview of our focus areas (short to medium, as well as longer term) is illustrated below. Given that we are less advanced in our journey to achieving zero harm than other business units in the Anglo American group, we are intensely focused on building the foundations to facilitate a step-change in our safety performance. Site-specific turnaround plans have been implemented at our more challenging operations, Amandelbult and the smelters. In 2019, we will emphasise initiatives to eliminate fatalities.

#### **Amplats safety strategy**



Principal safety risks facing our employees and contractors are falls-of-ground, moving machinery, transportation, electrical or release of stored energy, and isolation/lock-out. We have prioritised prevention in these areas, and are addressing identified shortcomings. Fatigue and stress management is another focus area.

Below we elaborate on **how** we plan to mitigate safety risks in our strategic focus areas.

	programme. Management and execu	ntability is a priority to improve the impact of our visible felt leadership (VFL) utives regularly engage with employees in the workplace, observing work and promote the right behaviours to ensure compliance.						
Passionate eadership	The tone is set from with top, with our CEO leading by example in emphasising visible felt safety leadership at every key event. At the annual CEO safety summit, senior leadership – supported by technical, functional and external specialists – discuss performance for the past year and determine focus areas and expectations for the year ahead.							
	needs to be as concerned about the recognise our responsibility for ensu	a critical component of true safety leadership. In practice, this means everyone safety of their colleagues as they are about their own. At the same time, we ring our people are adequately trained and empowered to exercise their right to safe and withdraw to a safe area, without retribution. This is an area where we and commitment.						
	programme to ensure supervisors had workplace. In addition to improved p	upervision, especially at Amandelbult. We have introduced a development ave the required technical skills and can apply theory effectively in the erformance management processes, coaching assists in addressing any iced at Amandelbult at the end of 2018 and will be rolled out across the						
wnership and ccountability	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. We regularly review metrics and rewards to ensure they are in line with prevailing focus areas, and effective.							
	To foster a stronger safety culture, we activities. This defines the practices of	needs strong leadership, effective supervision and an engaged workforce.  e are implementing a framework to embed positive leadership practices in dail expected of managers, supervisors, and all our employees, and their roles in unched our updated life-saving golden rules to help us achieve our goal of zer ion of employment.						
	Our life-saving golden rules							
	1 The fundamentals	Only carry out a task if you are trained and authorised to do it. Make sure you assess the risks involved and guard against them. Always wear your personal protective equipment and obtain a permit where required. If controls are not in place, or not working properly stop the job and only continue once the controls are working properly.						
	2 Underground and surface mining	Never enter restricted areas unless you have permission. Only cross conveyors at designated crossing points. When underground do not enter areas of unsupported ground; always bar down according to your training and do not enter the pathways of winches which are not isolated.						
	Mobile equipment and light vehicle	Always follow the traffic rules, wear your seat belt, keep within speed limits, and do not make phone calls while driving. Pedestrians must always stand well clear of mobile equipment and vehicles.						
	4 Confined spaces	Never enter a confined space without understanding and following your site's confined space procedure.						
	5 Working at heights	Always use fall protection safety equipment when working at heights.						
	6 Energy and machinery isolation	All energy sources must be safely isolated and energy released before working on the piece of equipment. Release energy, lock, tag and test.						
	Lifting and mechanical handling	Make sure the lifting device is capable of lifting the load. Never allow anyone to be in the drop zone of the load.						
	Water bodies and liquid storage	When working around water and liquid storage facilities always wear a buoyancy vest and never work alone.						
	Chemicals and hazardous substances	Make sure you know how to handle, store and dispose of any chemicals or hazardous substances you are working with.						
Safety culture	and an understanding that failing to o	ved compulsory training to entrench their commitment to honouring the rules, comply has consequences through the 'fair culture' model. This approach ses are followed after safety incidents, and necessary consequences are						

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

Risk management	We provide training for all employees in addressing risk and specific hazards in their workplaces. We identify substandard and high-risk conditions continuously, and rank workplaces based on observed risks. Management regularly visits workplaces with the highest risk ranking across our operations: these sites, and their planned actions, are then discussed at executive level.
	In 2018 we introduced a more rigorous programme for monitoring critical safety control management, helping to foster greater transparency and accountability, and improve the levels of work executed to plan. We emphasise critical controls to eliminate fatalities. Each month, we track monitoring completed to plan and the critical control deviation rate. Any shortcomings are addressed immediately. The quality of critical-control monitoring and compliance, and closeout of actions, improved significantly at several operations in 2018.
Critical-control management	This year, we started reviewing and revising our critical controls in line with minimum mandatory strategies and associated monitoring specifications for common major hazards defined by Anglo American plc. This process will continue in 2019.
Engineering solutions	<ul> <li>Over the last 10 years, implementing best-practice engineering solutions has been a critical part of our safety focus, especially in mitigating fatal risks. For example:</li> <li>To address fall-of-ground risks, we introduced bolts and nets on the rock face. This has made the most dangerous area (between the last line of support and the face) much safer</li> <li>In managing transport and machinery risks, we focused on collision-avoidance systems using vehicle and person proximity-detection systems and braking. This has significantly reduced the number of underground transport accidents. While our initial focus was on heavy moving equipment, we are now implementing these practices in light-delivery vehicles</li> <li>At Mogalakwena complex, we introduced two earthmoving vehicles in 2018 featuring technology that gives the operator a 360° view and significantly reduces the risks of a man-machine interface</li> <li>Other innovative solutions relate to centralised blasting, and winches and rigging.</li> </ul>
Mine modernisation	We continually explore methods that make mining safer. To achieve our long-term objectives, we have a continuous drive towards modernisation to ensure our equipment is much safer, more efficient and productive. At Amandelbult, for example, this include different types of drills and explosives, cleaning methods and logistics. While the benefits of innovation in mining, for example improved safety performance, are clear, we continue to engage in a socially responsible way about the deployment of innovation.
	In 2018, we began rolling out mobile devices (digital tablet applications) to people on the front line, particularly underground at Amandelbult, to capture and upload workplace information daily to a central platform and facilitate timely responses to concerns or deviations.
	The technology eliminates double-handling of data, improves efficiency and supports our integrated SHE approach to achieving zero harm. At Dishaba Mine, we are already using over 200 devices underground.
Mobility and digitisation	Digitisation is a major focus in the next few years. In 2018, we engaged external specialists to assist in identifying and prioritising opportunities in this field. We already have extensive equipment using intelligent technologies and aim to be able to track and respond to information remotely. In the longer term, we aim to digitise lock-outs, daily bookings, logbooks, warnings, measuring critical-control effectiveness and monitoring health information via wearable devices.

**SAFETY**For the year ended 31 December

	Number of fatalities					Fatal-injury frequency rate (FIFR) <sup>1</sup>				
Operations	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
Tumela Mine	-	1	2	_	-	_	0.056	0.11	_	_
Dishaba Mine	2	2	-	-	1	0.144	0.135	-	-	0.143
Union Mine <sup>2</sup>	-	1	1	-	-	-	0.103	0.101	-	_
Mogalakwena Mine	_	_	_	_	_	_	_	_	_	_
Unki Platinum Mine	_	_	_	_	_	_	_	_	_	_
Amandelbult concentrators	_	_	_	_	_	_	_	_	_	_
Union concentrators <sup>2</sup>	_	_	_	_	_	_	_	_	_	_
Mogalakwena concentrators	_	_	_	_	_	_	_	_	_	_
Unki concentrator	_	_	_	_	_	_	_	_	_	_
Mototolo concentrator	_	_	_	_	_	_	_	_	_	-
Mototolo Lebowa and Borwa shafts <sup>3</sup>	_					_				
ACP	_	_	_	_	_	_	_	_	_	_
Waterval smelter	_	1	-	_	1	_	0.664	-	-	0.554
Mortimer smelter	_	_	_	_	_	_	_	_	_	_
Polokwane smelter	_	_	_	_	_	_	_	_	_	_
Unki smelter <sup>4</sup>	_					-				
Rustenburg Base Metal Refiners	_	_	-	_	_	-	_	-	-	_
Precious Metals Refinery	_	1	-	_	_	_	0.579	-	-	_
Greenfield projects <sup>5</sup>	_	_	_	1	_	-	_	_	0.144	_
Total/aggregate <sup>6</sup>	2 <sup>RA</sup>	6	7	2	3	0.027RA	0.073	0.067	0.017	0.031

	Lost-time injury frequency rate (LTIFR) <sup>7</sup>			Total recordable case frequency rate (TR				TRCFR)8		
Operations	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
Tumela Mine (Amandelbult)	3.11	4.05	2.92	5.14	4.19	3.61	4.78	4.57	7.02	5.27
Dishaba Mine (Amandelbult)	3.38	2.69	3.14	4.66	4.29	4.53	4.44	4.76	9.13	8.01
Union Mine <sup>2</sup>	6.70	9.14	7.61	9.61	5.33	9.38	12.02	10.24	13.94	8.11
Mogalakwena Mine	0.45	0.68	0.85	1.08	0.58	0.79	1.35	2.26	6.27	5.02
Unki Platinum Mine	1.17	1.68	0.95	0.91	0.59	1.4	2.8	4.13	2.72	4.46
Amandelbult concentrators	0.82	4.05	1.51	1.24	_	2.45	6.3	3.03	4.14	1.84
Union concentrators <sup>2</sup>	-	1.55	1.31	1.63	_	-	7.74	2.63	1.63	-
Mogalakwena concentrators	1.18	0.81	0.78	0.53	1.86	1.18	1.29	2.34	4.54	5.57
Unki concentrator	-	_	-	2.27	2.28	-	-	-	6.82	4.57
Mototolo concentrator	-	_	2.6	_	_	-	-	2.6	_	_
Mototolo Lebowa and Borwa shafts <sup>3</sup>	-					-				
ACP	4.14	3.05	1.06	1.95	2.96	6.90	3.05	1.06	1.95	4.94
Waterval smelter	1.96	3.32	2.6	-	5.54	2.61	7.30	3.25	1.06	7.20
Mortimer smelter	7.51	5.09	1.89	_	_	7.51	6.78	5.67	3.71	3.71
Polokwane smelter	-	_	_	_	1.94	-	4.53	2.28	2.11	5.82
Unki smelter⁴	-					-				
Rustenburg Base Metal Refiners	0.85	1.43	2.44	4.18	1.98	2.84	2.57	6.41	7.76	4.82
Precious Metals Refinery		1.16	6.03	2.62	1.31	2.13	2.32	7.23	5.9	5.88
Greenfield projects <sup>5</sup>	1.07	0.94	0.82	2.59	3.20	4.73	1.57	1.37	5.75	7
Total/aggregate <sup>6</sup>	2.10	3.17	3.65	4.92	3.46	3.00 <sup>RA</sup>	4.52	5.28	7.59	6.09

<sup>&</sup>lt;sup>1</sup> FIFR – fatal injury frequency rate (calculated) is a measure of the rate of all fatal injuries per million hours worked.

<sup>&</sup>lt;sup>2</sup> Union Mine and concentrators sold on 31 January 2018.

<sup>&</sup>lt;sup>3</sup> Mototolo, Lebowa and Borwa shafts acquired from 1 November 2018.

<sup>&</sup>lt;sup>4</sup> Unki smelter operational from September 2018.

<sup>&</sup>lt;sup>5</sup> Greenfield projects 2018: Twickenham Mine, Amandelbult chrome recovery plant (module 3 and 4), Der Brochen exploration, infrastructure and prefeasibility projects, Eastern and Western Limb greenfields exploration (Eastern to end August), Unki housing infrastructure project, Unki smelter project, Mareesburg tailings facilities and SO<sub>2</sub> abatement plant at Polokwane (from September 2018).

<sup>&</sup>lt;sup>6</sup> Rustenburg divested operations included to date of sale – 31 October 2016.

<sup>&</sup>lt;sup>7</sup> LTIFR – lost-time injury-frequency rate (calculated) is a measure of the rate of all lost-time injuries per million hours worked.

<sup>8</sup> TRCFR – total recordable case frequency rate (calculated) is a measure of the rate of all injuries requiring treatment above first aid per million hours worked.

Reasonable assurance provided by PwC. Refer to page 106 for the independent assurance report.

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

#### **HEALTH**

HIGHLIGHTS	LOWLIGHTS/CHALLENGES
A <b>90%</b> antiretroviral uptake among employees living with HIV.	<b>88%</b> of employees know their HIV status (below the 90% target).
A reduction in TB incidence to 325 per 100 000.	415 new cases of HIV were diagnosed among new and existing employees.
A <b>76%</b> uptake of isoniazid prophylactic therapy among employees living with HIV.	

#### **HFAITH**

#### **EMPLOYEE AND COMMUNITY HEALTH**

Against the backdrop of an increasing burden of communicable and non-communicable diseases, our approach to health extends beyond striving for zero harm to promoting employee wellbeing and optimal levels of health. As part of zero harm, we are committed to adopting leading practices to reduce levels of exposure to hazards in the workplace and to eliminate occupational diseases at our operations. Any illness caused by or associated with our work or working environment is unacceptable.

Being in good health, both physical and mental, 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 as part of our efforts to build healthier host communities.

#### Our principal health risks

The main occupational health risks associated with our mining activities remain airborne pollutants (inhalable hazards), exposure to noise and stress to muscles, bones and joints. Exposure-reduction plans are in place at all sites where risks are identified.

From a broader public-health perspective, other risk factors include communicable diseases, pulmonary tuberculosis (TB) and the associated human immunodeficiency virus (HIV) co-infection, as well as non-communicable diseases, mainly hypertension and mental health issues. Managing fatigue – a complex, multi-factor challenge with many potential effects – is another focus.

#### **OUR MANAGEMENT APPROACH**

Our health-related activities focus on key areas and objectives:

# Mitigate health risks in the workplace (occupational hygiene)

 Eliminate exposures to harmful substances by understanding hazardous sources and mechanism of release, and proactively investing in engineering and operational control solutions

# Conduct fitness assessments and employee surveillance (occupational medicine)

- Establish comprehensive and integrated screening and surveillance programmes that examine workplace and personal lifestyle risks
- Optimise employee rehabilitation (from a work-related injury or illness), reintegration and return-to-work processes

# Monitor and support the health and overall wellbeing of employees (wellness)

 Maintain intensive HIV and TB programmes, manage chronic and lifestyle diseases, support good mental health, prevent drug and alcohol abuse

## Build healthier communities

 Collaborate with government and local partners in implementing community health initiatives to improve access to healthcare services and strengthen service delivery Our health strategy has clear objectives and targets for health outcomes in 2022. These include ensuring there are no new cases of occupational disease because of exposure to health hazards at our operations, and positively influencing the health and wellbeing of our employees through a proactive, integrated, holistic approach to managing workplace and personal health.

Action plans are aligned with achieving the occupational health milestones set for the South African mining industry, across all our operations. The Mine Health and Safety Council's (MHSC) 2024 milestones include targets for the control of HIV, TB, dust and noise.

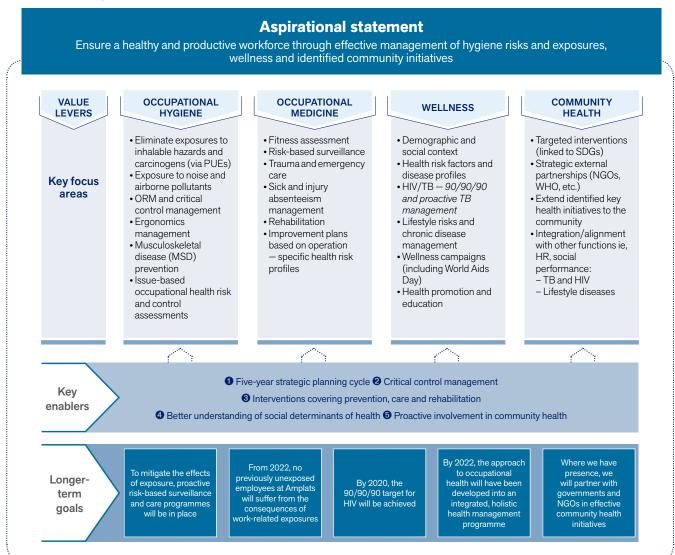
The progress we have made in aligning health risk management with the operating model and operational risk management (ORM)

processes, as well as improving occupational hygiene capacity and capability, is the foundation for continuous improvement in our health performance.

As part of the Anglo American sustainability strategy of achieving the United Nation's Sustainable Development Goal (SDG) targets in all our host communities, we have prioritised SDG 3 – to ensure healthy lives and promote wellbeing for all at all ages. We aim to identify and implement strategic community-health solutions that address locally relevant health indicators. The close alignment between health and sustainability strategies will also enable us to expand existing wellness initiatives, such as HIV and TB initiatives.

#### **Amplats health strategy**

#### **Health strategy**



# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

#### **OCCUPATIONAL HEALTH**

When it comes to occupational health, our primary focus is to eliminate exposure to health hazards in the workplace at levels known to cause harm and prevent associated occupational diseases.

In 2018, we enforced 20 voluntary, proactive stoppages to mitigate occupational hygiene risks.

#### **Controlling occupational exposure**

The company's occupational-hygiene programme targets the elimination of occupational health hazards at source. Adding impetus to this focus is the recognition that we need to apply the same rigour in identifying and managing potentially fatal inhalable health hazards as we do for safety. We are also concentrating on better understanding and managing certain occupational carcinogenic risks, including exposure to welding fumes, respirable diesel particulate matter, arsenic, nickel and ultraviolet radiation.

In workplaces where there is a possibility that an occupational exposure limit (OEL) might be exceeded, we investigate and implement engineering controls and administrative controls, and give employees appropriate personal protective equipment (PPE), such as respiratory-protection and hearing-protection devices.

Detailed analyses ensure the most effective PPE is used for the respective hazard. Intensive programmes ensure employees are aware of the hazards they are exposed to, and the risk-mitigation measures implemented, and trained in the appropriate use and maintenance of PPE. Strict controls ensure employees adhere to requirements in areas where hazards are present and they need to use PPE.

In parallel with engineering solutions, the progressive introduction of real-time monitoring of workplace conditions to detect potential excessive inhalable hazard concentrations in the atmosphere has significantly improved our understanding of our risk profiles and timely control measures, facilitating a marked reduction in potential exposure to health hazards.

Our real-time data analytics platform is helping us make the right decisions, at speed, when substandard health and safety-related conditions are indicated at our mine sites, namely when controls are not performing optimally (case study on page 35). In addition, the overall reliability of our exposure monitoring data is improving.

In 2018, we recorded four new cases of occupational disease: two cases of noise-induced hearing loss (NIHL), one case of occupational asthma and one case of occupational dermatitis.

#### **HEALTH** for the year ended 31 December

New cases of occupational disease	2018	2017	2016	2015	2014
Noise-induced hearing loss	2 <sup>RA</sup>	6	23	36	34
Chronic obstructive airways disease	_	_	_	_	2
Occupational tuberculosis	_	_	_	_	_
Occupational asthma	1	3	1	2	_
Occupational dermatitis	1	3	1	1	-
Occupational cancers	_	_	_	_	-
Platinosis (platinum salt sensitivity)	_	_	2	_	_

Employees potentially exposed to hazards <sup>1</sup>	2018	2017
Total number of workers	34,462	37,946
Inhalable hazards and carcinogens		
Workers potentially exposed to inhalable hazards above the exposure limit	555LA	546
Workers potentially exposed to carcinogens above the exposure limit	<b>527</b> LA	518
Noise		
Total number of workers at risk of exposure to noise <sup>2</sup>	29,593	32,813
Workers potentially exposed to noise above 85dB(A)	18,639	21,468

<sup>1</sup> Exposure is above the occupational exposure limit 'A' classification band (without taking PPE into account).

<sup>&</sup>lt;sup>2</sup> All workers, including long-term contractors, potentially exposed above the A, B, C and D exposure limit classification bands (without taking PPE into account).

Reasonable assurance provided by PwC. Refer to page 106 for the independent assurance report.

LA Limited assurance provided by PwC. Refer to page 106 for independent assurance report.

#### CASE STUDY: USING REAL-TIME MONITORING AND DATA ANALYTICS TO BUILD A SAFER WORKPLACE

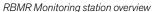
Over the last two years, we have been implementing Anglo American's operational intelligence suite (OiS). Developed by the group's occupational health and information management teams, OiS is a real-time data analytics platform that interrogates data feeds, manual uploads and events.

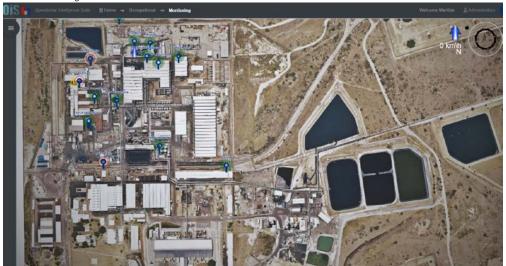
It uses real-time data to monitor defined parameters and trigger an alert to critical controllers when an over-exposure or critical-control failure is detected. This prompts an immediate investigation to determine root causes and remedial action to prevent repeat occurrences.

The key difference between the OiS system and off-the-shelf products is its ability to receive, record and analyse data such as air flow and gas levels from multiple sources on a single platform that also has analytical and reporting capabilities.

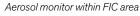
The platform is enabling significantly improved control monitoring and management of workplace environmental conditions and associated occupational exposures. For example, applying the OiS platform has assisted RBMR to significantly reduce personal exposures to airborne pollutants within 12 months by optimising control measures (see graph). OiS is also operational at our PMR and ACP refineries, and has been entrenched at Mogalakwena Mine over the last year. It is currently being implemented at Amandelbult concentrator and Polokwane smelter.

The OiS project received the 2018 award for technology innovation in health and safety from the USA National Institute for Occupational Safety and Health.











Conveying velocity indicator and aerosol display

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

#### Managing inhalable pollutants

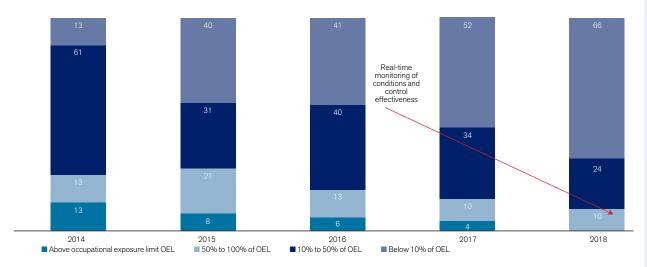
Occupational exposure to airborne pollutants, such as dust, at our operations is associated with the development of occupational lung diseases, notably TB, lung cancer and airway diseases.

We implement monitoring and control programmes for dust and other airborne pollutants at all sites, with results informing our controls and initiatives to reduce levels of exposure. Ongoing improvements have been achieved, most efficiently at sites where we are implementing digital real-time monitoring.

Reducing levels of exposure to DPM (diesel particulate matter) is a particular focus for occupational hygiene. Personal exposure measurements at our operations underground have decreased by 26% as a result of various control mechanisms, notably optimising ventilation flow and progressively introducing diesel particulate filters in all high-cycle machinery.

At our smelters, we have identified metallurgical dust, nickel and sulphur dioxide (SO<sub>2</sub>) as the main fugitive emissions during cleaning activities and from sources such as the crusher plant and furnaces. Action plans are being implemented to address these risks and monitor mitigation of exposure levels. Progress is most evident at RBMR, with steady reductions in levels of exposure to airborne pollutants, primarily cobalt sulphate, nickel and arsenic. Employees exposed in the occupational limit 'A' classification band (without taking PPE into account), have been reduced to zero at RBMR and PMR.

#### Airborne pollutant classification distribution 2014 to 2018 (%)



Our non-occupational air quality management is reviewed on page 99.

#### Noise and hearing conservation

We have made significant progress over the last three years to mitigate the risk of exposure to excessive noise levels, primarily driven by engineering solutions for haul-truck cabins and rock drills. In line with our sustained progress in mitigating levels of noise exposure, we have decreased the proportion of employees working in higher-risk categories.

Our focus remains on controlling exposure at source and protecting employees who work in environments where noise levels exceed eight-hour 85 decibel (dB(A)) limit. We have 13,955 pieces of equipment emitting noise levels above 85dB(A) and 16 emitting levels above 107 dB(A) (an improvement on 34 pieces in 2017). Engineering improvements are ongoing to reduce noise levels to the 2024 milestone of below 107dB(A). Sandblasting at RBMR currently also exceeds this limit: in 2018, we successfully tested an engineering solution that reduces levels by 10dB(A). Once implemented, this will ensure we control levels of noise to permitted levels.

The roll-out of personalised hearing-protection devices for sites at risk has materially improved the effectiveness of hearing-protection measures. Noise zones are clearly demarcated.

The new formula for calculating NIHL for industry health milestone purposes has been implemented at our South African operations. To detect early hearing deterioration, we conduct both annual and ad hoc (depending on noise exposure) audiometric screening examinations, which incorporate the required standard threshold shift. Where necessary, we implement additional corrective measures, before permanent NIHL develops.

In 2018, we diagnosed two cases of NIHL hearing-loss shift of over 10%, which were duly submitted for independent third-party assessment of disability and compensation.

#### Monitoring the health of employees

Our occupational medical-surveillance programmes ensure that the baseline health of every employee entering the workforce is recorded; their state of health is monitored for the duration of their employment; and focused interventions help individuals sustain and potentially improve their health.

Our programmes are designed to detect risk factors and early signs of ill-health related to occupational exposures and lifestyle conditions. Medical surveillance therefore incorporates screening for common lifestyle health-risk factors, non-communicable and communicable diseases including TB and HIV, obesity, smoking, hypertension and diabetes.

Based on our health profiling and wellness examinations, we have identified the need to focus on and intervene to address lifestyle health risks, particularly 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 website. The employees' online records are linked to their hazard-exposure profile and can be accurately tracked and analysed over time.

In 2018, 51 employee contracts were terminated due to ill-health and disability.

#### **Musculoskeletal conditions**

The most prevalent musculoskeletal issue at our operations is lower-back pain in machine operators. The most common musculoskeletal injuries involve limbs and lower-back injuries. In all cases, we ensure the necessary assessments and, where applicable, referral to a specialist, operation (if required), compensation, rehabilitation and return to work.

We continue to implement education and awareness initiatives on correct manual handling, good posture and periodic stretching exercises. We conduct ergonomic risk assessments for mobile equipment and tasks involving manual handling and implement corrective measures to mitigate the risk exposure profile at that operation. For example, to lift heavy loads, we seek to use equipment instead of physical labour.

#### **Fatigue management**

Various health-related factors, such as medical and psychological conditions as well as aspects of a person's workplace or lifestyle, can contribute to fatigue. Fatigue in turn is associated with reduced alertness and poor judgement. Fatigue-related risks are heightened at some operations by exposure to thermal stress.

Our current activities to manage and control this potential safety and health risk include:

- Seeking to balance workloads
- Staffing and shift scheduling
- Applying controls, such as compulsory fatigue breaks
- Training employees on how to manage fatigue
- Assessing alertness (readiness) for duty
- Monitoring fatigue.

Our approach to managing fatigue is most advanced at Mogalakwena Mine, where we have implemented sophisticated fatigue-prevention, prediction and detection technology in high-risk areas. These include cameras in truck cabins and tracking fatigue shifts using bio rostering. Our medical surveillance programmes also consider fatigue's contributing factors.

Given the complexity of the challenge, we recognise the need to foster greater cross-functional collaboration across the human resources, health and safety disciplines to ensure a more integrated approach to managing fatigue.

#### **EMPLOYEE WELLBEING**

Our approach to health-risk management is increasingly addressing the interplay between occupational and non-occupational risk factors. For example, reducing or eliminating exposure to airborne pollutants happens in conjunction with anti-smoking campaigns, screening for TB, HIV, diabetes and other chronic conditions, roll-out of isoniazid prophylaxis for TB, and seamless referral to care programmes.

Established wellness initiatives across our operations are supported by related campaigns. Through various programmes, we strive to educate people on preventing and managing chronic and lifestyle diseases, and to positively influence their wellbeing and lifestyles.

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

In addition to HIV, TB and chronic-disease management, we continue to focus on mental health, drug and alcohol abuse, and other health issues. Contractors have access to our HIV and chronic disease screening services.

Through our wellness ambassador project, we strive to increase levels of knowledge and awareness of common health issues among our employees, and to promote ownership of personal health in the workplace. At each operation, we have wellness ambassadors – typically health and safety representatives – who serve as rolemodels and 'go-to' people for our employees to find support and direction to the correct point of care or service. We currently have 70 trained ambassadors operating across six sites.

Our participation in national and industry tripartite structures working on TB and HIV control and prevention initiatives are reviewed on page 41.

#### Managing HIV/Aids and TB

Amplats is a recognised leader for its TB and HIV/Aids programmes in the workplace and our performance is in line with World Health Organization and DMR expectations. Over the last five years, we have achieved a step-change in managing TB and HIV in our workforce (case study on page 41 and performance data below).

In 2018, we made good progress towards meeting ambitious targets. These include the UNAIDS 90/90/90 targets for 2020: 90% of our permanent employees should know their HIV status, 90% of identified seropositives should be on antiretroviral therapy (ART), and 90% of those should have undetectable viral loads.

In 2018, we concentrated on ensuring improvements at Amandelbult, where HIV and TB prevalence is highest. This included visible-felt leadership support; intensified well-planned

wellness campaigns; innovative, incentivised voluntary testing and counselling; and proactive follow-up on all employees who do not know their status. Our executive leadership led by example and participated in wellness screening. Multi-channel communication using posters, videos, and health and safety representatives who have attended a formal wellness training programme (wellness ambassadors) were engaged for health promotion. We trained 40 healthcare providers in voluntary counselling and testing. Site-specific plans and tactics were adopted to drive wellness screening and enrolment on the HIV programme.

At the end of 2018, 17,955 employees knew their status – representing 88% of our workforce, up from 82% in 2017. The uptake of ART by HIV-positive employees (4,203 in the review period) increased to 90% in 2018, from 86% in 2017. In line with government and best-practice treatment guidelines, all people diagnosed as HIV-positive start ART treatment immediately.

The number of reported new cases of HIV remains a challenge. For 2018, a total of 415 new cases were reported. This was made up of 277 employees who were either new recruits or previous status unknown and 192 employees who seroconverted from a previous negative to a positive status.

A total of 72 TB cases were recorded at our operations in 2018, of which about 69% have HIV co-infection. For the third consecutive year, there were no reported cases of occupational TB among healthcare workers. At year end, our TB incidence was 325 per 100,000 and the uptake of TB preventative therapy (isoniazid prophylaxis) was 76%.

In 2018, five employees died from TB: four at Amandelbult (one was a multi-drug resistant TB case) and one at Mogalakwena.

#### **HEALTH INDICATORS**

for the year ended 31 December

	2018	2017	2016	2015	2014
Hearing conservation					
Employees exposed to noise levels ≥85dB(A) < 105dB(A)	18 639	21 465	15 993	28 552	27 751
Employees exposed to noise levels ≥105dB(A)	_	3	606	552	749
Number of pieces of equipment emitting noise $\geq 107 dB (A)^{\dagger}$	16	34	42	29	NM
Occupational diseases					
Noise-induced hearing loss (NIHL) new cases	2	6	23	36	34
HIV management					
≥90% at risk population know their status# (%)	88	82	NM	NM	NM
Employees who know their status*	17 955	20 173	22 222	32 375	41 822
≥90% known HIV-positive employees on antiretroviral therapy (ART)# (%)	90	86	70	75	53
Employees on antiretroviral therapy (ART)	4 203	5 073	3 569	6 203	4 666
Tuberculosis					
New cases	72	148	253	450	476
Retreatment cases	0	7	33	73	107
TB deaths	5	5	14	27	51

Impact of attrition not factored.

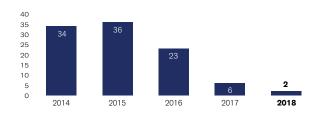
NM = not measured.

<sup>&</sup>lt;sup>†</sup>SA mining industry noise sources to be below 107dB(A). Includes Unki from 2016.

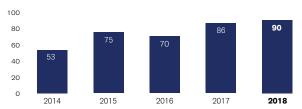
<sup>\*</sup> Excludes Unki. Reporting against 90:90:90 UNAIDS targets began in 2017.

<sup>\*</sup>All known HIV-positive plus non-reactive cases. 2014 to 2016 = employee VCT cases (tested).

#### Noise-induced hearing loss (NIHL) new cases



# ≥90% known HIV-positive employees on antiretroviral therapy (ART) (%)



From 2016, the ART uptake was based on the UNAIDS 90: 90: 90 target and the treatment guideline advocating test and treat.

#### Chronic disease and lifestyle management

We continue to focus on identifying and managing patients with chronic conditions (particularly hypertension, HIV and diabetes) and assessing whether they are still fit to perform their duties safely and productively.

The most prevalent and concerning lifestyle-associated health risks in our workforce are high salt intake and tobacco smoking. We reinforce promotional messages on healthy lifestyles at occupational health and dressing-station clinics, during team talks and wellness campaigns, and via health posters.

All employees with chronic conditions are monitored regularly through our occupational health clinics to minimise associated risks.

At our single-accommodation villages, we monitor average meal participation to ensure our workers are adequately nourished. At all sites, the main (lunch) meal participation remains over 85%. We closely monitor dietary intake and ensure food safety, storage and preparation requirements conform to recommended standards.

#### Mental health support

To promote emotional wellbeing, and support employees with early signs of emotional stress, we facilitate access to professional support. Through our well-established employee assistance programme, Amplats offers assistance to employees and family members who need psychosocial support. The programme is run by social workers, clinical psychologists and psychiatrists.

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. In 2018, we recorded 1,089 consultations across our operations. The main reasons related to mental health (651 consultations) and social issues (425 consultations). The low number of consultations on financial issues reflects the availability and use of our well-established financial assistance programme (Nkululeko).

#### Financial wellness

Mental-health challenges are often related to financial difficulties. At our operations, we have concentrated in recent years on mitigating high levels of overindebtedness that have affected the wellness of many employees. The benefits of the Nkululeko Programme are evident when observing employee consultations related to the employee-assistance programme. See page 46 for the Nkululeko Programme.

#### **Absenteeism**

Supporting the good health of our employees assists 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 (owing to injuries on duty, non-work-related injuries and sickness) improved to 7,63% compared to 8.61% in 2017. With respect to non-work-related illness, this is attributable to improvements in chronic disease management processes – such as – alignment of reviews with renewal of chronic medicine prescriptions.

We are mindful that our absenteeism rate remains high compared to the industry standard, and we aim to strengthen our approach by developing corrective interventions informed by more insightful medical-surveillance reporting and effective illnesses management.

A particular focus is frequent or prolonged sick leave. This is being driven by a cross-functional team and a more coordinated approach between the human resources and health disciplines.

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

Absenteeism (days)	2018	2017	2016
Absenteeism due to injury on duty	22,702	30,514	42,670
Absenteeism due to non-work-related illness and injuries	385,004	496,379	768,062
Total absenteeism rate (%)	7.63	8.61	8.77

#### **INVESTING IN COMMUNITY HEALTH**

Extending our health promotion activities to the broader community complements our internal health drive, and supports local socioeconomic development outcomes. Our activities include investing in strengthening health systems in our neighbouring communities, often in partnership with government.

Our aim is to improve access to quality medical and healthcare services, and alleviate some of the mounting pressure on health service delivery. Our comprehensive assessments in local communities using the socio-economic assessment toolbox (SEAT) include health considerations incorporated in social management plans.

In implementing our parent's sustainability strategy, in 2018 we began deepening our understanding of locally relevant health priorities. By 2020, we aim to have established a baseline, identified priorities and developed strategic partnerships to implement community-health solutions at every site to support SDG 3 (page 62) health targets in all our host communities by 2030.

In addition to the initiatives reviewed above, Amplats contributes to community health through specific services, summarised below: **Rustenburg mobile clinics:** In partnership with the North West Department of Health, Amplats operates two mobile clinics providing primary-care services to informal settlements near our operations.

Emergency medical services: The resources allocated for mine emergency-medical services are also available to support emergency responses for incidents outside the mining premises. These include vehicle accidents on public roads, medical emergencies in the community and cases associated with community violence. In 2018, 27% and 20% of Mogalakwena and Amandelbult's respective emergency responses were community related.

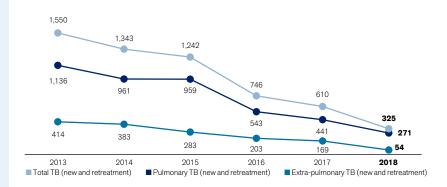
**TB contact-tracing:** In partnership with district TB coordinators, our facilities continue to focus on TB contact tracing.

**Alchemy project:** Our SHE management programme extends into host communities, working in collaboration with our Alchemy project and our community empowerment and development programme, reviewed on page 68.



#### CASE STUDY: THE BENEFITS OF A PROACTIVE AND INTEGRATED APPROACH TO HIV AND TB

#### Tuberculosis incidence rate per 100,000



Over the years, Amplats has demonstrated its commitment to a zero-harm approach that extends beyond safety to the health and wellbeing of its workforce. For example, the company's integrated response to the HIV and tuberculosis (TB) burden facing its workforce includes appropriate health policies, allocating resources to enrol HIV-positive employees on treatment programmes, and reducing the incidence of TB and its associated complications.

TB is contagious and airborne, and the data is sobering:

- TB is one of the top 10 causes of death, the main cause of death related to antimicrobial resistance and the leading killer of people with HIV
- About 1% of South Africans (560,000) develop TB each year and over 70% of cases are co-infected with HIV
- Sub-Saharan Africa carries more than 70% of the global burden of HIV. UNAIDS estimated that 35 million people were living with HIV worldwide in 2013, while StatsSA estimated that 5.4 million of those were South Africans 10% of the population.

The TB incidence in the South African population was around 900 per 100,000 in 2013, with the Stop TB partnership estimating the annual cost of the epidemic in the country at USD886 million. Mining was identified as one of the key sectors that had to be targeted to reduce the TB burden and its associated negative impacts.

In an attempt to tackle TB among current and former miners, their families and affected communities, 15 southern African leaders signed a declaration with a 2024 milestone to reduce TB in the mining industry to below the national incidence rate.

Six years ago, Amplats had an estimated HIV prevalence rate of 21% among its employees, and a TB incidence rate of 1,550 cases per 100,000. The following year, this dropped to 1,348 per 100,000. An analysis of our 2014 HIV and TB data highlighted disturbing facts:

- A high number of HIV-positive employees were either not registered on the disease management programme or were registered, but not actively participating in the wellness or ART programme
- Of 51 deaths in 2014, 37 people (72%) had known their HIV-positive status for at least a year prior to their death.

We clearly needed a more effective response to these challenges – one that was premised on enhancing the programme and strengthening our health system to bridge the gaps between HIV and TB objectives, programme budgeting, resource allocation and desired outcomes. We also needed to enhance employee awareness about the risks of these diseases and their participation in preventative and treatment programmes.

In 2015, we spent around R9 million primarily to drive registration on HIV disease management, active case finding for TB and providing isoniazid prophylaxis therapy to HIV-positive employees. As part of our commitment to sustainable mining, this proactive disease management is anchored on two of our global sustainability pillars of thriving communities and healthy environment.

By the following year, most (97%) of the known 1,488 employees who had not registered on the HIV disease management programme were successfully registered. Over a two-year period, 5,522 HIV-positive employees were screened for TB and started on isoniazid therapy and, in line with the HIV treatment protocol at the time, also started on INH prophylaxis.

# SAFETY AND HEALTH OF EMPLOYEES AND COMMUNITIES CONTINUED

#### Adopting 90/90/90 targets and test-and-treat guidelines

In 2016, Anglo American adopted the global 90/90/90 targets and test-and-treat guidelines. Earlier improvements provided an ideal launchpad for achieving these revised targets. Using an integrated database of 'know your status' and improved use of the information management system, Amplats was able to start over 1,200 HIV-positive employees on ART therapy in 2017.

#### **Final outputs and outcomes**

Despite recalibrating the percentage of HIV-positive employees on ART after adopting the test-and-treat guidelines, at end-2018 90% of all known HIV-positive employees were on ART.

In 2017, the TB incidence was 610 per 100,000. This standardised rate clearly demonstrates the reduction in the burden of TB. In 2018, the rate decreased to 325 per 100,000.

#### **Monitoring and evaluation**

- For clinical programmes, continuous monitoring and evaluation drives programme enhancement and assesses progress against expected targets. From inception, we have used detailed reviews and analysis to fully understand the nature of the problem and context. Analysis showed that, despite well-entrenched HIV and TB programmes, our inability to proactively identify and follow-up on HIV-positive employees and the lack of integrated clinical pathways were major constraints to managing these diseases. Given that this intervention covered all our business units, the analysis was not limited to clinical parameters, but also covered a site-by-site review of healthcare arrangements including medical insurance cover and the unique features of various healthcare settings (for example, the Eastern Limb region is remote, with few facilities falling under medical aid networks so this requires managed-care processes and interventions).
- Before rolling out INH prophylaxis, all qualifying cases were thoroughly screened to exclude active TB disease. Given that an
  unstructured roll-out process could contribute to drug resistance and poor outcomes, drug-resistance rates have been closely
  monitored throughout this process.
- As TB is contagious, healthcare workers, employees and households are at risk of being infected. By reducing the number
  of active TB cases, the risk of transmission is minimised, and the environment is safer. While our healthcare facilities have
  infection-control measures such as UV lights and bacteriocidal filters, reducing the number of active TB cases significantly
  reduces the risk of workplace transmission. As proof, no case of workplace-acquired TB has been reported in the last two
  years.
- To fight the stigma of HIV and TB, employees' active participation in wellness campaigns and World Aids Day events clearly
  demonstrates effective partnerships. Onsite managers, wellness ambassadors, unions and communication teams, supported
  by the corporate SHE team, organise wellness campaigns with executives and senior managers participating in wellness
  screening, and those who are TB survivors sharing their experiences with fellow workers good examples of visible felt
  leadership.
- At healthcare facilities, doctors and nurses share the responsibility to offer group counselling to employees in waiting areas at
  the out-patient department or occupational health clinic. The escalation process adopted for HIV counselling is another
  example of a shared responsibility between the nursing professionals and the medical practitioners.

One of the UN Sustainability Development Goals identified in the group sustainability strategy is health and wellbeing (SDG 3). Including this goal offers an opportunity to collaborate with other functions and to develop innovative solutions and partnerships for community health initiatives.

Our work on TB has been shared with other Anglo American business units, the mining industry and UNAIDS. Although strengthening the health system was initially intended to support HIV and TB programmes, it naturally permeates the entire delivery system – a knock-on benefit.

# PILLAR: OUR PEOPLE



# OUR PEOPLE CONTINUED

#### **OUR PEOPLE**

#### **HIGHLIGHTS**

**Stable** relationships with labour unions

**6.28%** of payroll on training and development

1 002 employees received regular performance and development reviews during 2018.

#### **HUMAN RESOURCE DEVELOPMENT**

# Enabling modernisation and mechanisation through digital talent and learning capability

The introduction of new mining technologies and methods gives Amplats a significant opportunity to improve performance efficiency and safety.

However, new technologies in modernisation and mechanisation require new and different skill sets. This is an employee who is both a technical expert and machine operator, with an in-depth technical knowledge of the machinery and the cognitive and visio-spatial abilities to manage underground equipment safely and effectively via a remote-control unit in a very confined underground space.

As such, it is critical that the future of work and the employee of the future be viewed holistically, but also through the Amplats lens. The future of work in line with the so-called fourth industrial revolution indicates that work will be:

- Deploying digitally enabled hardware tools to perform or improve activities that have traditionally been carried out manually or with human-controlled machinery
- Using connected mobility, and virtual and augmented reality to empower field, remote and centralised workers in real time
- Linking operations, IT layers and devices or systems that are currently separate
- Leveraging algorithms and artificial intelligence to process data from sources in and beyond the traditional value chain, to provide real-time decision support and projections.

The employee of the future is defined within the Amplats landscape, dictating that they will work with:

- Immediate, remote expert assistance and real-time guidance
- In-depth technical knowledge of machinery
- Data-rich analysis and interpretation
- · Cognitive and visio-spatial abilities
- Ability to apply more complex skills by monitoring equipment and problem-solving
- · Advanced technology design, engineering and maintenance
- Strong analytical and technological skills.

#### LOWLIGHTS/CHALLENGES

#### BEE representation at certain senior levels

Thus, the traditional approach to talent identification, assessment and development is not an option for this large-scale and broadbased transformation.

In addition, we need to rapidly extend our ability to identify and engage with talent in local communities to create technological nodes where community members can bridge the digital divide and provide generations of highly skilled mining talent for years to come.

In 2018, we developed a new people strategy for Amplats to build a digital talent and learning capability. Implementation will begin in 2019 to rapidly convert large groups of current employees from conventional to modernised equipment. After that, we will redirect some of this investment to support further transitions in mechanisation and automation.

While the benefits of innovation in mining, for example, improved safety performance, are clear, we continue to engage in a socially responsible way about the deployment of innovation.

#### TRANSFORMING THE WORKPLACE

Transforming the workplace to reflect the diversity of South Africa's population and comply with mining charter requirements is a business imperative.

We are successfully diversifying our workforce through targeted recruitment and development campaigns for historically disadvantaged South Africans (HDSAs), women in mining and people with disabilities. Meeting representative demand for skills at managerial level, particularly HDSAs and women, is an ongoing challenge.

We focus on rewarding good performers, developing skills, providing opportunities for career advancement, and developing leadership capacity.

By the end of 2018, 78% of our managers were HDSAs (2017: 76%), exceeding the South African old mining charter requirement of 40%. HDSA representation in core and critical skills was 87% against the current mining charter target of 40%. At the end of 2018, women made up 24% of management (2017: 24%), and 18% of the total workforce (2017: 17%), with 15% in the disciplines of mining, engineering, projects and metallurgy (2017: 13%).

#### **EMPLOYMENT EQUITY AS PER MINING CHARTER**

Description	Measure	2018 progress against target	Compliance target
Diversification of the workplace to reflect the country's demographics	Top management (board) level Senior management	<b>33%</b> <sup>RA</sup>	40% 40%
and remain competitive	(including exco) Middle management	50% <sup>RA</sup> 69% <sup>RA</sup>	40%
	Junior management	<b>82%</b> <sup>RA</sup>	40%
	Core skills	<b>87%</b> <sup>RA</sup>	40%

<sup>&</sup>lt;sup>RA</sup> Reasonable assurance provided by PwC. Refer to page 106 for the independent assurance report.

#### **Employment equity per occupational level**

(2018 employment equity statistics as per Employment Equity Act requirements)

		Mal	e			Fem		Foreign	nationals		
Occupational levels	African	Coloured	Asian	White	African	Coloured	Asian	White	Male	Female	Total
Top management	0	0	1	5	2	0	0	0	0	0	8
Senior management	39	3	11	71	8		8	5	5	0	150
Professionally qualified and											
experienced specialist and											
mid-management	555	18	21	395	192	8	18	130	33	5	1,375
Skilled technical and											
academically qualified											
workers, junior											
management, supervisors	2,295	34	6	584	751	12	2	162	141	3	3,987
Semi-skilled and											
discretionary decision-											
making	10,811	6	0	74	2,010	2	1	12	1,180	1	14,097
Unskilled and defined											
decision-making	783	2	0	4	346	1	0	0	30	0	1,166
Total permanent											
employees	14,483	63	39	1,130	3,309	23	29	309	1,389	9	20,783
Temporary employees	596	1	0	62	122	1	3	14	65	0	864
Grand total	15,079	64	39	1,192	3,431	24	32	323	1,454	9	21,647

Note: All numbers are for the year ended 31 December 2017.

#### **HOUSING - BOKOMOSA PROJECT**

Bokomosa is a sustainable development project in Rustenburg between Rustenburg Platinum Mines (RPM), the Department of Human Settlements (DoHS) in North West province and Rustenburg local municipality. It aims to provide housing to the community of Rustenburg (Bokomosa) and ex-employees of RPM.

In terms of the tripartite agreement, the parties will each contribute to the development. For RPM, this includes:

- Donating a land parcel of 204ha near our Base Metal Refinery (valued at R35 million) to the municipality
- Constructing a scalable waste-water treatment works with construction completed in November 2018, the only outstanding work on the plant is installing Eskom power. The municipality also committed funds to construct toilets in the existing Bokomosa township, which is expected to be complete by February 2019
- Overall design and management of the project RPM commissioned consultants to design the township, houses and waste-water treatment plant. All designs were approved by the municipality and DoHS. These consultants are also responsible for signing off work done by contractors to ensure they comply with designs
- Costs current indications are that RPM's spend will be around R171 million, within the approved budget for the project.

#### **Constructing houses**

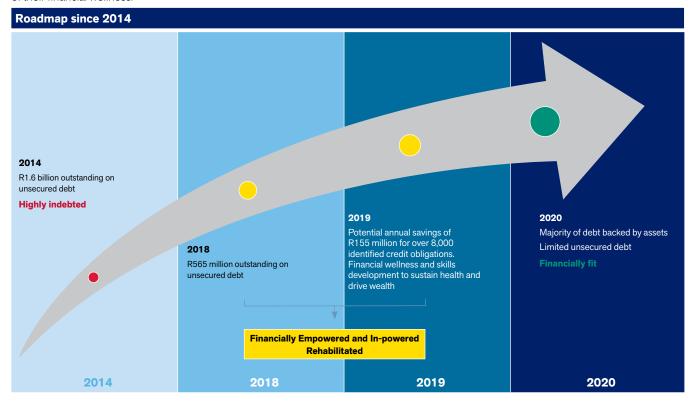
In terms of the agreement, Bokomosa will be classified as a DoHS breaking new ground project, meaning it will focus on unemployed people or people earning less than R3 500 per month. DoHS is contractually responsible for constructing 4,000 houses, planned in two phases.

**Phase 1:** Constructing 1,600 houses. This phase is being implemented by DoHS through the Housing Development Agency **Phase 2:** Constructing a further 2,400 houses after completing phase 1 and upgrading the waste-water treatment plant to handle additional throughput.

# OUR PEOPLE CONTINUED

#### **NKULULEKO FINANCIAL WELLNESS PROGRAMME**

The Nkululeko financial wellness programme we initiated in 2015 has been very successful in empowering our workforce to take ownership of their financial wellness.



While continuing to offer debt-relief solutions, in 2018 Nkululeko implemented a change-management process to ensure individual transition from being empowered to become 'in-powered' and eventually financially fit:

- Empowerment is about creating a conducive environment for people to perform and excel. Empowerment is an important and critical leadership habit or trait and the Nkululeko programme offers these opportunities
- In-powerment is about personal choice; a decision and proactive
  action by an individual to create (and 'do' or take action) for self.
  The process of in-powerment depends on self and cannot be
  done by someone else, although a coach can facilitate the
  process. Through the Nkululeko financial wellness programme,
  individuals were assisted and coached to transition towards
  becoming financially fit and eventually financially free.

The focus for the review period was on financial wellbeing, including debt relief, financial wealth creation and skills development:

 4,253 employees have signed up on the programme – including 286 debt-relief solutions (on average, employees using these solutions are paying R3,259 (51%) less every month towards their debt commitments, largely due to reduced interest rates ranging from 28% to 7%)

- Affordable debt savings of R48 million on reduced instalments, with average interest rates dropping from 26% to under 3% and an average saving of 24%
- An average of 52% of net income added back into employees' households, resulting in savings/refunds of R2.3 million
- 14,730 employees have attended financial wellness induction sessions
- 10,216 interactions with employees recorded informal engagements/enquiries
- 2,154 provisional tax submissions administered.

#### Step-change initiatives in 2018:

- 1,635 employees participated in financial wellness and skills development events to create awareness on individual financial assessments, debt health and smart-banking workshops
- 806 employees participated in a smart-banking workshop to empower them to bank better and plan for their future
- 408 employees attended a debt power workshop that 'inpowered' them to settle their unsecured debt and helped to become debt free
- 386 employees attended the debt-repair workshop that created awareness and understanding of the risks linked to indebtedness.

#### **Organisational culture transformation**

Since beginning our organisational culture transformation (OCT) journey in 2013, we have made significant progress.

Last year, we focused on a number of key areas:

- Leadership development
- Operational roll out of bottom-up initiatives
- Workforce engagement
- Union leadership alignment
- · Tracking and monitoring.

Building on that progress, in the review period we focused on:

- Continued implementation of various leadership interventions
- Rolling out bottom-up initiatives so that the culture change can be influenced and felt at the front-line supervisor and team levels

 Embedding and reinforcing the culture change and behaviour shift so that it becomes part of how the organisation is managed.

As part of the journey, activities to enable the desired top-down and bottom-up behaviour shift are implemented simultaneously. The impact and effectiveness of these activities is tracked continually.

The case study on page 52 summarises our progress to date.

#### **Survey results**

Our tracking and monitoring tools provide feedback on the effectiveness of OCT implementation and valuable insights to enhance our initiatives. The quarterly Tshiamo pulse survey was conducted across all our operational sites, and results indicate that employee confidence, morale and mood on progress in our culture transformation journey are perceived as positive.

#### Key themes from analysing this survey showed that:

Elements we are doing better on	Elements we can improve on
There is high energy and engagement in the workforce, reflected in the positive response to the following statements:  I am sure about my role at work I am proud to work for this company I feel comfortable to refuse unsafe work I am encouraged to find better ways to do my job	<ul> <li>Build employee confidence in survey participation</li> <li>Team engagement to be prioritised</li> <li>Leadership visibility and perceptions by workforce</li> </ul>
The level of employee engagement has improved exponentially	Clarify each individual's role in leadership     Leadership is how we behave: results indicate a lingering perception to link leadership to positions and roles versus behaviour
Level of trust has been recovered, and more can be done to sustain it	As leaders, we need to reflect on the behaviours we demonstrate and how we lead, in order to live up to inspirational and serve and support leadership

#### **Next steps**

Action	How	When	Status
Feedback provided to all employees – to maintain the credibility of the process, timely and transparent feedback is vital	Using available communication channels, ensure feedback is simple, transparent and accessible	Within seven days of results	Completed at all sites
Each operation needs to explain what results indicate for that site	Operational OCT working team that represents the workforce, guided by specialist	Within four weeks of sharing results	Completed
Commitment by operational management on the top three actions adopted to address survey perceptions/feedback	Each operation to analyse results and input suggestions  Identify and prioritise top three focus areas and associated actions for improvement	By end of week four	Completed
Incorporate improvement action items into operational OCT implementation plan and schedule	Implement and track progress	Immediately on agreement	Implemented year-round

# OUR PEOPLE CONTINUED

#### **EMPLOYEE RELATIONS**

Amplats has developed and maintained a strong relationship with union leaders at head office, regional and branch levels. The employee relations scenario within Amplats is underpinned by the concept of freedom of association – as emulsified in the Labour Relations Act and Constitution.

We concluded a three-year wage agreement covering 2016 to 2019 and finalised an employee share ownership scheme (ESOP) with our union stakeholders.

Labour instability remains an issue in all South African economic sectors. While there have been strikes in most sectors, including

mining, Amplats was not affected by strike activity in the review period.

In the last quarter of 2018, we acquired Mototolo Mine, and legislative (section 197, see sidebar) integration is progressing well with the new union – General Industrial Workers Union of South Africa (GIWUSA).

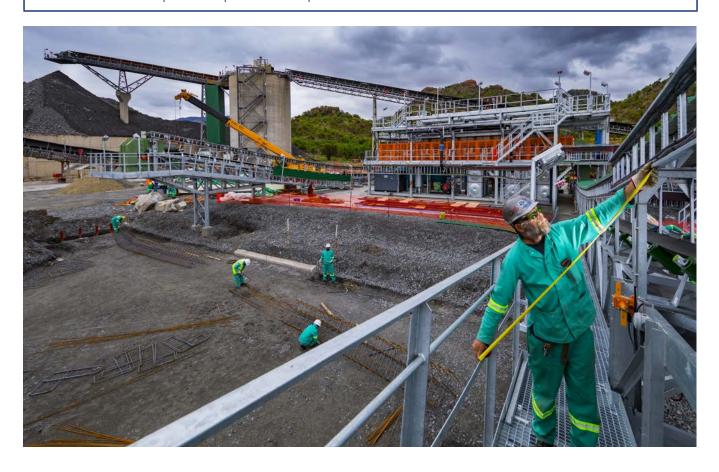
Maintaining effective union stakeholder relationships remains critical for our operations, where almost 94% of employees are unionised

#### **MOTOTOLO ACQUISITION**

#### Section 197 transfer of employees from an HR perspective

The sale and transfer of Mototolo Mine to Amplats was processed under section 197 of the Labour Relations Act, ie Mototolo employees were transferred on terms and conditions that are, on the whole, not less favourable than those they enjoyed under Glencore. As a result, their terms and conditions are ringfenced and unchanged (including job titles, grades, benefits, etc). Transitional services agreement arrangements with Glencore were instituted from November 2018 and lapsed in February 2019, after which Amplats will take full control of systems and data migration.

A detailed communications plan was introduced to transition employees smoothly. Ongoing engagement with the recognised trade union (GIWUSA) is proactively addressing issues affecting these employees, including changing processes. Plans to roll out Amplats' organisational culture transformation (OCT, page 52) are under way. In the interim, awareness on our values and code of conduct were signed by all Mototolo employees. We are also developing the appropriate integration/harmonisation strategy in line with section 197 legal requirements and will engage GIWUSA and Mototolo's employees in negotiations and consultations to ensure alignment of terms and conditions. This process is expected to be complete within six months.



#### **Programmes**

Initiative	Description
Young professionals (bursars and graduates)	Amplats has a well-structured bursary and graduate-development programme focused on ensuring a diverse pipeline of professionals into the business across all key disciplines.
Engineering learnerships	This programme helps mitigate the skills shortage in the engineering artisanal levels that Amplats requires.
Fast-tracking programmes	Fast-tracking programmes address under-representation of HDSA employees in technical fields, focusing on supervisory and management categories.
Skills programmes	Various skills programmes, consisting of groups of unit standards that allow learners to become employable for a specific role and recognised by the Mining Qualification Authority.
Cadetship/internships	Training individuals from local communities in skills for specific jobs to be employed immediately into permanent positions or later as needed.
Schools project	Amplats adopts schools to bolster education and ensure a pipeline of educated youth to employ in future.

#### Our performance with selected training and development programmes in 2018 is summarised below:

Engineering training	289 learners enrolled in various engineering training schemes (2017: 239) and 133 qualified (2017: 78).
	3,122 participated in different specialised trade-related short courses (2017: 2,072).
Leadership development	Attendance of management and leadership development initiatives in 2018:  • Junior management programme: 30  • Programme for management excellence: 27  • Senior leadership development programme: 36  • Anglo American sustainability management programme: 5  • 1 028 supervisors attended specific supervisory-level performance skills programmes
Developing our young professionals	Bursaries and graduate-in-training programmes in specific fields for 208 people (2017: 257).
Operational risk management process	12,567 completed the ORM programme in 2018 (2017: 15,332) 611 employees completed training for occupational health and safety skills programme
Access to adult basic education and training (AET)	AET was provided to 151 employees (2017: 202) as well as:53 contractor employees (2017: 32) and:125 community members (2018: 63).
	This is provided part-time and full-time to accommodate shift workers

Expenditure on training and development was 6.28% of total payroll in 2018 (2017: 6.20%) while, on average, each employee received 50 hours of training (2017: 90 hours). The reduction in training hours was due to implementing the learning management system and more accurate recording of computer-based training.

# OUR PEOPLE CONTINUED

#### **HUMAN RESOURCES**

#### **EMPLOYMENT STATISTICS**

	2018	2017	2016	2015	2014
Breakdown of South African workforce					
Gauteng	213	255	278	330	377
Limpopo	16,177	22,010	21,692	23,259	24,822
North West	2,894	2,878	2,860	17,991	20,323
Mpumalanga	1,502	177	136	136	140
Total own employees	20,786	25,320	24,966	41,716	45,662
Contracting staff					_
Labour hire	28	37	98	401	435
Contractors	1,916	2,201	2,090	2,171	2,422
Total contracting staff	1,944	2,238	2,188	2,572	2,857
Employment creation in provinces, numbers					
Gauteng	14	25	(52)	(47)	(40)
Limpopo	259	651	(1,567)	(1,563)	245
North West	195	144	(15,131)	(2,332)	(439)
Mpumalanga	37	18	0	(4)	12
Total own employees	585		(16,750)	(3,946)	(222)
Labour turnover in South Africa, % (including voluntary separation packages)					
Gauteng	0.11	0.25	0.15	0.20	0.06
Limpopo	4.24	4.77	5.13	4.54	1.61
North West	0.56	0.69	2.56	4.73	1.4
Mpumalanga	0.08	0.03	0.01	0.02	0.01
Labour turnover in Zimbabwe	0.21	0.19	0.14	0.12	0.15

<sup>&</sup>lt;sup>1</sup> Total permanent workforce in South Africa.

#### **TURNOVER PER REGION**

		2018 excluding VSPs*		18 g VSPs	201 excludin		201 includin		201 excludin		201 includin	_
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Gauteng	19	0.09	23	0.11	60	0.23	65	0.25	33	0.09	61	0.15
Limpopo	747	3.47	913	4.24	1,211	4.67	1,235	4.77	976	2.53	2,055	5.13
Mpumalanga	17	0.08	17	0.08	8	0.03	8	0.03	5	0.01	6	0.01
North West	117	0.54	121	0.56	172	0.66	179	0.69	463	1.20	1,025	2.56
Zimbabwe	46	0.21	46	0.21	47	0.18	49	0.19	56	0.15	56	0.14
Grand total	946	4.39RA	1,120	5.20	1,498	5.78	1,536	5.93	1,533	3.98	3,203	8.00

 $<sup>^* \</sup>textit{Voluntary severance packages}.$ 

#### **TURNOVER BY GENDER AND AGE IN 2018**

	20 – 30	31 – 40	41 – 50	51 – 60	61 – 72	Total
Turnover excluding VSPs						
Women %	0.09	0.21	0.07	0.06	0.00	0.44
Men %	0.33	1.26	0.86	1.38	0.12	3.95
Grand total	0.42	1.48	0.93	1.45	0.12	4.39
Turnover including VSPs						
Female %	0.10	0.25	0.08	0.08	0.00	0.51
Male %	0.34	1.33	0.93	1.97	0.12	4.69
Grand total	0.44	1.58	1.01	2.05	0.12	5.20

RA Reasonable assurance provided by PwC. Refer to page 106 for independent assurance report.

#### **TRAINING IN 2018**

	Bla	ack	Colo	oured	As	ian	WI	hite	Total	
Type of training	Male	Female	Male	Female	Male	Female	Male	Female	HDSA trained	Total trained
Graduates	53	29	1	0	2	1	16	8	94	110
Bursaries	35	26	0	0	6	2	20	9	78	98
Leaderships (engineering)	183	86	4	0	1	0	14	1	275	289

#### **MEMBERSHIP OF RECOGNISED UNIONS AND ASSOCIATIONS**

as at 31 December	2018	2017	2016	2015	2014
Association of Mineworkers and Construction Union (AMCU)	9,886	13,691	24,382	24,815	26,916
National Union of Mineworkers (NUM)	5,670	6,378	8,200	9,463	9,560
United Association of South Africa (UASA)	2,157	2,630	5,827	6,518	5,077
National Union of Metalworkers of South Africa (NUMSA)	50	270	347	359	465
GIWUSA	917				
Total	18,680	22,969	38,756	41,155	42,018
Total percentage of workforce represented, excluding management* (%)	94.8*	92	94	91	94
* Unki operations headcount excluded in denominator. Comparative figures (%)		95.74	96.88	96.67	93.73

#### **AVERAGE TRAINING HOURS IN 2018**

Per employee	2018	2017	2016
Professionally qualified and experienced specialists and mid-management	28	39	46
Semi-skilled and discretionary decision makers	50	96	98
Senior management	19	11	10
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	49	85	88
Unskilled and defined decision makers	108	101	80
Total per employee	50	90	91

Note: Reduction due to implementation of learning management system and more accurate recording of computer-based training

# **OUR PEOPLE** CONTINUED

#### **CASE STUDY: TRANSFORMING AN ORGANISATION**

At Anglo American Platinum, we witnessed changes that reshaped us from the inside out, calling for a boldness and resolve that would endure all circumstances. The changes we went through necessarily had us rethink our definition of success and re-evaluate who and what we wanted to be at heart. Our journey to significance, as we call it, is an evolving culture journey across the business that is steadily building an organisation that is far more alert and responsive to the heart of culture transformation, and not just the notion of it. **Chris Griffith, CEO** 

Our desire to win back the hearts and minds of our workforce, to enable the healing and upliftment of our people, lies in two factors. Firstly, fundamental market changes that dictated our own transformation from 2013 and, secondly, industry conditions that caused a five-month strike across the platinum belt in 2014.

The combined impact of these events meant we had to change - not just how we do business, but who we essentially are.

This was the genesis of organisational culture transformation (OCT) at Amplats. Although we were participating in the Minerals Council's earlier initiative on transforming the mining industry, the scale of the strike and our own restructuring made it imperative for the company to commit to a truly transformed organisational culture, one that would be sustainable and would stretch beyond the mine fences of our operations.

These were difficult years for us, from restructuring, downsizing or selling loss-making operations, to rightsizing the overhead and redefining operational efficiencies to improve cash flow. While these decisions were vital, they had a huge impact on the psyche of the organisation and the relationship between employee and employer. Trust was eroded, with many in the workforce unsure of how much the company vested in them as individuals, and not just as employee numbers.

We needed a culture change with impact, underpinned by the desire to be significant – significant employees and people, significant leaders and significant actions as an organisation. At the same time, we understood that this change would require courage, commitment and vision – the anchors on which our culture transformation journey has been built. It would also take time.

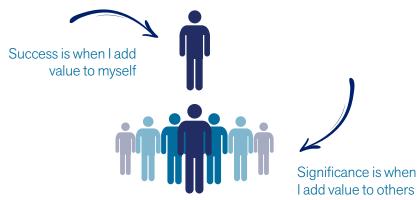
Over the last five years, we have focused intensely on embedding a new culture at Amplats, one that values significance over success and value over volume. A culture that is shaped as a 'journey' towards an organisation that will be known as an employer of choice, fostering high-performing teams and individuals.

As we enter the next phase of our strategy (page 11), the journey is even bolder; aiming to be the world's most valued mining company within the next five years, valued through the eyes of its stakeholders and crafted around the purpose to *re-imagine mining to improve people's lives.* 

OCT has become integral to the way things are done at Amplats, by emphasising the value people bring to the organisation, over and above any systemic or procedural value. This intense focus on people is evident in the levers underpinning the transformation process:

- Our company values (safety, care and respect, collaboration, integrity, accountability, innovation)
- Our leadership philosophy (personal, inspirational, serving and supporting, ubuntu)
- Engagement that is transparent and authentic.

# Giving all the opportunity to make their voices heard to ensure an all-inclusive approach to problem-solving and lasting culture transformation



By using appropriate methods to connect with our diverse workforce, we are enabling their intrinsic behaviour and habit-forming ways through capacitation and skills development. We have also improved the organisation's receptiveness and created fertile ground for adoption via initiatives that address unconscious bias. This has helped enable an inclusive and diverse workforce, resensitising our people to exclusionary practices that may hamper our desire for a transformed workspace. It also ensures holistic wellness – financial, emotional and physical – enabling our people to be receptive to the opportunities offered by the culture in our organisation.

While OCT continues to gain momentum, we will not relax our efforts to drive behavioural change throughout the organisation, knowing that some hearts and minds are won easier than others. Given our aim to reach and then exceed best practice and because OCT is designed to be the lifeblood of the company, not a temporary measure, sustained effort will ensure Amplats does indeed reach significance, and then boldly explores what lies beyond that standard.

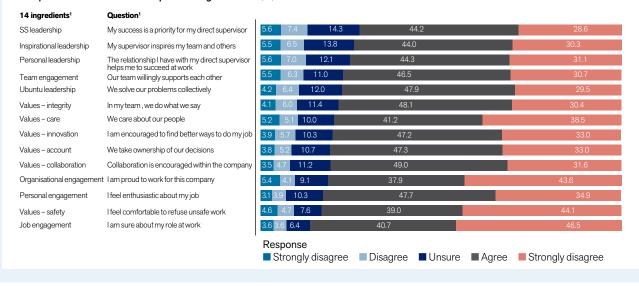
#### **Our progress**

The basic tenets are continuously communicated to all employees and contractors, using the most appropriate channels for the target audience. In addition, intense sessions target higher bands in the company, enabling them to effectively cascade the messaging down. The sessions allow for open and honest engagement in a safe forum, weaving together a cohesive organisation.

With key sessions held on a revolving basis at every operation, we are reaching more and more people in the company.

After an employee engagement survey in 2017 highlighted progress and identified areas for improvement, we conducted a full survey in from October 2018 – December 2018 to assess progress and the shift in culture behaviour since the start of OCT. Results are shown below.

#### 14 question results detail per 14 ingredients (%)



# PILLAR: SOCIO-POLITICAL





#### **HIGHLIGHTS**

Delivered water to over

40,000

community members in Mapela

Mogalakwena reached agreement with Ga-Molekana and Sekuruwe communities on

#### compensation for ploughing fields:

compensation paid to affected families in Ga-Molekana and into the trust fund for Sekuruwe

# **Upgraded:**

4 schools, 2 clinics

10 water and sanitation school projects

Reaching over

8,000

learners on the early childhood development, leadership and character-building, and grade 12 support programmes

#### LOWLIGHTS/CHALLENGES

High

### unemployment

rates, mainly Sekhukhune and Waterberg districts, as mines downscale

Bokoni and Twickenham on care and maintenance, with fewer

procurement and employment opportunities Additional stakeholder groupings, all requesting independent engagement with mines despite agreed platforms and

#### creating tension

between the parties

Slow service delivery from municipalities putting

pressure on mines to deliver services

#### SOCIAL CAPITAL

Maintaining and improving our social licence to operate depends on our ability to enhance this capital at all levels of our society. We refer to this as our sociopolitical pillar of value. While a licence to operate is a tangible, regulated entity, the social licence to operate is a fluid concept more easily identified by its lack, rather than its presence. Social capital itself is the outcome of the investment an organisation makes into building relationships with its stakeholders.

Granting, rejecting or withdrawing a social licence to operate is a stakeholder group's response to the extent of that social capital (positive or negative), which in turn supports an organisation's legitimacy, credibility and trust.

Our business strategy focuses on embedding an approach that will improve our legitimacy and credibility by integrating our purpose and embedding the Anglo American sustainability strategy into functional strategies.

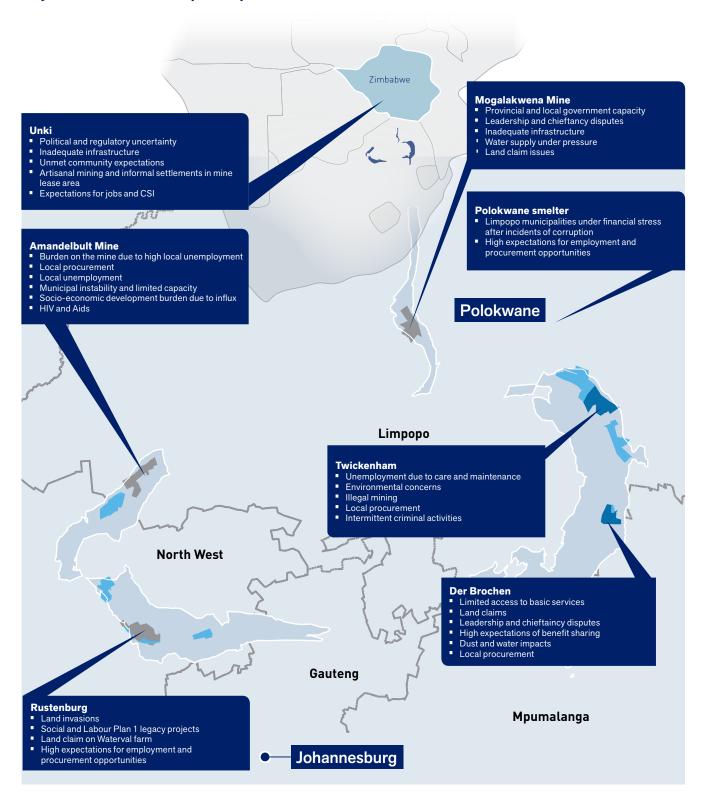
#### **SOCIAL ISSUES ENCOUNTERED AT SITES**

Our social licence to operate remains a significant area of focus as it is imperative for the long-term sustainability of our business. We recognise that Amplats is a microcosm, functioning in a boarder societal framework, and an inextricable part of the fabric of society. Our vision to re-imagine mining to improve people's lives highlights the role Amplats plays in shaping the life of modern society and the role society in turn plays in achieving this vision for mutual benefit.

Each site operates in a unique societal context, with specific risks and opportunities. The way we manage social issues at each site influences our social capital and requires individualised and focused effort to create positive social impacts.

# SOCIO-POLITICAL CONTINUED

#### Key social issues at Amplats operations



#### **NEW 2018 SOCIAL STRATEGY**

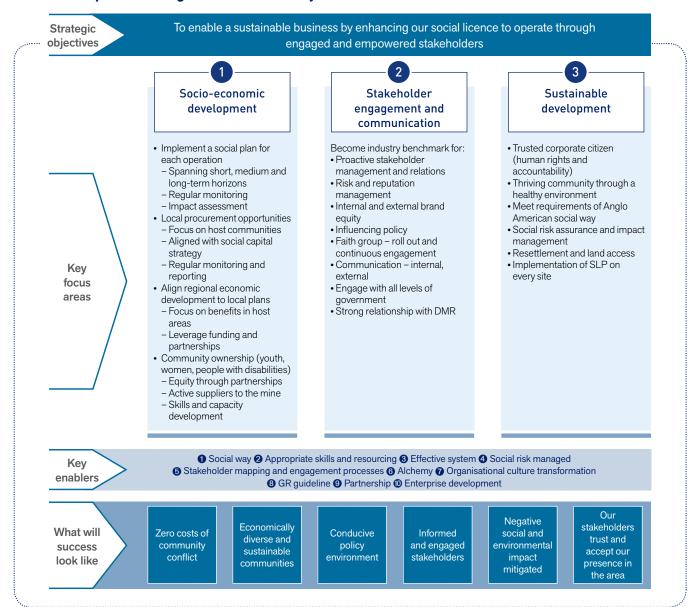
Our social strategy plays a significant role in supporting our company strategy and addressing the key social issues at Amplats operations. Our business strategic priorities are enacted in a safe, values-driven and socially responsible way, underpinned by a key enabler to build leading community and stakeholder relationships and make a lasting contribution. The social strategy therefore helps the business to fulfil its societal obligations by delivering shared value – through creating social value to stakeholders while generating business value.

In 2018, the Amplats social strategy was redesigned to adapt to the changing needs of the business and better meet the needs of our stakeholders. The new strategy clearly defines our objective to enable a sustainable business by enhancing our social licence to operate through engaged and empowered stakeholders.

It enshrines three value levers (or pillars): socio-economic development, stakeholder engagement and communication, and sustainable development. Each value lever has strategic focus areas that aim to deliver positive social impacts and enhance social capital.

#### **Amplats social strategy 2018**

#### How do we plan to integrate sustainability?



# SOCIO-POLITICAL CONTINUED

We remain focused on meeting our commitments for 2016 to 2020 social and labour plans (SLPs). Our stakeholders are more involved in the delivery of SLPs and we continue to monitor and evaluate the impact of each project. This is part of the broader socio-economic development (SED) strategy for all our sites aimed at delivering lasting benefits for the communities in which we operate.

Stakeholder engagement was an important focus in 2018, with Amplats responding to the needs of diverse stakeholders, each presenting a unique opportunity to communicate our strategic intent to enhance stakeholder inclusivity by building stronger and more effective relationships. We built the foundations of effective engagement by setting up community forums and concentrated on stabilising our relationships with government and communities. We are working with interfaith groups as a trusted and credible stakeholder in the community and ensuring faith leaders have input in rebuilding communities. Although some issues persisted, we remained committed to effective engagement processes.

The sustainable development value lever was introduced to align our social strategy more closely to our sustainability strategy. The latter in turn has been aligned with the Anglo American group sustainability strategy, featuring three global sustainability pillars and associated global stretch goals.

#### **AMPLATS' SUSTAINABILITY NARRATIVE**

The Anglo American sustainability strategy was officially launched in March 2018, outlining a series of stretch goals across three major areas of sustainability – the environment, community development, and driving greater trust and transparency across the mining industry - to be delivered between 2018 and 2030.

Anglo American has applied its FutureSmart Mining™ approach in developing this strategy, which includes a robust consultation process with employees and an array of external stakeholders, in line with the United Nations' Sustainable Development Goals (SDGs).

#### **OUR GLOBAL SUSTAINABILITY PILLARS**

TRUSTED CORPORATE **LEADER** 

**THRIVING** COMMUNITIES

**HEALTHY ENVIRONMENT** 

#### **TAILORED FIVE-YEAR SITE PLANS**

All sites and key group functions. Flexible and integrated response to group, business unit and local priorities

# PARTNERSHIP AND ENGAGEMENT

Education

Health and wellbeing

Livelihoods

Accountability Ethical value chains

**GLOBAL STRETCH GOALS** 

Biodiversity Climate change Water

**COLLABORATIVE REGIONAL DEVELOPMENT** 



Regional specialist analysis



Planning and implementation in partnership

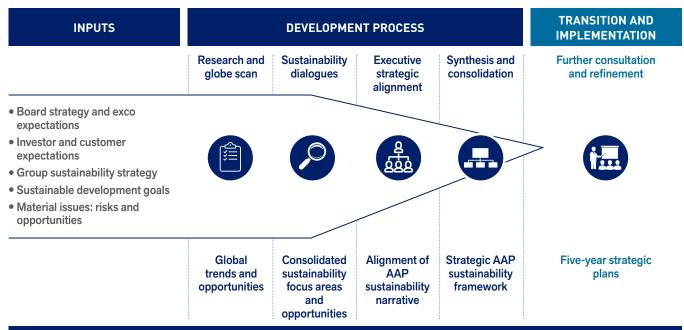
## CRITICAL FOUNDATIONS

Policy advocacy

PARTNERSHIP AND ENGAGEMENT

OUR GLOBAL SUSTAINABILITY PILLARS	GLOBAL STRETCH GOALS		
Trusted corporate leader	Accountability Our vision is to transform the relationship between mines and communities, and wider society	Ethical value chains Our vision is to be part of a value chain that supports and reinforces positive human rights and sustainability outcomes	Policy advocacy Our vision is to take a lead on issues that affect our business in a way that is collaborative and aimed at society's wider goals
Thriving communities	Education Our vision is for all children in host communities to have access to excellent education and training	Health and wellbeing Our vision is for the SDG targets for health to be achieved in all our host communities	<b>Livelihoods Our vision</b> is shared, sustainable prosperity in our host communities
Healthy environment	Biodiversity Our vision is to deliver net positive impact (NPI) across Anglo American through implementing the mitigation hierarchy and investing in biodiversity stewardship	Climate change Our vision is to operate carbon- neutral mines	Water Our vision is to operate waterless mines in water-scarce catchments

We initiated a process to integrate the group sustainability strategy into our business. Inputs included the expectations of the board and executive committee, investor and customer expectations, the Anglo American sustainability strategy, UN SDGs and our material issues. The development process began with sustainability dialogues – thought-provoking interviews with senior management. Sustainability workshops were held at each site, and were a critical component in embedding the group sustainability strategy in Amplats and an opportunity to develop tailored five-year implementation plans to meet the goal and targets stipulated by the strategy.



Delivering a transformational strategy to create long-term value for Amplats and our stakeholders

This culminated in developing a sustainability narrative, a description of how sustainability is embedded in the organisation, which in turn underpins the sustainability implementation framework. Guided by the global sustainability pillars and stretch goals, we examined our sustainability ambition, risks and opportunities by engaging all levels of the organisation. Inputs from our board, executive committee, technical heads of department and site colleagues reaffirmed our commitment to our sustainability approach while challenging us to meet the ambitious goals set in the group strategy. The challenge for 2019 will be to integrate the new sustainability goals into existing business processes and site plans.

# SOCIO-POLITICAL CONTINUED

#### **Sustainability Narrative**

#### **INPUTS**

#### Anglo American Sustainability Strategy

#### **Anglo American Group Strategy**



#### **Functional strategies**

Safety, Health & Environment Corporate Affairs Human Resources Technical

#### **Products**



#### Air quality

- Autocatalysis
- Heat and energy decarbonisation through renewable hydrogen production
- Carbon capture and usage

# FIVE YEAR SITE, SOCIAL AND SUSTAINABILITY PLAN



#### Integrating the hydrogen economy with renewable energy

- Hydrogen infrastructure
- Fuel cell electric vehicles
- Distributed power generation
- Energy storage



#### Improving people's lives

- Water treatment
- Food preservationAdvanced electronics



#### Improving wellness

- Biomedical applications
- Dental alloys and applications
- Healthcare sensors and electronincs
- Cancer treatment

#### **OUR CONTRIBUTION TO THE UNITED NATION SUSTAINABLE DEVELOPMENT GOALS:**





No Poverty







Good Health and Wellbeing



Quality Education



Clean water and Sanitation



Affordable and Clean Energy





Industry, Innovation and Infrastructure



Sustainable Cities and Communities



Responsible Consumption and Production



Climate Action



Life and Land



#### **CASE STUDY: COLLABORATIVE REGIONAL DEVELOPMENT**

Last year we reported that Amplats has embarked on an ambitious journey to become a regional partner in socio-economic development. The aim of this initiative is to collaborate with other partners to facilitate and catalyse cross-sectoral socio-economic development in the Limpopo region, while diversifying local economies away from mining to ensure their long-term sustainability.

Mark Cutifani, Anglo American CEO, explained the concept at the launch of the Anglo American sustainability strategy in May 2018: "This ambitious strategy will transform how our stakeholders experience our business, both locally and globally. Our approach goes far beyond compliance with mining law or regulatory requirements. It is about making a more strategic, holistic, positive and lasting impact – sustainable business in its full and proper sense. Partnership and engagement are at the heart of this transformative approach. Our efforts to realise long-term and truly sustainable development opportunities are centred on what we call collaborative regional development or CRD."

#### Governance

We made considerable progress in 2018 to progress the CRD partnership. We have established a functional backbone organisation with a clear value proposition and operating model to manage the day-to-day operations of the partnership, while formalising governance and accountability structures and actively engaging cross-sectoral and government stakeholders to implement the vision.

A memorandum of understanding (MoU) has been agreed by all public, private and civil society partners to demonstrate their commitment to the partnership. With this MoU, we achieved two objectives:

- Positively impact the long-term development approach of provincial government and municipalities
- Build political will in the national and Limpopo government to collaborate more effectively.

Parallel to that, a consortium agreement is being developed and agreed between the funding partners. The partnership is also considering different options to establish a legal entity that will ensure the sustainability of the backbone by formalising partner relationships, attracting donor funding, and recruiting skilled and dedicated staff to undertake the required functions in the backbone organisation.

#### **Brand identity**

Although Anglo American has been at the forefront of establishing this partnership in Limpopo, it is owned by all the partners. It is therefore critical that the partnership creates its own name and identity, which will be officially launched in early 2019.

#### Initiatives

Building on the progress in 2017, we conducted feasibility assessments on five initiatives in 2018. Three have been completed – integrated game ranching, community wi-fi and community health – and are moving into implementation phase, while feasibility studies for supplier development and agro-processing will be completed in early 2019.

Through the partnership, we have acquired a grant of R10 million from the Department of Environmental Affairs. This fund supports the integrated game ranching initiative which is a partnership project between the Armoede Community Trust in Mogalakwena, Amplats, government and the CRD platform. The co-funding structure between government and the business demonstrates the power of partnerships and our collective ability to do more together.

Our focus for 2019 will be on delivering the feasible initiatives and developing appropriate strategies to scale these up to broaden our impact.



# SOCIO-POLITICAL CONTINUED

CRD in action: Co-design, co-fund and co-implement an integrated game ranch to support livelihoods outside the mining sector

To diversify local economies, this project focuses on establishing an integrated game farm that includes livestock breeding, meat processing and ecotourism.

The pilot phase will focus on the Armoede community near Mogalakwena Mine to build a commercially viable business with active community participation, while securing appropriate offtake markets for its products in partnership with government. At the same time, we will use land from biodiversity offsets to create community joint ventures and ensure adequate skills transfer for communities to meaningfully participate.

The project is geographically well positioned as, statistically, half the game farms in South Africa are in Limpopo and there are several successful community land claims that can be developed as part of the initiative. In addition, national government recently announced an investment of over R1 billion into the wildlife economy to stimulate the industry. This presents an opportunity to expand the initiative beyond the initial pilot and seek support to use either government or communal available land to significantly scale it up to create transformative growth and economic opportunity.

The expected outcomes of this project include:

- An established, successful integrated game farm hub that generates significant employment, financial and other benefits for communities in the province
- Demonstrate the opportunity for similar joint ventures between local communities (redundant land), mining companies and existing (white-owned) game farms across the province
- A model to transform the game-farming sector (including emerging-farmer capacity programmes).

#### **OUR CONTRIBUTIONS TO THE UN SUSTAINABLE DEVELOPMENT GOALS**

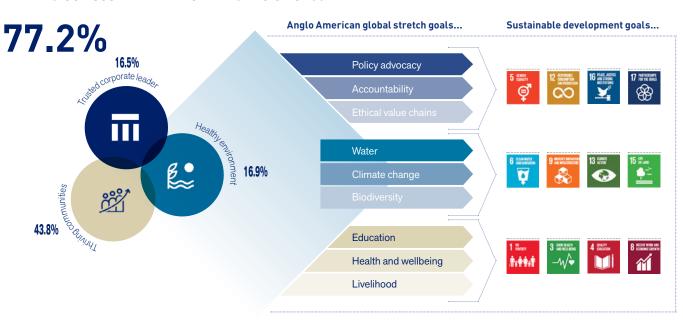
We are integrating UN SDGs into the way in which the Anglo American strategy is being implemented. In 2018, we mapped our prior-year financial contributions to the SDGs, to:

#### Establish a footprint mapping methodology

Obtain a view on our financial contributions to all 17 SDGs, specifically the 12 most relevant to the group's global sustainability strategy

Launch an external accountability forum (known as the SDG accountability dialogue) to engage external stakeholders in this journey

#### **MAPPING OUR SUSTAINABILITY STRATEGY TO UN SDGs**



Our 2017 footprint is a business-as-usual view, where the SDGs had an impact on investment decisions or activities. The baseline assessment indicates that 77% of our 2017 financial contributions are linked to 12 of the 17 SDGs. The largest financial contribution is to SDG 8, decent work and economic growth, followed by SDG 1 (no poverty) and SDG 9 (industry innovation and infrastructure). The results are consistent with organisational initiatives focused on job creation and infrastructure development. The current baseline assessment focuses on financial contributions and not on impact. Anglo American will undertake further work, in collaboration with Amplats, to refine the assessment to include impacts. In addition, the current SDG focus was reviewed in the exco sustainability strategy workshop in November 2018 and areas requiring further consideration were discussed.

#### **ANGLO SOCIAL WAY COMPLIANCE**

The Anglo American social way defines the governance framework for social performance. It specifies concise requirements for all group managed sites to ensure systems are in place to: engage with affected and interested stakeholders; avoid, prevent, mitigate and, where appropriate, remediate adverse social impacts; and maximise development opportunities. These requirements reflect evolving expectations and international best practice including: the updated International Finance Corporation (IFC) performance standards (2012); UN guiding principles on business and human rights; and the voluntary principles on security and human rights (a collaborative global effort by governments, major multinational extractive companies and NGOs). Social-way requirements apply

to the lifecycle of our activities: from exploration through project development (concept, prefeasibility and feasibility stages), construction, commissioning, operation, closure and post-closure. Our social performance principles include:

- Deliver a lasting positive contribution to communities
- Manage risks and impacts
- Respect human rights
- Engage with affected and interested stakeholders
- Empower vulnerable and marginalised groups
- Integrate social performance within relevant operational processes.

Annual social-way assessments were conducted in 2018 for all our sites, and externally. On a scale of 1 to 5, with 5 being the highest, sites scored between 3.6 and 4.5 (3 and above indicate compliance to social-way requirements). The Amplats business unit average was 4.2 for 2018.

# TSWELOPELE - OUR SOCIAL PERFORMANCE MANAGEMENT SYSTEM

It has been a year since we launched Tswelopele (Setswana: to move forward), a system that enables us to capture, interpret and manage all social information across our operations. This repository of information supports improved and informed management of social processes, governance, risk and compliance.

We have launched 10 modules, the highlight of which has been the dashboard's functionality in improving our ability to manage and make decisions.



# SOCIO-POLITICAL CONTINUED

The stakeholder management and engagement module is the most used across our operations, reflecting the intensity of engagements between Amplats and stakeholders to maintain relationships, manage issues and deliver lasting socio-economic benefits to communities. Adoption of the social incidents and grievances module has been slow, largely due to the ongoing integration process between Enablon (current grievance reporting system) and Tswelopele. We expect use to improve once integration is complete in 2019.

#### Tswelopele modules usage 2018



The priority for the new year is to improve Tswelopele functionality to support delivery of the Anglo American social way across all our operations.

#### **UPDATE ON MOTLHOTLO RESETTLEMENT**

To expand Mogalakwena Mine, we needed to acquire land previously occupied by the community of Motlhotlo to dump waste rock. Motlhotlo is north-west of the mining pit and resettling the remaining households is strategically important for the continuity of our flagship operation to:

- Eliminate health and safety risks for households in the mining area
- Give Amplats full access to the approved leased mining rights area and reduce reputational risks caused by unauthorised access by the public
- Fully use dump space and reduce operational costs.

The Motlhotlo resettlement was initiated in 2005 and all 956 households agreed to relocate. Subsequently, 64 households retracted their decision, electing to remain on the property. The number of households at Motlhotlo grew from 64 to 156 by 2012.

Following negotiations, a relocation agreement was signed with the community in June 2012, and we appointed external experts to develop a resettlement action plan. The primary objectives of this plan were to:

- Consolidate and build on existing resettlement planning
- Include all negotiated agreements and conflict-resolution activities (which have characterised the Motlhotlo resettlement process)
- Document and finalise the relocation agreement between Amplats and the remaining households.

The plan was developed in line with the policies, legal and institutional framework of South Africa, as well as the demographic and socio-economic characteristics of the affected community. In addition, it was informed by the internationally accepted good-practice guidance in the IFC's performance standard on land acquisition and involuntary resettlement.

The 2012 agreements set out three resettlement options for the Motlhotlo households:

- Option 1: an agricultural farm (Klipfontein and Tobias Zyn Loop farm) at Mookgophong
- Option 2: the new villages at Armoede and Rooibokfontein
- Option 3: a location of their choice within a 50km radius of Mogalakwena Mine.

Of the 156 households, 92 have relocated to option 2, three have selected option 3, and the 61 households remaining at Motlhotlo have selected option 1. Two households indicated that members would remain on the land. A separate charter was issued to formalise the relocation project for the remaining 63 households.

The main challenge was to identify suitable land for relocating the households. The land needed to comply with Spatial Planning and Land Use Management Act 16 of 2013 and be accepted by the community. A portion of land in ext 14 of Mokopane was identified, as well as a portion of land in ext 12. The community and their lawyers selected ext 14A where the land is fully serviced and roads were being tarred. The community also liked demonstration houses built for employee housing. After presenting the land options to the Community Property Association (CPA) for initial approval, the land was then shown to the community. The majority (43/60) of eligible households selected the option.

Subsequently, entitlements outlined in the June 2012 agreement were re-evaluated to compensate for the challenges of urban living. The entitlements and required support were formulated into a relocation action plan and a livelihood restoration plan, with an appropriate budget approved by Amplats exco.

An addendum to the June 2012 agreement was drafted and approved by most of the community in August 2018. House construction began in November and implementation of the livelihood restoration plan in January 2019. The first activities were house construction and providing transport to schools and the construction site. The children of consenting households also started 2019 in their new schools.

The mediation process outlined in the June 2012 agreement is being followed with the remaining 19 households. The objective is to find a suitable alternative relocation site as per option 3 of the agreement for the remaining households.

#### Independent resettlement review

In 2015, our sustainability department initiated an independent review on four resettlements: Mogalakwena (Ga-Pila, Ga-Puka and Ga-Sekhaolelo) and Twickenham (Makobakoba). The aim was to ascertain the status of resettled communities in line with the IFC's resettlement performance standard 5, as well as Anglo American social way requirements.

Due to setbacks (including unavailability of key documentation, community's reluctance to participate and community conflict), the review process was suspended in 2016.

At the beginning of 2018, consulting firms were re-engaged to complete the review, present Amplats with an assessment of the status of resettled communities and recommendations to address identified risks. The independent resettlement review for Mogalakwena was completed in September, with findings and recommendations presented to exco.

The next steps include:

- Developing a remediation and monitoring plan to address identified risks and gaps
- Developing an engagement and communication plan to communicate the findings, recommendations and remediation plan emanating from the review and structural assessment
- Proposed plans, budget and schedule will be presented to management for approval.

After that, the remediation plan will be implemented and progress closely monitored.

#### CASE STUDY: UNKI MINE CONSTRUCTS AND EQUIPS RUCHANYU CLINIC

As part of its corporate social responsibility, Unki Mine constructed and equipped Ruchanyu Clinic, 40 km from away from the mine in Midlands Province, Zimbabwe. In May 2018, a crowd of about 1,000 dignitaries, community members, schoolchildren and Amplats representatives gathered for the official opening.

The project was implemented in partnership with the Tongogara rural district council and Ruchanyu community. The Minister of State for Provincial Affairs, Mr O Ncube, commissioned the clinic and urged other operations to initiate projects that will uplift surrounding communities. He highlighted how Ruchanya Clinic would enhance the health of benefiting communities.

This view was echoed by local councillor, Mr Mteliso, saying: "The clinic will address several problems faced by our community such as walking long distances for healthcare." A community member being attended to by nurses expressed how thankful they were to have this clinic as it is easily accessible and no user fees are required for medical attention.

The clinic currently serves six villages, with an average of 100 households in each. Over 60 people are treated at the clinic weekly. It provides a number of services including outpatients; HIV testing and counselling; opportunistic infection; antenatal, labour, delivery and postnatal; immunisation; circumcision and family planning. The clinic has been well received by community members who previously had to travel over 20 km to the nearest medical facility.

"We appreciate this project and, as the Ministry of Health, we assure you that we will support it by providing drugs and staff for its smooth running and for the benefit of the community," said Dr Muchekedza, the provincial medical director of Shurugwi.





# **OUR COMMUNITIES**

The future of our business is linked with the future of communities in our operating areas. Investing in their wellbeing is, therefore, an investment in the sustainability of our business. We strive to invest in our communities by creating social and economic benefits that meet explicit needs during and beyond the life of a mine.

#### **OUR APPROACH TO CREATING SUSTAINED ECONOMIC AND SOCIAL BENEFIT**

Stakeholder inclusivity underpins our approach to value creation and is integral to securing our social licence to operate. In 2018, there was less community unrest around our operations, highlighting the importance of engaging proactively with our communities. We recognise more needs to be done to manage and build relationships, if we are to maintain the trust and acceptance of our stakeholders.

#### Real-time insight into community perceptions

In striving for better stakeholder engagement, three years ago we participated in a pilot project that provides real-time insight into community perceptions around our Mogalakwena Mine. The project used SMS technology for community perception surveys and was developed with Australia's Commonwealth and Scientific Industrial Research Organisation, a pioneer in measuring social licence to operate.

During the project, over 1,800 community members across the four sites completed a baseline survey and then, using SMS, updated their views on each mine's progress against the key drivers of our social licence to operate. This provided valuable insight into our strengths and weaknesses, and supported the development of a strategic approach to maintaining and enhancing our social licence to operate.

The mines continue to engage with stakeholders to address issues raised in the survey. The fieldworkers' strategy has been rolled out in Mogalakwena, Amandelbult and Rustenburg and over 100 youth trained and employed as fieldworkers from surrounding communities to conduct door-to-door engagement with residents and provide feedback and progress on pertinent issues.

These initiatives are helping to restore trusting relationships with our communities as they are openly communicating with the mine through their representatives and receiving first-hand information as individuals.

Understanding that each community is unique, we use our industry-leading socio-economic assessment toolbox (SEAT) that details how our operations affect each community. We can then engage more effectively, accountably and transparently.

Many of these programmes run in partnership with nongovernmental organisations, communities and local governments. Our approach is informed by regulatory requirements such as the South African mining charter and our social and labour plans (SLPs), and is implemented through a comprehensive set of social performance requirements detailed in the Anglo American social way.

Our social performance department works closely with our sustainability, supply chain and local procurement departments to promote socio-economic upliftment in communities close to our operations and in the areas from which we draw our labour.

We also aim to align our social and infrastructural investment projects with municipal, provincial and national development plans. All our operations have functioning community engagement forums, leadership forums or task teams (in the case of Mogalakwena), nominated and elected by the communities and meeting at least quarterly. In addition, we have established business forums in our communities, which engage with the mines on business issues and opportunities. We continually monitor the quality of our engagement and the structures and communication channels in place, especially at community level, to ensure these are effective.

Our commitment to social development in Zimbabwe parallels our commitment in South Africa. At Unki Platinum Mine, our corporate social investment initiatives include sports, arts and culture, health and food security, and supporting vulnerable groups.

#### **DISTRIBUTING ECONOMIC VALUE**

Our licence to operate depends on our ability to ensure our stakeholders participate in the economic benefits we generate, and

that our activities leave our host governments and communities with a firm foundation for a sustainable future. The fact that we are a major mining company raises particular expectations.

Through our core activities – employing people, paying taxes to governments and procuring from host communities – we make our most significant contribution to the South African and Zimbabwean economies.

The value disbursed directly by Amplats in 2018 was R29 billion (2017: R21 billion). Based on the dividend of R11.25, the Alchemy Trust will receive a dividend payment of R28.3 million. Through the multiplier effect, the positive economic contribution of our operations extends significantly further.

To support our transformation goals, we have a number of empowerment transactions and joint ventures. As an example, project Alchemy provides direct participation in Amplats by local communities, with progress summarised below.

#### Alchemy – community empowerment and development

The Amplats community empowerment and development programme (known as Alchemy) was launched in 2011. This pioneering programme promotes thriving communities and sustained local, inclusive community development beyond mining, through mining, leveraging communities' shareholding in our company. The Alchemy development structures are tools for empowered communities and development partners to participate in creating a sustainable future.

Alchemy is well aligned with the vision outlined by President Cyril Ramaposa at the Mining Indaba (5 February 2019). All five trusts and the non-profit company (NPC) have been established as agents for multi-stakeholder local development, with communities having a direct say in their destiny. The trusts are actively consulting with the communities they serve within the 15 to 50 km radius from the operations of Mogalakwena, Amandelbult, Rustenburg and Twickenham.



# OUR COMMUNITIES CONTINUED

#### **Highlights and priorities**

All the representative structures are registered, certified as public-benefit organisations, are audited, have appointed senior operations managers as well as project development and implementation units, and are actively engaging with stakeholders and implementing development projects.

The trusts and NPO are led by experienced, independent trustees and are appointing community trustees to enhance local relevance and positive impact. During the consolidation phase, community trustees will have the majority voice in these structures, ensuring full alignment with the development visions of local communities.

Alchemy development structures are set up to drive local impact in a phased approach.

#### Alchemy development structures' four-phased approach

		3 – 10 years	11 – 30 years	30 years+	
Phase	Foundation	Consolidation	Operational	Full	
Description	Critical period ensuring effective start-up	First phase of full, capacitated trust structure, including community trustees on board	Second phase of full, consolidated trust structure	Potentially the post-mining phase of self-sufficient trust operation	

The Dikuno Tsa Sechaba Trust and Zenzele Itereleng NPC have already transitioned to the operational phase. The other trusts will achieve the same status by mid-2019, after electing community trustees. Annual general meetings are scheduled for the second quarter of 2019 to share progress on development initiatives with stakeholders.

#### **Community development project funding**

Over the past six years, engagement by the trustees on community needs and their prioritisation has matured extensively.

The 2019 corporate social investment plan included extensive local stakeholder and community consultation to maximise local beneficiation. While responding to immediate community challenges, including food security, access to drinking water and the dignity of employment, the trusts and NPC are entering into strategic partnerships to plan and implement medium to long-term systems strengthening, and asset-based community development programmes to respond to complex local challenges. This includes:

- Strengthening education and health systems, and infrastructure
- Integrating 4th industrial revolution skills for meaningful employment
- Entrepreneurship and small, medium and micro-enterprise (SMME) development
- Supplier development
- Diversification of the local economy beyond mining, with a strong focus on agriculture in rural and peri-urban communities (facilitating agricultural capacity-building and offtake agreements)
- Digital enablement of local businesses, community-based organisations and development initiatives.

To date, R351.3 million in trust funding has been received through the dividend/safety net, CSI, safety, health and environment (SHE) KPI programme and interest. The trusts facilitate a selection of schools where the SHE programme is implemented to improve health and safety awareness in communities.

With Amplats reinstating dividend payments, the benefit from shareholding/ownership is confirmed with communities participating directly and experiencing the benefit of a profitable organisation in their midst.

#### Significant projects

# Dikuno Tsa Sechaba Community Development Trust (Amandelbult)

- Ramotshodi Secondary School was constructed at a cost of R18 million and handed over to the Department of Education in 2018, replacing a dilapidated infrastructure unsuited for learning and teaching
- With only some 5% of matriculants pursuing post-schooling opportunities, in 2019, the trust awarded bursaries to 15 local youth to further their studies at institutions of higher learning. This includes registration, tuition and accommodation.

#### **Rustenburg Community Development Trust**

- The R42.3 million Mfidikwe waterborne sewerage project includes 411 stands in a collaboration between the Royal Bafokeng, Sibanye-Stillwater and the trust (which contributed R27.3 million) to enhance health conditions in the community. The project is on track to be completed by July 2019.
- Through digital innovation, and to enhance grassroots communication, collaboration and positive impact in communities, the trust is pioneering a free community-wide wi-fi development platform to strengthen the community lifecycle –

from prenatal care, schooling, post-schooling, skills for employability, SMME and entrepreneurship to frail care for the aged. The platform went live at four schools in 2018 and will be officially launched in April 2019 across the broader community.

# Ditholwana Tsa Rena Community Development Trust (Mogalakwena)

- To support inclusive development, in 2018 the trust contributed R1.5 million towards a library for the visually impaired at Siloe School for the Blind
- The trust is also pioneering a free community-wide wi-fi
  development platform to strengthen the community lifecycle
  from prenatal care, schooling, post-schooling, skills for
  employability, SMME and entrepreneurship to frail care for the
  aged. This platform went live during a testing phase and will be
  officially launched in May 2019.

# Bohwa Bja Rena Community Development Trust (Twickenham)

 Three key initiatives will be implemented in 2019: the profitable boer goat-farming project (R4.2 million), finalising the portable skills training hub to support employability, as well as the water security and sports project.

#### Zenzele Itereleng (labour-sending areas)

- After a successful partnership with the Nelson Mandela Institute in 2018, the NPC will extend the project to enhance literacy in the ECD-phase through mother-tongue instruction.
- The alternative solar energy multi-grid solution to remote communities was successfully implemented in 2018 and is proving sustainable.

# Social return on innovation for positive, transformative impact

On the journey of maturity and considering the needs of the trusts and their benefit communities, all trusts/NPC are leveraging additional development vehicles, including scaleable innovative social investment (projects/programmes with greater social return on investment and innovation), resource mobilisation, lobbying and advocacy in support of positive impact in benefit communities.

Fulfilling their role as facilitators in realising the Alchemy vision of sustainable and thriving communities through and beyond mining, all the trusts are playing leading roles in pioneering integrated, site-based development implementation plans in collaboration with teams from Amplats (sustainability, social performance, supply chain, community regional development, Zimele, mining operations and more), Anglo American's South African education initiative, corporate partners like Vodacom, Microsoft and IBM, aligned with national, provincial and local/traditional government initiatives. In 2019, the parties will work towards breaking down inefficient, siloed approaches to development.

The trusts and NPC are leveraging these strategic partnerships to pioneer provision of their free 'digital-nation Africa' courseware to all local SMMEs, entrepreneurs and youth via their community-

wide, free wi-fi development platforms, which have gone live in multiple test sites. This, together with Microsoft's Virtual Academy and massive open online courses, will facilitate free access to benefit communities to increase the miniscule 5% of youth participating in post-schooling studies. The aim is to help reduce the high unemployment rate in these primarily rural and peri-urban communities, by aligning with the skills requirements of the future global economy.

With exceptionally high youth unemployment (about 65%) in these communities, and the likelihood of this deteriorating over the next few years, this is a priority for all the trusts/NPC.

#### **COMMUNITY DEVELOPMENT INITIATIVES**

In 2018, the total social investment spend was R609 million, which included corporate social investment (CSI) spend in South Africa, of R254.21 million (2017: R295 million) in line with mining charter requirements, and in Zimbabwe of R9.95 million (2017: R5.7 million).

Since 2010, we have initiated 114 projects related to our SLPs. By the end of 2018, we had completed 111, with the final projects due for completion in 2019. Most completed projects have been handed over to the relevant beneficiaries. The remaining projects are in Twickenham and we continue to report progress to the DMR as required. After submitting new SLPs in 2015, we began implementation in 2016. We committed to deliver 74 projects from 2016 and to date, 32 have been completed.

Mine community development expenditure in South Africa in 2018 was allocated to the following projects:

#### Total social investment spend in 2018

Focus area	2018 Rm
Health and social welfare	7.8
Education and skills development	55.6
Infrastructure	118.7
Enterprise development	88.8
Community trusts	82
Community dividends	142
Other (Alchemy, Chairman's Fund, interfaith	
programme and other donations)	104.1
Unki CSI	9.95
Total social investment	609

	2018 Rm
CSI spend*	264.16 <sup>RA</sup>

Reasonable assurance provided by PwC. Refer to page 106 for the independent assurance report.

<sup>\*</sup> Including Unki, excluding overhead costs.

# OUR COMMUNITIES CONTINUED

#### SOME OF OUR COMMUNITY DEVELOPMENT FOCUS AREAS:

#### **FOCUS AREA**

#### **PROGRESS**

#### **Health and welfare**

Our investment in healthcare reflects our desire to address the more immediate needs of our communities, ensuring they have access to healthcare facilities that protect their right to live healthy lives.

#### Limpopo province

We have completed the Sekuruwe clinic and the Naledi clinic in partnership with the Limpopo provincial department of health. These clinics have been handed over to the department. We handed over two ambulances to the MEC of health to support the Mecklenburg Hospital close to our Twickenham operation.

#### **North West province**

We began engaging with the provincial department of health on construction of Lenchwe clinic in Mokgalwaneng village, close to our Amandelbult operation.

We invest in youth development and education programmes in communities near our mines. In 2018 we launched the early childhood development (ECD) programme and supported nine ECD centres in Mogalakwena, Twickenham and Amandelbult with 858 learners participating. The leadership and character-building programme was rolled out to Amandelbult and Twickenham areas, with 3,218 leaners, 149 teachers and 4,076 parents participating.

#### **Schools infrastructure**

Mogalakwena Mine completed constructing additional blocks of classrooms and administration facilities at John Pedro and Langalibalele schools. Mmamodimakwena in Amandelbult and Masebudi in Twickenham were also completed.

We continue to provide water and build decent sanitation facilities at schools around our mines. In 2018, sanitation facilities in 10 schools were upgraded.

The 10 best-performing learners from different schools around Mapela were offered full scholarships to attend one of the best private schools in Limpopo.

The mine has contributed R12.7 million to the Limpopo Education Trust to construct the new Seritarita school. The mine and department of education are engaging the Skimming community to begin construction.

#### **Education and training**

We invest in education as the most effective way of reducing poverty and making a sustainable difference in the lives of our communities.

#### **Agriculture and environment**

This economic segment offers significant employment opportunities and livelihood resilience. Our agricultural projects support farmers in launching new agricultural businesses on their own or communal land.

**Enterprise development** This takes place through various programmes and in conjunction with our supply chain team. We also draw on Zimele, the Anglo American-wide initiative that is a catalyst for emerging black businesses in South Africa, supporting commercially viable small and medium enterprises by

providing skills training and

We continue to invest in agriculture by supporting four farms managed by different cooperatives that have created 46 permanent jobs. The farms in St George and Kalkfontein, close to our Der Brochen project, were given back to communities through the land-restitution process and we continue to work with them to ensure the land is being used effectively. The Ga-Mashabela poultry farm is doing well, with the cooperative supplying eggs to local markets.

Mogalakwena Mine sponsors and supports 20 eco-schools in the area. The mine's successful Groenfontein farm and training centre offers courses in permaculture and cattle management to local communities. It has also been developed into an agri-ecological incubator to support agricultural and sustainable development projects in neighbouring communities. For the youth, it offers a sustainable development course linked to the international eco-schools programme. In 2018, Mogalakwena trained 95 local entrepreneurs through its supply chain.

Our initiatives to support localised procurement and supplier development contribute to skills development, create jobs and support emerging businesses. Our enterprise development programmes are designed to build resilience in host communities and a more robust and competitive supply chain for Anglo American. For more information on how we are transforming our supply chain, see page 78.

funding.

#### **FOCUS AREA**

#### **PROGRESS**

#### Infrastructure

(roads, housing, water and sanitation)

A key feature of our SLPs is a commitment to infrastructure development. We aim to ensure our operations' infrastructure projects complement the integrated development plans (IDPs) and priorities of local municipalities.

Working with partners to provide infrastructure that can be used during and after mining activities is important in creating sustainable value for our host communities. Our mines are often in areas that are underdeveloped and remote, where we can share infrastructure, such as roads, health facilities and water, with local communities.

Working with the Road Agency Limpopo and Department of Public Works, we are constructing a 20km road at Twickenham. Amplats has contributed R47 million to the project, and over 100 local jobs have been created. It is estimated that the road will be completed in 2019.

Twickenham continues the project to electrify over 700 households in Ga-Mampa and Phasha-Makgalanoto villages. A further 210 households were added to the project, which will be completed early in 2019. We have installed solar street lights in six villages around our operations in Mogalakwena, Twickenham and Der Brochen, with growing demand to reach more villages. This has reduced the cost of street lights significantly.

Mogalakwena has initiated a project to provide access to water to 70,000 members of Mapela community, in partnership with Mogalakwena municipality and the Mapela traditional authority. To date, over 45,000 people in Mapela have access to clean water and this project will be completed in 2019.

In 2018, we invested R4 million (2016: R9 million) in institutional capacity development.

#### Institutional capacity building

We focus on facilitating productive employment, strengthening skills, competencies and the abilities of our employees and community members to promote robust, self-sufficient local economies long after the life-of-mine.

We engaged the Development Bank of South Africa to develop and deliver leadership and governance training for 540 members of traditional councils on 29 sites where we operate, investing R20 million.

We continue to support the work of the premier's employment and growth advisory council in Limpopo in conjunction with our partners, through detailed needs analysis and, where necessary, resource support. For instance, at the Greater Tubatse municipality, based on the needs identified, there are three resources available to the municipality: an engineer, a financial resource and an administrator. We are considering options to support the council further by ensuring skills transfers and capacity building at Tubatse and the two other municipalities we support.

### Community trusts (including Alchemy)

Alchemy is our R3.5 billion BBBEE ownership programme. It is designed to promote long-term sustainable development in host communities and key labour-sending areas that do not benefit from our other BEE programmes.

Community trusts are an important means to support community development initiatives. Four have been established to date.

Project identification and implementation is progressing well and 70% of funds received have been approved for projects. Of the R69 million in approved funds, R22 million was disbursed by the end of 2017.

#### Responding to community concerns and impacts

We believe our first duty is to behave in a way that respects the human rights of employees, host communities and business partners. Beyond initiatives to benefit our host communities, we aim to respond promptly to any negative impacts we may cause. Where there has been physical resettlement of people or heritage sites, such as relocating graves, we continue to ensure the impact is minimal.

#### **Community complaints and incidents**

Responding effectively to community complaints and expectations underpins good relations. Community expectations and the lack of development in some of our neighbouring communities pose challenges for those operations, as demands on the mines to provide basic services and employment spiral.

In 2018, 139 community complaints were submitted through formal procedures at our operations (2017: 147), mostly on employment, procurement opportunities and environmental impacts. All were assessed and complainants kept informed throughout the grievance and complaints process. We aim to resolve all complaints as quickly as possible.

There were a number of community protests around the platinum industry's mines, with communities temporarily blocking access roads to operations, or neighbouring mines affecting our operations. Communities were protesting about the lack of employment and procurement opportunities, as well as lack of municipal service delivery. Engagements with the communities, local government officials and the police are ongoing to attempt to limit the impact of these disruptions.

### **OUR COMMUNITIES CONTINUED**

#### Resettlements and improving access

In the development phase of our mines, we plan projects to avoid or minimise resettlement. Our standards align with Anglo American and stipulate that all resettlements must at least meet the International Finance Corporate (IFC) performance standard on land acquisition and involuntary resettlement, and must

demonstrably improve the livelihoods of resettled people. In line with the IFC standard, each resettlement must also be planned and implemented in a participatory manner.

An independent review of all our resettlements should be completed by the third quarter of 2018.

#### **CASE STUDY: COMMUNITY DEVELOPMENT**

#### Inter-faith programme

Effective stakeholder engagement is one of the key pillars in our strategy and the Anglo American social way. We also aim to preserve the culture and heritage of host communities.

While we have had successes with our past work, it is now opportune to align our strategy with innovative ways of engaging with stakeholders who were not prioritised in the past.

Given greater demand to deepen our engagements and strengthen trust with the communities we work in, we believe the inter-faith programme is an appropriate approach. Past channels we have used to work with communities include traditional leaders, political formations, government, and community engagement forums. However, various issues, primarily rooted in the incapacity of these structures to deliver promised services, have made these traditional channels and structures increasingly lose authority, legitimacy, acceptability as well as the ability to mobilise communities on community development issues. As such, a one-dimensional, parochial association with these structures raises risks for all parties.

Against this background, it was imperative to find alternate structures and systems that could be used to facilitate dialogue on community development while maintaining good and credible relations. We proactively began working towards this in 2016. The key criteria in selecting novel avenues and structures included: past and current interactions with communities, the respect specific structures receive from communities, services coverage and uptake, reputation, credibility, awareness of community issues, ability to mobilise communities and mainstream gender, human rights, generational and ethical conduct as well as demonstrating humane approaches in dealing with communities.

We started a pilot project in Mogalakwena premised on working with faith groups and their leaders to advance community development in 2016. We went through a process of mobilising all churches in this area, ensuring pastors understood our core values and identifying key community projects they would want us to support.

A total of 160 pastors from different churches in the area were rallied to work towards the core values of unity, love and service. They identified six projects that we should work on together: moral regeneration to curb moral decay in the communities; early childhood development (ECD) and teacher mentorship; IT services for youth, including literacy through training; basic finance training, which builds financial literacy by covering issues such as debt and saving; agriculture; basic ethical conduct and governance; and basic counselling and trauma support.

Key highlights to date of the inter-faith project include:

- Training 160 pastors in ethical conduct and governance, basic counselling, agriculture and first aid
- A memorandum of understanding with Komatsu to facilitate the start of the IT project
- Training for all church elders on basic ethics, governance and counselling
- Interactions with the broader Mining and Faith Reflection Initiative, led by Archbishop Thabo Makgoba, and mining leaders.
- · A visit by David Urquhart, the ninth bishop of Birmingham and convenor of the Lords Spiritual in the UK.

#### Through this work we have:

- Rejuvenated our relationships with communities
- Opened new conduits for engagement and communication
- Expanded our services coverage
- Increased service uptake and ultimately create alternative innovative structures that can advance community development while showcasing our work and enhancing our reputation.

The programme rolled out to Twickenham and Der Brochen in the latter part of 2018 and will be fully implemented in 2019. One of the key success factors we look forward to is faith Leaders intervening and mediating on divisions and conflicts in communities, and reconstructing our society.

#### **CASE STUDY: ZIMELE - BUILDING SMALL BUSINESS**

#### **New strategy**

For the past 29 years, Anglo American Zimele (Zimele) has been at the forefront of supporting small, medium and microenterprises (SMMEs) and helping Anglo American deliver positive social impacts at a time when South Africa needed it most.

Since inception, Zimele's primary goal was to enable historically disadvantaged South Africans to participate in the economy, extending on this goal Zimele must adapt to respond to national priorities of reducing South Africa's deep levels of unemployment, inequality and poverty. A new strategy was developed that will reposition Zimele to respond to these challenges and leverage its strengths to make it more sensitive to local context by significantly scaling up job opportunities and support the unlocking of local economic development.

This strategy has been designed to better serve SMMEs and support job creation by focusing on mentoring first, while building a network of partnerships to give qualifying SMMEs access to market opportunities and financing. In addition, it focuses more on mentoring young people entering the job market. Zimele responds to mine communities' needs by supporting the creation of economic opportunities and contributing to more sustainable livelihoods.

The new strategy is being rolled out in phases, starting with three hubs in the second half of 2018. This will be followed by additional site reviews and implementation in 2019. Absa, in partnership with Zimele, is responsible for loan administration – funding is provided to host communities' SMMEs in line with the National Credit Act – while TechnoServe is responsible for managing the Zimele hubs and implementing the mentorship programme.

#### Mentorship and advisory services

As its name implies, the Zimele mentorship and advisory service aims to impart knowledge to Amplats' host communities through mentorship-focused training based on a needs/gap analysis that enhances the capacity and capability of their SMMEs and youth to become financially and operationally independent, and sustainable. The service offers three development programmes:

- Zimele supplier development programme
  - The supplier development programme's objectives are to develop the skills of host-community suppliers in specific goods and services related to the mine value chain.
- Zimele enterprise development programme
  - This programme's objective is to develop the capabilities and capacity of host-community SMMEs to grow sustainable businesses that will create jobs in sectors beyond mining.
- Zimele youth development programme
  - The objective of the youth development programme is to facilitate the process of defining career paths for unemployed youth and providing skills training to access job opportunities. It also aims to support youth to start new businesses or to increase sales of an existing youth-owned business.

#### Progress update (2018)

#### Mentorship programme

In 2018, three programmes were rolled out at Amplats operations in Mogalakwena and Rustenburg. Zimele expanded to Amandelbult operations in February 2019.

- Mogalakwena the Zimele mentorship programme was launched via the supplier development programme, with
  12 participating suppliers after a rigorous selection process. These suppliers offer a range of goods and services including blast
  equipment; earthmoving equipment; hydraulics supply and services; maintenance for electrical, construction, civil instruments
  and steel work; and waste management. All are 100% black-owned businesses and three have over 51% female ownership.
  In addition, four suppliers have a level of youth ownership and one is entirely youth-owned. These suppliers employ 329 people,
  including 36 from the Mogalakwena host community. The enterprise and youth development programme was launched at
  Mogalakwena in the last quarter of 2018.
- Rustenburg all three programmes are being launched at our operation in Rustenburg. The application process for the supplier development programme has been concluded and 10 host-community suppliers selected to participate. The enterprise and youth development programmes have been promoted in host communities and the application process started in January 2019.
- Amandelbult all three programmes are in the early stages of roll-out. After the diagnostics and design of the supplier development programme were finalised, this programme began in January 2019.

#### Access to finance

In 2018, 22 loans totalling R27 million were disbursed in Amplats host communities, supporting 284 jobs. The majority (64%) of loan applications received and disbursed were from the hub in Rustenburg, with the balance from the Amandelbult, Burgersfort and Mogalakwena hubs.

### **OUR STAKEHOLDERS**

#### **KEY ISSUES**

Refer to map on page 56 for key issues.

#### **OUR APPROACH TO MEANINGFUL ENGAGEMENT**

We are committed to working with our stakeholders to understand their legitimate needs and concerns, and integrate these into our business to create an organisation that is sustainable and shares the value generated. This means we need to stay abreast of the everchanging landscape of relationships in our diverse group of stakeholders.

We believe building quality relationships rests on recognising key factors:

- A relationship is only sustainable if it provides benefits to both parties (sharing value)
- Clear, consistent communication is the operating framework in building and maintaining quality relationships.

A summary of key stakeholder engagements in 2018 is shown below, and detailed on page 10 of our integrated report.

#### **UNDERSTANDING OUR STAKEHOLDERS**

Our business relies on diverse stakeholders and they rely on us to meet certain needs. We engage with these stakeholders in numerous ways to understand their legitimate needs and communicate our goals, creating relationships of mutual benefit.

In 2016, we mapped our stakeholders in a comprehensive process to ensure we were aware of organisations and individuals with an interest in our operations. This insight has enabled us to improve future engagements.

#### **RESPECTING HUMAN RIGHTS**

Human rights describe rights that are inherent to all human beings and to which everyone is equally entitled without discrimination on ethnicity, religion, language, sex, colour or any other status.

Amplats has a zero tolerance approach to child forced labour.

Respect for human rights is a non-negotiable value enshrined in Anglo American's core values, its human rights policy and social way. These were drafted in line with the UN guiding principles on business and human rights. They guide behaviour at our operations in South Africa and Zimbabwe in a way that respects the human rights of our employees, host communities and business partners.

To ensure compliance with the UN guiding principles and the requirements of our parent's social way, external training on human rights and due-diligence assessments was conducted in 2016.

In addition, in-depth due-diligence assessments were conducted at all sites in 2017 by external human rights experts to capacitate sites on managing human rights issues. This was achieved through interviews and workshops with key personnel to identify related impacts, evaluate the effectiveness of existing management measures and identify additional measures where required.

#### Security and human rights

Amplats has long committed to upholding voluntary principles on security and human rights.

A due diligence was conducted in October 2017 to identify and manage the most critical issues that may have human rights impacts from a security perspective. Training was conducted in November 2018 on the Voluntary Principles on Security and Human Rights.

We continue to focus on security-related human rights issues in South Africa and Zimbabwe by managing potential risks at our operations and in the broader communities where we operate.

### MEETING OUR OBLIGATIONS TO GOVERNMENTS AND SOCIETY

#### Government

Engaging effectively and openly with government at all levels is essential to unlocking value. We have a responsibility to understand the expectations of government and to be clear about what we, as a company, need to do to succeed. We also believe that, in turn, governments have a responsibility to listen to aspects affecting our business, engage with us and create an environment in which our industry can make a positive long-term difference to those countries.

Many of our social projects can only succeed if we engage with government and align our projects to broader goals for the country.

The way companies are run determines more than just their financial performance. If run well, they contribute to the prosperity of the country and their host communities.

#### Our strategic approach

We believe pursuing the highest levels of compliance is an opportunity for Amplats: by adhering to regulation, legislation, voluntary codes and social compacts, we ensure our business practices are conducted responsibly, which in turn benefits the areas in which we operate.

While we strive to meet legal compliance obligations, our approach is to go beyond mere box-ticking to make a substantive difference.

#### **Entrenching compliance in our business**

In South Africa, companies are governed by a broad range of legislation and regulation, some generic to the business world and some specific to mining.

Mining and exploration permits are issued under the Mineral and Petroleum Resources Development Act (MPRDA) that governs technical and socio-economic issues. Amplats is committed to complying with all applicable legislation. We are also committed to complying with a range of voluntary codes and guidelines to manage the social and environmental risks of mining.

Regulatory uncertainty is an ongoing risk that we address through active engagement, both as a member of the Anglo American group and through the Minerals Council. Regulatory matters relating to a specific material issue are discussed in the relevant section of this report or cross-referenced to our integrated report.

# Voluntary codes to which Amplats is committed

- International Council on Mining and Metals (ICMM)
  maximises the contribution of mining, minerals and metals
  to sustainable development. Anglo American is a founding
  member and Amplats has adopted and complies with the
  ICMM's 10 principles for sustainable development.
- We support the UN guiding principles on business and human rights aspects. These are incorporated into our policies and management systems, but we need to enhance implementation and continue to integrate the principles into our operations.
- Anglo American is a member company of the UN Global Compact and Amplats therefore complies with the compact's principles.
- Anglo American is a member company of the voluntary principles on business and human rights (VPSHR) and Amplats complies accordingly. These principles guide companies in maintaining the safety and security of their operations in an operating framework that encourages respect for human rights.
- The Extractive Industries Transparency Initiative (EITI) is a global standard promoting the transparent and accountable management of natural resources. Amplats, as a member of the Anglo American group, is a supporting company and complies with the principles of the initiative.

#### **Specific issues**

#### **Davis tax committee**

The committee is assessing the South African tax policy framework and its role in supporting the objectives of inclusive growth, employment, development and fiscal sustainability. In its final report on hard-rock mining (published in November 2017), the committee acknowledges the mining industry's importance as a vital sector in terms of job creation and foreign exchange generation for South Africa's balance of payments. It also acknowledges that mining involves very substantial upfront investment costs, typically followed by a prolonged time lag before mining production (and income generation) begins, as well as heightened risks posed by adverse changes in commodity prices and geological risks.

The committee was broadly in favour of retaining the status quo by taxing mining companies at the same rate as other corporate taxpayers. Based on its review of existing mining taxes, the committee's recommendations were to:

- Reject the call for resource rent or similar windfall tax
- Retain the mineral royalty, subject to various clarifications and improvements
- Reject the request to channel a portion of royalties directly to mining communities

- A template contract should be devised for contract mining relationships
- Eliminate the 100% year one tax deduction for capital expenditure and align with manufacturing industries, ie allowance over four years
- Remove the current ringfence at a future date to compensate for the change to the capital expenditure allowance
- Remove requirement for DMR approval when mining companies dispose of mining assets
- Conduct an investigation on tax relief for rehabilitation funding mechanisms
- Mining charter expenses to be deductible for tax purposes.

The committee is advisory in nature and the minister of finance will consider the report and recommendations, and make any appropriate announcements as part of the normal budget and legislative processes. Any tax policy proposals will be subject to normal consultative processes and parliamentary oversight once announced by the minister.

#### Mining charter

On 27 September 2018, the minister of mineral resources, Gwede Mantashe, published the final version of the revised broad-based black economic empowerment charter for the South African mining and minerals industry (MC18). The new charter came into effect immediately and is purportedly published under section 100(2) of the Mineral and Petroleum Resources Development Act 2002 (MPRDA).

This long-awaited announcement was welcomed by the Minerals Council, Anglo American and other industry stakeholders for providing much-needed regulatory certainty for the sector. The South African mining and natural resources sector has been widely recognised as a significant contributor and potential further contributor to growth and transformation in South Africa for the benefit of all citizens.

MC18 contains far-reaching changes and introduces more onerous compliance obligations than those stipulated in precious versions. It continues to emphasise the need for increased participation of black people (historically disadvantaged South Africans) at ownership, board and managerial levels of businesses, with more focus on including procurement opportunities for businesses owned by women and youth. MC18 also focuses strongly on creating South African manufacturing capability by including local-content requirements in the procurement scorecard.

# **OUR STAKEHOLDERS** CONTINUED

#### Compliance with mining charter II

We are reporting on Mining Charter II. The first annual reporting on the Mining Charter 2018, shall be due on or before 31 March 2020.

ELEMENT	DESCRIPTION	MEASURE	2018 PROGRESS AGAINST TARGET	COMPLIANCE TARGET
Reporting	Has the company reported the level of compliance for the calendar year?	Documentary proof of receipt from the department	Reports submitted to DMR	Annually
Ownership	Minimum target for effective HDSA ownership	Meaningful economic participation	43% of our business has been transferred to HDSAs	26%
Housing and living conditions	Converting and upgrading hostels to an occupancy rate of one per person per room	Percentage reduction of occupancy rate	100% of employees in single-room accommodation	Occupancy rate of one person per room
	Converting and upgrading hostels into family units	Percentage conversion of hostels into family units	All hostels converted into family units	Family units established
Procurement	Procurement spend from	Capital goods	73%	40%
and enterprise development	BEE entity	Services	70%	70%
		Consumable goods	79%	50%
	Multinational suppliers' contribution to the social fund	Annual spend on procurement from multinational suppliers	Social fund not established by the DMR	0.5% of procurement value
Employment	Diversification of the	Top management (board)	33% <sup>RA</sup>	40%
equity	workplace to reflect the country's demographics to attain competitiveness	Senior management (including exco)	50% <sup>RA</sup>	40%
		Middle management	69% <sup>RA</sup>	40%
		Junior management	82% <sup>RA</sup>	40%
		Core skills	87% <sup>RA</sup>	40%

RA Reasonable assurance provided by PwC. Refer to page 106 for the independent assurance report.

ELEMENT	DESCRIPTION	MEASURE	2018 PROGRESS AGAINST TARGET	COMPLIANCE TARGET
Sustainable development and growth	Improving the industry's environmental management	Implementing approved environmental management programmes	Implementation of commitments in approved environmental management programmes is continuously tracked through (reg 34) performance assessments, closure liability updates, monitoring and more to ensure compliance. Gaps are addressed through the environmental management systems.	All at 100%
	Improving the industry's health and safety performance	Implementation of the tripartite action plan on health and safety	Implementation of action plans is aligned	100%
	Using South Africa-based research facilities for analysis of samples across the mining value chain	Percentage of samples in South African facilities	100%	100%
Beneficiation	Contribution beneficiation (from 2012)	Additional production volume contribution to local value addition beyond the baseline	The company continues to implement its beneficiation strategy. Offset guidelines have not yet been defined by DMR and therefore Amplats cannot calculate what offsets it qualifies for	Section 26 of MPRDA (% above baseline)
Human resource development	Development of requisite skills, including support for South Africa-based research and development initiatives, intended to develop solutions in exploration, mining, processing, technology efficiency (energy and water use in mining), beneficiation, and environmental conservation and rehabilitation	Human resources development expenditure as percentage of total annual payroll (excluding mandatory skills development levy)	6.28% (excludes expenditure for South Africa-based research and development initiatives)	5%
Mine community development	Conduct ethnographic community consultative and collaborative processes to delineate community needs analysis	Implement approved community projects	Amplats spent 9% of Net Profit after tax (NPAT) on mine community development	1% of NPAT

### OUR STAKEHOLDERS CONTINUED

#### Maintaining effective relations with government

Amplats engages constructively with the South African government at all levels, both directly and through industry bodies such as the Minerals Council. Key issues include:

- · Financial state of the platinum sector
- Compliance with our mining licence and related requirements
- Labour relations and safety
- Contribution to national developmental priorities such as job creation, skills development, public health, and economic and socio-political transformation
- BBBEE legislation
- Taxation policy, including royalties and carbon taxes
- Company developments, including strategy and repositioning.

We support the principles of the Extractive Industries Transparency Initiative on disclosing payments. In 2018, R4.4 billion was paid to the South African government as taxes (2017: R3.8 billion); and US\$19.5 million to the Zimbabwean government (2017: US\$19.2 million). We do not support any political party and make no political donations.

In Zimbabwe, we face uncertainty on indigenisation. We therefore maintain regular contact with government officials, ensure full legal and regulatory compliance in a changing environment, and invest in community and social development initiatives.

#### Partnering to align goals

South Africa is a well-developed mining jurisdiction, with comprehensive legislation. We aim to work with government stakeholders to ensure regulatory and legislative developments are balanced and promote long-term investment and industry competitiveness in the international marketplace.

We continue to partner with government in contributing to the goals of the national development plan (NDP) as well as the UN's sustainable development goals (SDGs), in collaboration with the office of the deputy president. We work with government's integrated development plans at provincial and local level. Given the challenge of aligning our projects to maximise benefits for intended recipients, we focus on working across departments internally and aligning projects across multiple government departments.

#### **Transforming our supply chain**

Amplats makes a valuable contribution to our country's transformation, economic growth and empowering local businesses through inclusive procurement and supplier development as well as industry-wide enterprise development.

Based on our philosophy of going beyond compliance, we have again significantly exceeded targets in the previous mining charter. Given the high local-content requirement, targets in the new mining charter (MC18) will be more challenging and we are developing detailed plans to achieve milestones en route to its five-year targets.

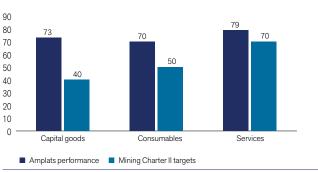
We made a step-change towards strengthening the resilience of empowerment initiatives by introducing two elements aimed at maximising our contribution to socio-economic development (SED):

- Inclusive procurement: strategic and deliberate procurement of goods and services from local companies (South African, with a focus on host community-based suppliers), implementing programmes that incubate, support, develop and mentor previously disadvantaged individuals, effectively incorporating host community-based suppliers to our operational value chains through improved access to opportunities and inclusive processes and procedures, and working with large/corporate suppliers to leverage host-community enterprise and supplier development.
- Industry-wide enterprise development: our strategic approach to address low socio-economic development in areas around our operations is to partner with other industries to jointly fund and support programmes to create mining/non-mining job and business opportunities. We are pioneering a provincial programme for Limpopo in partnership with government, other industry players (Exxaro), the Council for Scientific and Industrial Research (CSIR), Eskom and the United Nations. The programme aims to support diversification of provincial economic activities from mining-dependency to others such as agriculture and agro-processing; tourism and renewable energy. In addition, our bigger drive is to support industrialisation by capitalising on the economies of scale to be derived from partnering with key industry players (beyond mining) in the province. We are also working with Absa and other financial institutions to maximise efforts and share resources to achieve this goal.

#### Procurement progress 2017 to 2018

- 74% of our 2018 discretionary spend was with black-owned and black-empowered suppliers, including 23%, 19% and 9% on regional (province), local (district) and host-community suppliers respectively.
- Against the mining charter II targets of 40% for capital goods, 50% for consumables and 70% services, we achieved 73%, 70% and 79% respectively.

## Procurement progress (%)



#### Host-community supplier development

In 2018, 62 new contracts were awarded to host-community SMMEs, summarised below. These were in addition to longer-term opportunities established in prior years:

Operations	Number of opportunities	Estimated value	Job creation in host communities
Amandelbult	15	R676,363,229	285
Mogalakwena	19	R410,618,642	191
Modikwa	6	R24,294,561	_
Mortimer smelter	7	R47,378,699	63
Waterval smelter	2	R16,422,218	5
Polokwane smelter	4	R33,031,334	_
RBMR	4	R18,366,659	10
PMR	1	R22,680,000	0
Twickenham	3	R14,920,528	21
Mototolo	_	_	-
Der Brochen	1	R10,238,687	_
Total	62	R1,274,314,562	575

	Amandelbult		Mogala	ıkwena	Der Bı	rochen	Twick	Twickenham	
	2018	SLP target	2018	SLP target	2018	SLP target	2018	SLP target	
Local supplier gap analysis/open days Courses for local	70	344	200	671	40	80	100	80	
suppliers	3	8	3	9	3	4	3	2	
Supplier development partners	2	4	3	8	3	3	3	3	
Rolemodels created	2	-	10	9	2	-	5	-	
New direct contracts with primary	5	15	10	19	2	7	10	8	
Partnerships Training local suppliers	4 75	12 109	15 40	109	3 30	109	15	63	
Youth-owned companies Women-owned		3	5	7	2	9	5	9	
companies	2	4	5	7	2	6	5	6	
	166	499	291	846	87	219	146	168	

<sup>•</sup> Twickenham on care and maintenance

<sup>•</sup> Der Brochen in project phase

### OUR STAKEHOLDERS CONTINUED

#### Procurement strategies and plan

Anglo American has developed an inclusive group procurement strategy that will assist all South African operations to achieve their empowerment and transformation goals. Our inclusive procurement approach is founded on our parent's sustainability strategy, specifically the desired outcome. Our employees, communities and partners have taken a stand with us in a sustainable, inclusive and prosperous future.

Our inclusive procurement strategy provides a framework for our operations in South Africa to design and implement procurement initiatives aimed at integrating and increasing spend among our host-community suppliers, targeting black-owned exempted micro-enterprises (EMEs) and qualifying small enterprises (QSEs).

We aim to make our procurement more inclusive, diversified and transparent for our host communities. This approach to supply chain is central to our value-creation ambition and we strive to deliver benefits that go beyond legislation and make a real, positive difference in communities where we operate.

To date, a number of workshops have been held across our sites to elicit support from all key stakeholders. We will follow up on the implementation of inclusive procurement plans across our businesses in South Africa.

# **Enterprise and supplier development (Anglo American Zimele)**

Amplats supports host-community suppliers – mostly EMEs and QSEs through our specialised Anglo Zimele project (refer page 73). Zimele provides mentorship support to SMMEs in our host communities to improve their capacity to supply quality goods and services (supplier development) and help others to develop businesses not linked to our wider group (enterprise development). The Zimele model focuses on delivering four key services: mentorship and advisory; enabling access to markets; SMME loan funding and hub management. Through this, we were able to:

- Provide funding to 55 enterprises (through 89 transactions) to the value of R44,723,427 in 2018
- Create 866 jobs through funding (500 new and 366 jobs sustained).

#### Second-tier enterprise and supplier development

Realising that most of our host-community suppliers/enterprises are interested in and equipped to provide only low-risk and non-critical supplies and services, we have several initiatives to expand their participation:

• **Subcontracting:** primarily in capital procurement. All main capital contractors/bidders must have enterprise development plans for each contract we are awarding. The plan outlines procurement packages the main contractor will subcontract to smaller host-community enterprises. Examples of these projects include the Amandelbult chrome recovery plant and Mareesburg tailings dam project. We are currently implementing a similar strategy for Polokwane and Mortimer smelters SO<sub>2</sub> abatement projects.

- Anglo American social way contractor management: our supply chain team will assess each Amplats contract as well as new (tender process) contracts for having a material social impact. If yes, the contractor will be provided with social requirements and targets, particularly for local procurement and enterprise development.
- Partnering with OEMs and large suppliers: Anglo American is
  partnering with our major suppliers to encourage them unbundle
  or set aside procurement opportunities for host-community
  suppliers. The plan is premised on our desire to increase and
  diversify procurement opportunities for these suppliers. In
  addition, our partnership entails using the expertise and
  experience of large suppliers to improve the capacity of small
  host-community suppliers as part of our second-tier supplier
  development efforts.

#### Responsible sourcing

Globally, there is a rising expectation for business to demonstrate accountability by ensuring responsible conduct by all parties in corporate supply chains. Responsible sourcing is a critical focus of our commitment to ethical value chains under the trusted corporate leader pillar of Anglo American's sustainability strategy.

Our vision is to be part of a value chain that supports and reinforces human rights and positive sustainability outcomes. We are committed to working with suppliers that comply with applicable laws, while striving for zero harm to people, society and our environment.

The Anglo American responsible sourcing standard for suppliers, available on our global websites, details our expectations of existing or prospective suppliers and provides guidance on implementing the Standard. At a minimum, we expect all suppliers to Anglo American to meet legal requirements in the countries in which they operate. Our standard summarises key expectations to: protect safety and health; protect the environment; respect labour and human rights; increase social accountability; conduct business fairly and with integrity.

Through a combination of self-assessments, third-party audits and bespoke capacity-building programmes, we support suppliers to 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.

Responsible sourcing	2018	2017
Self-assessment questionnaires		
requested	72	15
Suppliers audited	28	13
SMMEs trained on responsible		
sourcing risk	49	31

#### CASE STUDY: SUPPORTING SMMES TO MEET SUSTAINABILITY OBJECTIVES

Responsible sourcing is a key component in achieving our sustainability ambition. The aim is to support the group's Supply Chain teams to prioritise ethical decision-making when purchasing goods and services.

We acknowledge that small, medium and micro-enterprises (SMMEs) often have difficulty in trying to interpret, then implement policies and processes designed to meet South Africa's legal compliance requirements. This can be compounded by various industry regulations, regional difference and customer requirements, potentially resulting in excessive costs and complexity for start-up businesses and SMMEs – limiting their ability to operate sustainably.

While a fair amount of support is provided through various business incubation and enterprise development programmes, these are typically limited in their ability to generally address the detail of industry requirements or support SMMEs to address broader sustainability risk – including human and labour rights, environmental management, business integrity and anti-corruption, and safety and health.

In 2017, we concluded a pilot programme at our Mogalakwena operation aimed at building awareness and supporting SMME capacity to identify and manage legal and sustainability risks. In 2018, we extended this programme to our operations in Rustenburg, Amandelbult and the Polokwane smelter, targeting 49 additional SMMEs.

#### Programme design

The SMMEs who were identified to participate in the programme, included existing suppliers and those being considered for future sourcing. The SMMEs represented businesses exclusively located in our mining host communities, in line with our supplier development approach. The businesses range from professional services, such as plant hire, water purification and maintenance on engineering equipment, to general services such as cleaning and waste management.

The programme consisted of two main phases:

#### Phase 1

- Initial awareness workshops: intensive two-day training session highlighting compliance requirements of South African law, including the Basic Conditions of Employment (BCEA), BBBEE, health and safety, and appropriate environmental regulations.
- Participating SMMEs then completed the responsible sourcing self-assessment questionnaire, giving them insights into customer requirements
- SMME assessments: of the three sites, 17 SMMEs were selected for independently conducted audits against our responsible sourcing Standard for suppliers. The audit process included a site assessment, documentation review and employee interviews.
   Where risks and issues were identified, corrective plans were developed, outlining specific actions required to close out the risk, timelines and responsibilities
- Implementation manuals: practice workbooks have been provided to support SMMEs in closing out additional risk areas. These workbooks contain extracts from legal publications, implementation guidance and tools. The intention is to build the content through 2019 and share these manuals with the SMMEs, and potentially with other businesses not included in the capacity building programmes.

#### Phase 2

- The suppliers are currently working with external auditors to remediate risk issues. Secondary SMME assessments may be conducted in 2019 to verify how high-risk issues have been addressed and how the SMMEs have committed to improving their business activities when given appropriate levels of support and clarity
- The SMMEs were given materials and sample tools to support their compliance efforts.

#### CONCLUSION

This approach has been very well received by the SMMEs. Our management team was commended by the host community SMMEs for recognising the daily challenges of operating a small business and making sense of complicated legal and corporate requirements.

While we acknowledge the current gap between corporate requirements and SMME capability, what is clear is how passionate SMMEs are about their businesses, their eagerness to succeed, and the considerable innovation they potentially bring to Amplats.

Programmes and approaches that respect this diversity, and can target support to bridge that gap, will in turn build stronger relationships and reduce risk to our suppliers and ultimately our business.

# PILLAR: ENVIRONMENT





#### **ENVIRONMENTAL MANAGEMENT**

#### **HIGHLIGHTS**

### Zero level 3,

4 and 5 environmental incidents

Aiming for **Zero waste** 

to landfill – 38% year-on-year reduction in waste

**35%** potable water reduction; potable water-use intensity from external resource improved by 33%

**8%** less water withdrawals or abstractions

**7%** less energy use

**11%** less GHG emissions of CO<sub>2</sub> equivalents (excluding scope 3)

Construction of

#### R1.6 billion

SO<sub>2</sub> abatement plant at Polokwane smelter under way

Both refineries achieve

ISO 14001:2015

certification

Completed construction of

#### phase 1

of first lined tailings storage facility at Mareesburg

Completed buttressing at

# Helena tailings storage facility

to reduce risk of dam failure

#### LOWLIGHTS/CHALLENGES

# Construction of infrastructure

to prevent excess water discharge at Twickenham not yet completed.

In the transition to a

# low-carbon economy, PGMs are

critical to enable associated technologies. In delivering these products, we are committed to dramatically reducing our environmental footprint over the next decade. This will require a fundamental change in the makeup of our mining operations and processes.

#### Our management approach

Many of the environmental impacts of mining are borne by communities around our operations, while other activities contribute to global challenges such as climate change. By implementing best-practice standards, we aim to achieve and surpass basic legal compliance.

Our environmental strategy aligns with the Anglo American sustainability strategy in articulating our commitment to demonstrating leadership in environmental stewardship. We are building the foundations to guide our progress towards achieving ambitious goals for 2030 on water, climate change and biodiversity performance. Many of the technological innovations we will apply to achieve the desired step-change in our water and energy performance are at various stages of development.

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

#### **Amplats environmental strategy**

#### **Aspirational statement** Support long-term sustainability of the business by effectively managing resources, reducing impact on the environment and communities, as well as complying to legal requirements CLIMATE LAND VALUE **REHABILI-**WATER **CHANGE AND** STEWARDSHIP WASTE **EMISSIONS LEVERS TATION ENERGY** • Reduce new • Assess • Promote Effective Manage waste Engineered water use physical sustainable remediation streams and solutions to • Reuse/ climate livelihood options seek reduce and opportunities opportunities recycling change and Comply with eliminate **Key focus** impact • Water use extreme Implement legal to: - Reduce areas weather risks rehabilitation Effective efficiency biodiversity Reduce stewardship waste at on-site requirements Partner to programmes • Develop source systems eneray address local - Reuse/ consumption Contribute to site-specific • Continuous community • Efficient use protectedplans recycle and effective water needs area networks waste monitoring of Mine of energy Identify • Use Apply and opportunities Innovative ambient dewatering waste-related alternative implement conditions to and community energy credible offset planning for limit stormwater projects concurrent rehabilitation community sources measures management impact • Discharge Reduce effect Effective management of carbon tax practices to reduce dust and noise pollution • Anglo American operating model ② Operational risk management and critical control management Key 3 Enablon 4 SHE way 5 Minimum permitting requirements enablers 6 Cross-functional alignment and collaboration 7 Communication Progressive Recycle all suitable Address climaterehabilitation Zero waste to Effective control of emissions to Sustainable use What will water, net water contributors to change impacts effectively to that will ensure of all land on mine closure success by innovative reduce, reuse and protect employees ensure zero impact and sustainable look like mine with no/low assets and host operations on receptors recycling community water communities opportunities

#### **EFFECTIVE RISK MANAGEMENT**

The Anglo American SHE way management-system framework integrates safety, health and environment in guiding our approach to achieving zero harm.

We made progress in integrating environmental risk management into the Anglo American operational risk management (ORM) process and operating model. ORM implementation, which includes our most significant environmental risks, forms part of performance-based remuneration for senior executives, with targets to reduce significant environmental incidents. Our minimum permitting requirements, which apply to all permits (not just environmental), guide our operations in identifying and addressing potential risks of non-compliance with permit conditions. The SHE way is designed as a platform to enable operations to comply with and exceed ISO 14001 requirements for an environmental management system.

#### **COMPLIANCE AND CERTIFICATION**

Rustenburg Base Metals Refinery (RMBR) and Precious Metals Refinery (PMR), which are responsible for product delivery and compliance to external requirements, have environmental management systems certified against the new ISO 14001:2015 standard.

All other operations' environmental management systems are aligned with the ISO 14001:2004 standard and are expected to be certified against the new standard by 2020. This does not apply to our joint ventures or project partners.

Our right to operate directly relates to environmental permits and authorisations under relevant sections of:

- The Mineral and Petroleum Resources Development Act (MPRDA) – environmental management programme report
- National Environmental Management Act (NEMA) environmental impact assessments, basic assessments, waste licence and air emission licence
- National Water Act (NWA) water use licence (WUL).

Our environmental performance assessments are conducted annually (or biannually) against commitments in our environmental management programme reports (EMPRs) as required by legislation (MPRDA regulation 55(3) and NEMA regulation 34).

The compliance status of our operations is consistent with prior years at 96% for mining (including concentrators) and remains 96% for process since 2018 audit results are not available yet (smelters and refineries).

Legal commitments (as per approved environmental authorisations) are managed through action plans and progress is tracked. Findings and related plans from internal reviews/audits are continuously assessed, tracked and managed. All reviewed findings are discussed with senior management at each operation and key findings are regularly reported to our exco and operations committee.

Our operations continually engage the authorities on relevant legislation to obtain or renew the necessary permits or environmental authorisations to ensure we can manage our environmental impacts responsibly.

Amplats has quarterly meetings with the Department of Water and Sanitation (DWS). These engagements help build and maintain constructive relationships, and address concerns raised by both parties.

All managed operations have WULs. Internal and external WUL audits are conducted annually in line with regulatory requirements. Non-compliances identified in these audits are addressed through remedial actions, with clear accountabilities. Recent developments include:

- After divesting from Union Mine, we are applying for a separate WUL for Mortimer smelter
- Our Rustenburg process operations have an amended WUL after disposing of the Rustenburg shafts and concentrators in February 2018
- Amandelbult complex is applying for WULs for three projects: Haakdoorndrift opencast; Tumela 15 and Dishaba 62 East shaft; as well as a chrome recovery plant
- Mogalakwena is aligning its WUL as part of amendment applications for the third concentrator
- The Der Brochen/Mototolo WUL is being aligned as part of the amendment application for expansions at Der Brochen
- Twickenham WUL application has been submitted.

In 2018, no confirmed fines or directives for non-compliance with environmental regulations, licences or permits were imposed by authorities on any of our managed operations in South Africa or Zimbabwe. However, Unki (Zimbabwe) reported that an order and potential USD1,000 fine was issued in September 2018 for the PCD sludge temporary holding pad before disposal in the tailings storage facility. An appeal has been submitted to the authority, with a response pending.

#### LICENCE AND PERMITTING CONDITIONS

We have a dedicated team to coordinate permitting stakeholders, integrate project permitting schedules, integrate reporting on permit compliance and risk, and monitor the implementation of permit conditions. Documented permitting processes and systems (IT tools) are being developed to integrate the management of permits and stakeholder issues using three software tools – LandFolio, Enablon and Isometrix.

Progress on permit management is measured annually through our minimum permitting requirements. In the 2018 assessments, operation-specific plans to bridge gaps and reach the required level were formulated.

#### **ENVIRONMENTAL INCIDENTS**

Reporting, investigating and sharing lessons from environmental incidents or substandard acts and conditions are essential to heighten awareness on critical controls and promote actions to improve their effectiveness.

We adhere to the Anglo American five-tiered scale of environmental incident severity. Any level 4 to 5 (from high to major impact) incidents are included in the CEO's report to the board, and disclosed publicly.

In 2018, our operations implemented updated, more consistent classification criteria, using new digital tablets to report incidents

and environmental inspections. This technology reduces time spent capturing incidents and findings, and eliminates paperwork. The application is being rolled out across our operations.

We have not recorded any level 3 to 5 incidents since 2013. Trends analysis of level 1 and 2 incidents shows that 89% of incidents affected land and/or open water, predominantly as a result of hydrocarbon spills and pipe leakages.

In 2018, we recorded eight complaints/grievances classified as having an environmental impact (2017: nine). These were predominantly community complaints about activities that cause gas emissions or excessive dust. Each complaint was investigated, and feedback provided to the complainants, with remedial action taken where required.

#### **ENVIRONMENTAL EXPENDITURE AND PROVISIONS**

Environmental expenditure for our managed operations in 2018 was:

- R19.5 million for waste disposal, emissions treatment and remediation (2017: R26.7 million)
- R48.5 million for preventing pollution and environmental management (2017: R61.7 million).

Total environmental expenditure of R68.0 million was R20.4 million lower than 2017, reflecting divestments, cost savings, reduced water/energy use and operations now on care and maintenance. This excludes the costs of non-product output as defined in the International Federation of Accountants' guidance document on environmental management accounting.

#### **EXTERNAL RECOGNITION**

Amplats is proud to report that we ranked second globally in the metals and mining sector of the ISS-Oekom Corporate

Responsibility Review for 2018, scoring 1 (the lowest risk score) out of 10 for our environmental performance. ISS-Oekom is one of the world's leading rating agencies for ESG (environmental, social and governance) research.

Amplats also outperformed its peers in the FTSE/JSE Responsible Investment Index series, achieving 4.5 out of 5 for our environmental performance, and 4.6 out of 5 as an overall ESG score.

#### **WATER**

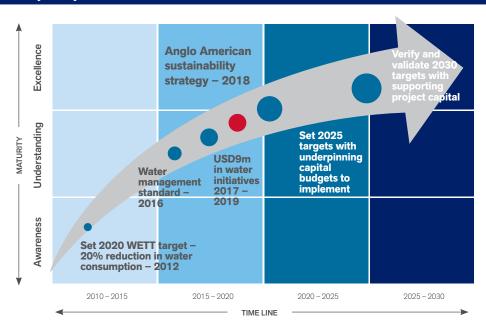
Water is a principal risk for Amplats, given that all our operations are in water-scarce areas and securing water is essential for our operations and growth. We are managing our current water use in a holistic and leading way, while developing and applying innovative technologies for a step-change in our water efficiency. In tandem, taking a catchment-based approach to water management enables us to play a leadership role in regional water preservation.

#### Water: a critical issue

Amplats relies heavily on water as an input to mining and processing activities. Responsible management of this resource is critical, given concerns on its security and quality, as well as strict regulation and scrutiny by authorities. Pressure on shared freshwater resources is exacerbated by growing climate impacts, competition between users and potential for conflict.

South Africa's water supply is predicted to reach a crisis point by 2030, and large-scale public-private partnerships will play a vital role in the future of water in this country. Mining is one of the few industries that can use water of lower quality, ie not suitable for human consumption, which allows us to apply creative approaches to water reuse and recycling.

#### **Anglo American water journey**



#### Our management approach

Anglo American significantly revised its approach to water management in 2016 by introducing a new group standard and reporting requirements. While previously our emphasis was on water-saving projects, the new standard takes a risk-based approach to water management, in line with global best practice and the International Council on Mining and Metals (ICMM) reporting guidelines. A cornerstone of the standard is implementing operational and regional water balances to inform our approach to managing regional (catchment-wide) water risks, in partnership with regional stakeholders.

All our operations completed a detailed self-assessment and gap analysis against the water standard and are addressing identified gaps. Progress in meeting the standard's requirements is included in our CEO scorecard. Most operations have appointed a water-specialist manager and completed a detailed, dynamic operational water balance for a more accurate and complete understanding of water use, storage and conveyance. A regional water balance has been completed for Limpopo, and is planned to support Mogalakwena Mine in future. Modelling water-balance and hydrogeological scenarios significantly improves our ability to predict and quantify life-of-asset risks and identify required infrastructure modifications.

In 2018, Anglo American developed a comprehensive water information management system (WIMS) – a real-time data analytics platform to capture and validate all key operation-specific water elements. The final automated module for reporting is now being developed. In 2019, this system will be rolled out across Amplats operations.

All operations will have detailed, dynamic operational water balances and hydrogeological models, supported by regional water balances linked to regional climatic data as well as the management system database. This will support a more consistent baseline of water management data to determine targets, KPIs, and operation-specific strategic water plans for our contribution to achieving our parent's sustainability strategy stretch goals.

Site plans include provision for water security, water-use efficiency, tailings water-recovery projects and a mine dewatering strategy, stormwater management and discharge management, complemented by a monitoring programme.

#### **RESPONDING TO WATER RISKS**

The main water-related risk to our business is assured security of supply. Another key risk is off-site water quality (surface and sub-surface) being impaired by an uncontrolled discharge into the environment.

#### **Water security**

Our climate data review and predictive modelling indicate that rising weather volatility as well as highly variable and interchangeable periods of droughts and floods are likely to exacerbate water stress at our operations.

We are implementing an integrated water plan (conservation and demand management) to mitigate related security risks. This includes a focus on shifting further to non-potable process water; investing in water-treatment and relevant technology innovation to improve operational water efficiencies; constructing on-site storage at Mogalakwena, Amandelbult and Rustenburg; rolling out the regional water strategy development for Limpopo; and ensuring strategic alignment, partnership and technical support to local and regional water authorities.

Water security is a particular risk for our operations in Limpopo, especially during prolonged drought and rising community and municipal demand. We are increasingly reducing fresh-water consumption at our operations, and partner in several regional bulk-water resource and water-efficiency initiatives. This is part of a collaborative water strategy for Limpopo, launched in 2017, in partnership with government, regional water providers and other mining houses. While the province is expected to be severely water-stressed between 2022 and 2025, studies have identified several opportunities for source-water options to augment regional water supply. In 2018, the focus was on forging partnerships between government and industry to accelerate development of bulk-water infrastructure improvements to supply the Olifants River catchment.

We are particularly involved through the Olifants River water forum and Lebalelo pipeline in sourcing water into the Northern and Eastern Limb platinum operations and communities. This includes collaborating with 30 organisations to provide bulk-water services to mines and communities in the area. Used (grey) water is also sourced for Northern Limb operations through partnerships with the Polokwane and Mokopane municipalities.

We have partnered with Polokwane municipality in upgrading the waste-water treatment works. Following competition of construction work in 2018, the new 6 megalitres/day (M\ell/d) expansion module of the plant was commissioned in December. A WUL is in place to increase offtake to Mogalakwena Mine to  $20 M\ell/d$ . Additional optimisation projects are planned on pipelines and water-storage facilities to Mogalakwena from 2019 to ensure improved reliability in the supply of treated sewage-water resources.

In the review period, we conducted a water census in the Twickenham area to:

- Determine the groundwater resource potential of the UG2 and Merensky pyroxenite – major aquifer, causing water ingress and consequent discharge at Twickenham
- Understand the impact of groundwater abstraction on reducing the decant
- Analyse post-closure water-management scenarios.

This work has been completed and shows a significant aquifer with great potential to be developed and used in the region via the Lebalelo water scheme.

Climate modelling has indicated that the frequency and intensity of floods and droughts will increase and continue to pose water-security risks to the Limpopo region.

#### Water quality

We seek to minimise adverse effects of our mining activities on surrounding surface and groundwater to avoid affecting the water security of our stakeholders. Poor-quality water is harmful to the environment and human health, can affect mining and processing equipment, and presents closure liabilities.

The volume and quality of water allowed to be discharged by our operations are regulated. Any unplanned discharges or regulatory breaches are investigated and reported as environmental incidents, while root causes are addressed promptly.

We monitor surface and groundwater at all our mines and process plants (upstream and downstream of operations), as well as inside and outside mining areas in catchments where we operate. We also monitor surface waterbodies. Our tailings return-water dams are habitats for fish, birds and plant life. At some operations, seepages from tailings storage facilities (TSFs) affect the quality of groundwater, but the impact is localised and no external groundwater users are affected. Seepage from TSFs contributes primarily to increasing salinity in localised groundwater bodies. The risk associated with groundwater plumes is continuously tracked through groundwater models and management measures are considered where required, such as drilling extraction and monitoring boreholes.

The expansion of the Polokwane waste-water plant will help to reduce quality risks in water being supplied to Mogalakwena concentrators.

At Twickenham, which is under care and maintenance, we have surplus water with about 1.0Ml/d released into the environment. We are addressing community concerns through a joint community forum, chaired by DWS. We are also providing potable water to animals and people in the affected community, and modifying existing infrastructure to reroute this water to a centralised storage facility. From this facility, blended surplus water and raw water will supply a neighbouring chrome mine and local agricultural project.

#### CASE STUDY: PROVIDING BULK-WATER SUPPLY TO COMMUNITIES AT MOGALAKWENA MINE

Amplats is funding a long-term solution to provide water to over 70,000 people living in 42 villages around Mogalakwena. Given the regional water scarcity, the mine previously trucked water to these villages.

The contractor, Hall Core Water Mapela, is responsible for increasing water-supply capacity by drilling, equipping and maintaining boreholes for 10 years, while Amplats is funding potable water supplied.

The project, which was successfully piloted at Scheming village in July 2018, is being rolled out across the villages and will deliver a total of 3.5M $\ell$  per day. At least 88 people will be permanently employed for the next 10 years.



Mr Erick Langa and Albert Lamaola tending their crops at Skimming village, thanks to water from the Hall Core Water Mapela project. In the background are the borehole and pump house built in phase 1.

#### **Partnerships in Limpopo**

Amplats has been instrumental in setting up partnerships to advance bulk-water resource development in Limpopo:

- Lebalelo Water Users Association (LWUA) was established in 2002 to develop and operate the supply system from
  Hovercroft to Steelpoort Valley, providing raw water to 15 mining operations. Amplats is the majority shareholder and
  chairman of the entity. LWUA was appointed to project manage raising the Flag Boshielo dam wall with DWS and is
  engaging with the department on potentially assisting with the Olifants River Water Resource Development Project
  (ORWRDP)
- ORWRDP: The mining industry's engagement with DWS on this project is coordinated through the joint water forum.
   Amplats chairs the forum's executive committee and has been instrumental in engaging with the department on bulk-water distribution in Limpopo
- Premier Employment Growth Advisory Council (PEGAC): established in the early 2000s, PEGAC is a forum for public and
  private sectors to coordinate efforts to develop infrastructure in Limpopo. Amplats co-chairs the integrated infrastructure
  working group and has seconded a specialist to assist the premier's office with project management and coordination
  since 2017.

#### **PERFORMANCE**

Our operations report in line with ICMM definitions for water withdrawal, consumption and discharge, tracking performance against targets monthly.

In 2018, we marginally exceeded our targets (0.3%) for total withdrawal and withdrawal intensity. However, less potable water was used than in 2017 and remained below target. Our progress in recent years has been driven by progressive implementation of best-practice water-treatment/recovery technologies.

In 2018, total water withdrawals measured in millions of cubic metres (Mm³) were 24.43Mm³ (2017: 26.53Mm³), above our targeted 24.36Mm³. Of this, 6.1Mm³ was potable water (2017: 9.4Mm³) and 6.2Mm³ non-potable water (2017: 5.6Mm³). Water discharges totalled 0.35Mm³. Current water data excludes rainfall and groundwater ingress, which will be included in the 2020 rebase-line as part of setting 2030 sustainability targets, after completing more accurate site-water balances and the WIMS water reporting tool.

6.14 million m<sup>3</sup> Non-potable water 6.19 million m<sup>3</sup> Surface water 1.42 million m<sup>3</sup> Groundwater pumped from New water use underground mine 24.43 million m<sup>3</sup> 4.12 million m<sup>3</sup> Groundwater pumped from open-pit mine 5.03 million m<sup>3</sup> Groundwater pumped from well fields/supply well 1.54 million m<sup>3</sup> Groundwater pumped from springs

For our total operational water requirements, 77% was met by recycling and reusing water (2017: 52%) from internal sewerage plants, tailings return-water dams, mine service water and other internal sources, such as pollution control and stormwater dams.

Water consumption is the amount of water not recycled or discharged. In 2018, our new-water consumption totalled 24.4Mm<sup>3</sup>.

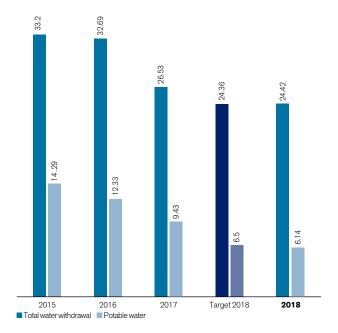
In 2018, for each refined ounce of PGMs and gold from managed operations (excluding toll refined):

- Total water-withdrawal intensity improved 6% to 5.42m³ (2017: 5.74m³)
- Potable water-use intensity from an external resource improved 33% to 1.36m³ (2017: 2.0m³).

No water source, ecosystem (eg 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.

In line with our commitment to transparent performance, we participate in the annual water disclosure project (WDP) of the CDP, available at www.cdproject.net. Amplats achieved an A-score for its 2018 submission. This score falls in the leadership band, and is higher than both the metals and mining average (C) and Africa regional average (B-).

Water (Million m<sup>3</sup>)



0,003 million m<sup>3</sup>

## CASE STUDY: INNOVATING WITH ELECTROCHEMICAL WATER TREATMENT

Amplats is using innovative electrochemical water-treatment technology to improve water efficiency while improving equipment reliability. The patented process from Universal Environmental Technologies (UET) promotes the removal of scaling minerals and silica in easy-to-clean reactors instead. Process benefits in the water-reticulation system are allowing much higher cycles of concentration, reducing the need for both blow-down (water saving) and added chemicals (cost saving).

The UET natural water treatment technology has been successfully implemented at the Baobab concentrator on the gland service-water (GSW) system, where conventional chemical treatment was not effective for treating high levels of hard minerals and silica in the water. In collaboration with UET, we have made good progress by:

- Reducing GSW consumption from 70m³/hr to 16m³/hr
- Removing over 300kg of excess hard minerals every month from the UET reactors

- Improving GSW pressure from 2 bar to 8 bar by clearing pipe networks
- Improving pump reliability through better water quality and pressure to glands
- Eliminating chemicals in the GSW and concentrator process.

The UET technology has also been successfully implemented on the cooling towers of a compressor at the Amandelbult complex, where the use of substantial amounts of potable water and chemical treatment in cooling towers is a major ongoing expense. The system achieved a significant increase in the cycles of concentration and a 35% saving of potable make-up.

During a trial, the system was operated on mine services water with promising results. The benefit offered is a 100% saving on potable water for the application. Further work is planned on using mine service water in cooling tower systems.



Baobab holding tank after UET.



UET container on outside installed at Amandelbult.



UET container on inside installed at Amandelbult.

#### **CLIMATE CHANGE AND ENERGY**

Our climate-change strategy is designed to safeguard the business and host communities against related risks, and to contribute to mitigating global greenhouse gas (GHG) emissions. We seek to understand the implications of climate change on our value chain, and to maximise opportunities in transitioning to a low-carbon future.

#### Management approach

Amplats aligns with the Anglo American 2020 energy and carbon targets, and sustainability strategy 2030 climate-change stretch goals. In working towards these targets, we are developing a more integrated approach to managing our social and environmental climate-related risks, recognising the importance of cross-disciplinary collaboration for effective risk management through integrated water, energy and carbon management.

Anglo American's climate-change policy articulates our commitment to five principles:

- Building internal agility and ensuring resilience to climate change
- Driving energy and carbon savings throughout our business
- · Understanding and responding to the carbon lifecycle risks and opportunities of our products
- Developing and implementing collaborative solutions with our stakeholders
- Contributing our skills and knowledge to developing responsible public policy.

A central aspect of our approach is the energy and carbon-management (ECO2MAN) programme, which we have been embedding across the group for several years. The programme centres on identifying and implementing projects to reduce energy use and GHG emissions and achieve site-level targets. Performance against our 2020 energy and GHG targets require a reduction against projected business-as-usual levels. Targets consider variable operating conditions, such as changes to mine plans, production levels, the depth and grade of orebodies, and haul distances, as well as acquisitions or disposals. As we progress towards our 2020 targets, we are focused on maintaining our current good practice, aligning our performance with the group energy and GHG emissions management standard, and addressing identified gaps.

The Amplats' CEO scorecard includes performance on energy and carbon. Further disclosure on our climate-related practices appears in our integrated report and our annual submission to CDP, available at www.cdproject.net.

Respecting society's growing expectations for greater transparency on climate change, our disclosure is progressively aligning with the recommendations of the Financial Stability Board's task force on climate-related financial disclosures, with full alignment expected in our 2020 reporting.

#### **REDUCING OPERATIONAL EMISSIONS AND ENERGY USE**

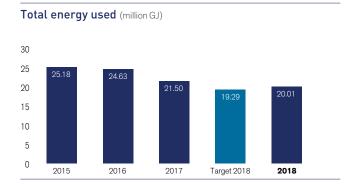
Mining and processing are energy-intensive, and energy alone makes up around 10% of our operating costs. Over 90% of our GHG emissions are indirect. In South Africa, we buy energy from our national utility, Eskom, which produces energy largely from coal-fired power stations. Optimising the use of our second-most important source of energy, diesel, is also a priority.

#### **Our targets**

An Amplats target of 250,000GJ saving from the business plan is expected in 2018 and a further 250,000GJ saving in 2019. This equates to a 1% saving in 2018 and a further 1% in 2019. Operational targets will be cascaded and approved as appropriate.

#### Our performance

Total energy consumed against business-as-usual 2015 to 2018



In 2018, Amplats operations were responsible for 4.1 million tonnes of  $\rm CO_2$ -equivalent emissions (Mt  $\rm CO_2$ e), (2017: 4.6Mt  $\rm CO_2$ e). Total energy consumption decreased to 20.0 million GJ (2017: 21.5 million GJ).

Our energy-intensity indicator reflects improved efficiency and effectiveness. The overall GJ targets are being aligned with the energy-intensity reduction approach.

In line with our commitment to transparent performance, we

participate in the annual climate disclosure project of the CDP. Amplats achieved an A- score for its 2018 submission, available at www.cdproject.net. This score falls in the leadership band, and is higher than both the metals and mining average of C and Africa regional average of B-.

For more performance detail, refer to table on page 104.

#### **PORTFOLIO RESILIENCE**

We identify and assess the potential impacts of climate change on our products. In 2016, we completed a qualitative assessment to determine implications for product demand in PGM markets, currently mainly linked to the automotive and jewellery industries. We expect the ongoing trend towards cleaner-emission vehicles, and increasingly stringent global emissions legislation, to sustain demand for PGMs in catalytic converters. We invest in several ventures, including hydrogen and fuel-cell companies developing new technologies to drive industrial demand for PGMs. Many of these address environmental issues such as pollution and global warming.

A further study on climate-change scenarios and the possible medium to long-term implications for our business is expected to be finalised in 2019. This will provide a quantitative assessment of implications for commodity profit pools and our products. In implementing the project, we have established a method to monitor climate indicator impacts, which will inform development of a resilience strategy and enhance our disclosure capability. The analysis aligns with recommendations from the task force on climate-related financial disclosures.

#### **MARKET DEVELOPMENT**

Our global PGM market-development initiatives include targeted longer-term growth areas, such as fuel cells, hydrogen and clean energy. In 2018, the PGM investment programme progressed to a second stage with the formation of AP Ventures IIp with matching USD100 million commitments from Amplats and the South African government's PIC (integrated report page 20). AP Ventures will invest globally in companies that support development of innovative and competitive technological uses of PGMs.

#### **ADAPTATION FOR CLIMATE RESILIENCE**

The investment decisions we make today on mine projects could be significantly affected by weather variability associated with long-term climate change. We seek to understand the physical implications of climate change for our operations and neighbouring communities, and to implement appropriate adaptation responses.

Key elements of our approach include:

- Building climate-change scenarios using best-available science
- Using our operating models to identify vulnerability and exposure
- Integrating critical controls into operational risk management.

#### **GHG** emissions showing no decline

We view climate change as one of the defining challenges of our era. Equally, we recognise the science of climate change and the role it has to play to limit global warming to 2°C.

Amplats has taken decisive steps to contribute to the global effort to reduce environmental emissions, while continuing to provide the materials that modern life requires.

Our total reported annual GHG declined 30% between 2015 (5.9 million tonnes) and 2018 (4.1 million tonnes). Over the same period, the company's total energy demand declined 20% (25.1 million GJ to 20.0 million GJ).

While divestments account for a significant portion of the reduction, continued work on operational productivity and energy efficiency has resulted in a 10% saving in energy and GHG emissions for the ongoing business.

#### The drive for low-energy and GHG operations

For over a decade, Amplats has driven a programme on energy efficiency. This extends from early use of Eskom's demand-side management incentives to help alleviate power-supply constraints, to the more recent uptake of National Treasury's section 12L energy efficiency tax allowance incentive.

Recent energy and GHG emissions (scope 1 and 2) savings were largely delivered through:

- Underground ventilation fan and compressed air optimisation
- Focused energy leadership programme across our smelter operations
- Heavy mining equipment fuel efficiency at Mogalakwena Mine.

We are investing in new mineral processing technologies that are more energy efficient than conventional methods. For example, our work on novel comminution (grinding and crushing rock) circuits fragments particles using substantially less energy (>30%), and with the potential to improve the design and process of our operations.

#### Renewable energy sourcing

In response to the high carbon content and an escalating and uncertain electricity price path, we are assessing options to introduce renewables and energy storage to diversify our energy mix, while delivering mine community benefits. We are currently evaluating tenders for a 60MW solar photovoltaic facility supplying Mogalakwena Mine.

#### Resilience to physical climate change

To understand the vulnerability of operations and host communities to physical climate change, we undertook an in-depth exercise with the CSIR. The analysis, which extends to beyond 2050, is the first such high-resolution study on the African continent. The climate-scenario data will be used in regional water-catchment models, and in mine water-balance simulations to inform water supply security and storm drainage design parameters.

#### Roadmap to carbon neutral

Amplats aligns with Anglo American's 2030 stretch goals for climate change, which require a 30% improvement in energy efficiency and an absolute 30% reduction in GHG emissions against the 2016 baseline. These stretch goals were informed by the South African government submission to the 2015 Paris Agreement, and are an important milestone in our longer-term vision to operate carbonneutral mines.

#### **INNOVATION**

In transitioning to a low-carbon economy, achieving our longerterm targets depends on radically reducing our energy consumption through process, equipment and behavioural efficiencies.

Comminution is the largest consumer of energy in mineral processing. Through Anglo American's FutureSmart Mining<sup>™</sup>, we are investing in new mineral-processing technologies that are more energy efficient than conventional methods of comminution. For example, we are piloting novel comminution circuits that use 'shock break' technology to fragment particles using 30% less energy than conventional means (equivalent to over 50,000 metric tonnes of  $CO_2$  per year for a 10Mtpa operation). We also apply best-available technologies to underground ventilation, fuel use and pumping.

Switching to low-carbon energy sources can help mitigate GHG emissions in cases where we cannot reduce energy consumption further. Currently, we are considering alternatives for electricity and diesel. In 2018, we assessed current and anticipated renewable-energy and energy-storage technologies and expected longer-term developments. At present, the most suitable technology delivering the greatest impact is solar photovoltaic. A project to develop a solar photovoltaic plant for Mogalakwena complex is in study phase, with planned implementation in 2021.

Our Waterval smelter generates electricity from waste heat recovered from the converting process. Through this process, we harvest around 16MW in thermal energy and return on average 3.2MW in electrical energy to the national grid.

#### **PUBLIC POLICY POSITIONS AND ENGAGEMENT**

Anglo American's formal position on climate change is expressed in the group policy and position statement as well as the ICMM statement on climate change.

We engage in policy processes through the ICMM, as well as several local and international forums. In South Africa, we participate in policy-engagement processes through our membership of the National Business Initiative, Business Unity South Africa, the energy-intensive users group and the industry task team on climate change.

We take a positive policy advocacy stance to accelerate investment in developing and commercialising both the hydrogen and fuel cell sectors through initiatives such as the Hydrogen Council, of which we are a founding member. We are also a member of and actively participate in China-based International Hydrogen and Fuel Cell Association, the UK-based Hydrogen and Fuel Cell Association as well two USA-based associations.

In South Africa, our operating sites have complied with new requirements under national GHG emission-reporting regulations. The industry is challenging aspects of these regulations, particularly the intention to manage company GHG emissions at regional level. The government also issued a draft bill on carbon tax in 2016. While certain policy and technical aspects remain outstanding, we are evaluating further opportunities to limit our exposure through both reduced energy use and GHG emissions, and opportunities to source carbon-offset credits.

#### **MINERAL WASTE**

Mining generates significant quantities of mineral residue, which affects the land by establishing tailings dams and waste rock piles, and may also influence water quality if not managed effectively.

In recent years, catastrophic tailings-dam breaches in the mining industry have led to greater public scrutiny of how tailings are managed and mineral residues stored. While tailings are a major environmental liability, their treatment and disposal practices also present significant opportunities to optimise water and energy efficiencies.

#### **REDUCING OUR MINERAL RESIDUE FOOTPRINT**

We seek to reduce our impacts on land by reusing mineral residue where possible. For example, we used waste rock in constructing the containment dam at Mogalakwena. Some of the mine's waste-rock dumps are a source of low-grade PGMs and are remined, crushed and reprocessed. The waste rock is also processed into aggregates for construction and road-building. Waste rock at the Amandelbult and Twickenham operations supports small-scale crushing projects that reduce their waste-rock footprints and decrease our closure liability.

#### **LEADING PRACTICES**

We are implementing leading practices in all aspects of tailings and dam management, from concept, design, engineering, maintenance and surveillance to closure and post-closure:

- Co-disposal is in place at the Blinkwater TSF where the wall is from waste rock and tailings are deposited inside the facility, with an interface layer between the waste rock and tailings
- At Mogalakwena, we are also exploring water-efficient deposition methods, including the potential for depositing tailings as paste or filtered cake
- At Mototolo concentrator, a filter press processes coarse and discard streams to an acceptable size for bedding material in the new Mareesburg TSF. This will protect the synthetic liner installed as a pollution-control measure to prevent water from seeping into the groundwater below. Mototolo also uses hydro-cyclones to deposit tailings at the Helena TSF.

#### **EFFECTIVE RISK MANAGEMENT**

TSFs are classified as a critical risk and subject to a rigorous risk management programme. We have rolled out the new Anglo American mineral residue facilities technical standard at all our tailings dams and water-retaining dams, and now formally report against performance requirements. We have 10 tailings dams in total: four at Amandelbult, three at Mogalakwena, two at Mototolo, and one at Unki.

Our operations are completing self-assessments against the standard to identify and prioritise gaps in compliance. Action plans are then developed and implemented to address gaps. In 2019, we will roll out the standard for our waste-rock piles and develop surface-flooding risk management plans.

The new standard raises the bar in the level of care for our mineral residue facilities, exceeding legislated requirements, as we seek to move beyond compliance to leading practice. Implementation is in line with ICMM requirements on preventing catastrophic failure of tailings storage facilities and has full senior leadership support.

Risk assessments are carried out at all stages of mineral-residue facilities management including studies, projects, construction and implementation. Where critical controls are required at facilities, these are clearly identified and we assign appropriately skilled and resourced people to monitor, audit and review facilities. Critical controls at facilities are audited internally by our technical specialists and externally by tailings specialist companies.

In 2017, we identified a potential stability risk at the Helena TSF and took immediate remedial action by constructing a buttress wall using waste rock to raise the height of the facility, restoring acceptable levels of safety by the end of the year. Ongoing monitoring and further buttressing in 2018 have reinforced levels of safety.

#### **TECHNOLOGICAL INNOVATIONS**

At Mogalakwena and Mototolo, we have started to test the efficacy of a new digital tablet application during routine safety inspections of tailings facilities and water-retaining dams. This technology enables us to better monitor deficiencies and track maintenance at these facilities, removing all paperwork for dam inspections. The application is being rolled out across our operations.

At Mareesburg TSF, we will use fibre-optic cable technology to identify seepages and evaluate the integrity of the installed liner. These state-of-the-art, 'near real-time' monitoring technologies allow much more precise measurements of dam movement, alerting operations to potential problems they need to address.

#### **NON-MINERAL WASTE**

Our vision is to achieve and sustain zero hazardous and general waste to landfill by the end of 2020. Although total elimination of waste is not feasible, we aim to ensure that methods are in place to eliminate any disposal to landfills through waste recovery, reuse and recycling, as well as alternative technologies.

#### Our management approach

Amplats' approach to zero waste to landfill (ZW2L) demonstrates our commitment to leadership in managing non-mineral waste streams to minimise effects on human health and the environment. By eliminating unnecessary wastage and disposing of waste at landfill sites, we comply with requirements under South Africa's NEMA and Waste Act.

Since we set our ZW2L target (for all managed operations) in 2013, we have seen a progressive shift in waste management and behavioural practices. This has been supported by awareness campaigns and improved waste-stream sorting and recycling across the business. The implementation of key projects, reviewed below, have enabled us to move towards our 2020 goal.

To support a step-change in this strategy, in August 2018, we partnered with a waste specialist company to develop and implement sustainable solutions for key waste streams across our operations over the next three years. Through this strategic partnership, we aim to adequately identify, quantify and manage our diverse operational waste streams. Our approach encompasses the entire value chain, not only end-of-the-line production waste. The specialist company will work with existing operational suppliers and engage with our host communities. Internally, we will promote more coordinated cross-functional efforts across the business.

The focus in 2018 has been to identify site-specific waste streams and address immediate opportunities for improvements. We are also engaging with our suppliers to explore opportunities to improve waste collection, reuse, and recyclable packaging solutions at our operations. Through to 2020, the focus will shift to lifecycle solutions, in partnership with waste companies and community-based initiatives.

The management of hazardous substances is strictly regulated and controlled at our operations, and at the receiving-waste facilities, which are regularly audited by external parties.

#### **Our performance**

We report hazardous and non-hazardous waste separately and against targets. Total waste reduction from 2017 (12.8kt) to 2018 (7.9kt) was 38%. This was mainly achieved through key projects, renewed efforts to raise awareness on operational waste, and a focus on reuse and recycling improvements.

Kilotonnes	2018	2018	2017	2017
	target	actual	target	actual
Non-hazardous waste to legal landfill	3.03	2.30 <sup>LA</sup>	3.8	3.6
Hazardous waste to legal landfill	7.52	5.60 <sup>LA</sup>	22.0	9.2

Note: Excludes Union Mine divested 31 January 2018.

LA Limited Assurance provided by PwC. Refer to page 106 for the independent sssurance report.

Waste collected for recycling	2018	2017
Waste paper	499	318
Glass	32	47
Steel	11,535	7,294
Plastic	359	324
Hazardous and non-hazardous waste reused/recycled	15,553	6,900
Used oil recycled to external companies (kt)	604	0.065
Used grease recycled to external companies	25.4	2.9

#### **KEY INITIATIVES TO REDUCE WASTE TO LANDFILL**

Mine soil bioremediation: At our open-pit Mogalakwena Mine, instead of disposing of soil affected by hydrocarbon spills as hazardous waste, we have a site to treat the soil for reuse. We have processed close to 2,500 tonnes of contaminated soil since the site opened in September 2017, achieving a saving of almost R10 million. The process is being implemented at other operations.

Air filter project: At Mogalakwena, since June 2018, we have stopped disposing of air filters (used in trucks) to landfill. We now collect all air filters at the remediation site, cut them open with pneumatic sheers and separate the components. Metal is collected for recycling, and filter paper is sent for recycling in Mokopane, along with our general waste.

Shredding waste tyres for recycling: To manage waste tyres on site at the Mogalakwena complex, an agreement was previously in place with Redisa, the South African government's tyre recycling agency, to cut and chip the mine's off-the-road tyres. The project was put on hold when Redisa was liquidated in June 2017, but was resumed in 2018 by the Waste Bureau in the Department of Environmental Affairs. To date, we have downsized 1,270 tonnes of tyres to shredded, high-quality rubber for reuse. We have a further 2,000 tyres to downsize. Following a rigorous process, we are signing a contract with a company to downsize historical tyres (pre-levy tyres).

Wood chipping as compost: Mogalakwena has started a five-year exotic vegetation-removal project. Yellow bells will be felled, chipped and used as compost to improve the quality of remediated soils and sludges.

Selling sodium sulphate by-product: Sodium sulphate is a by-product at RBMR. Since 2017, we have improved the quality of the by-product and amended offtake contracts with customers to enable the sale of an additional 13,000 tonnes per annum, achieving savings of around R25 million to date, rather than disposing of the excess product as hazardous waste.

Combustible low-grade material: PMR produces a low-grade material stream that has been treated by an external party since 2017, through a process of thermal decomposition to produce an ash that is collected and returned to PMR to recover PGMs. This process eliminates disposal as hazardous waste.

### CASE STUDY: WASTE-TO-WONDERFUL ART COMPETITION

To extend awareness about waste recycling to our communities through interactive campaigns, in 2018 we introduced our waste-to-wonderful art competition. We ran the competition in eight schools around our operations, providing an opportunity for learners to express their creativity by transforming discarded materials into expressive pieces of art. The winning artworks from each school were displayed at our head office in Johannesburg, and an overall winner chosen. Over R20,000 in prizes were shared by the winning schools and artists.



Amplats CEO Chris Griffith supporting the campaign.

#### **CASE STUDY: ZERO WASTE TO LANDFILL**

The Amplats approach to zero waste to landfill (ZW2L) supports our commitment to sustainable development and ensures compliance with the regulatory framework, ie National Environmental Management Act 107 1998 (NEMA) and the Waste Act 59 2008. This means eliminating unnecessary wastage and waste generation that would eventually be sent to landfill sites. ZW2L aligns with the waste focus in our environmental strategy, which commits to the effective management of waste streams and seeking opportunities to:

- Reduce waste at source
- Reduce, reuse and recycle
- Empower innovative waste-related community projects.

Efficient waste management contributes to reducing costs over time, making ZW2L an opportunity to manage our waste streams more efficiently, avert future financial implications and set environmental best practice for the mining industry.

#### PMR combustible materials project

By 2018, Amplats could account for a clear step change, with total waste sent to landfill down 64% (22kt to 79kt) since 2013. While some of this reductions are due to our divestments, a sizable percentage is the result of key projects and our renewed focus on operational waste awareness campaigns, reuse and recycling.

To maintain this progress, a specialist waste company was appointed in August 2018 to support the ZW2L strategy by establishing sustainable solutions for key waste streams across our operations. The role of this strategic partnership is to adequately identify, quantify and manage our diverse operational waste streams, using a systems approach to assess the entire value chain, not only end-of-the-line production of waste.

The specialist company will work with existing operational suppliers and include communities. Since September 2018, it has been visiting our operations to identify site-specific waste streams and upfront concerns that can be resolved immediately. Engagements between Interwaste and our environmental team have included supply chain due to the key role of this function in communicating the objectives of this strategy to our suppliers. Applying the waste hierarchy (where preventing waste generation is most favoured) provides the rationale to engage with our suppliers on waste collection, reuse and recyclable packaging solutions to some of the waste found at our operations.

In 2018, we extended our annual Amplats environmental campaign by launching the Waste to Wonderful Art competition. Our operations ran a competition with their local schools, where learners were invited to express their creativity by reusing disposed material to create pieces of art. Winners from each operation were invited to the final competition round in Johannesburg, where winning schools received their share of over R20 000 in prizes. The competition also offered an opportunity to extend awareness of waste management to our communities.

These interactive awareness initiatives fit into the context of ZW2L by giving Amplats the opportunity to take our communities with us on this journey towards zero waste to landfill.

While the ZW2L strategy is premised on a 2020 target, a defining measure of success will be sustainably maintaining specific identified waste streams at zero. ZW2L is not a single action or exercise, but will require multiple efforts and cooperation from functions across the business. This includes continued awareness campaigns (focused internally and externally) and open communication, with clear expectations between ourselves and our suppliers.

#### **BIODIVERSITY**

Biodiversity underpins the structure, function and composition of ecosystems and the services they provide to societies and economies. To reduce our risk exposure, ensure access to land and increase opportunities in biodiversity and ecosystem services, we need to understand how our projects, operations and supply chains impact and depend on the environment around them.

#### Our management approach

In seeking to contribute to conserving biodiversity, we are guided by the ambitious Anglo American sustainability strategy. We are building the foundations for a step-change in our biodiversity stewardship as we work towards delivering net positive impact – meaning that our overall negative impacts on biodiversity will be outweighed by the biodiversity gains we achieve through conservation projects – by 2030.

To get us there, we will ensure we have the necessary supporting processes, capacity and resources to rigorously apply the mitigation hierarchy – avoid, minimise, rehabilitate/restore, compensate or offset – and to enhance regional and interregional cooperation on biodiversity and conservation.

In 2018, we provided input on developing an Anglo American group biodiversity performance standard, which defines minimum requirements to manage biodiversity to achieve net positive impact and maximise associated opportunities wherever we operate. Approved in November 2018, we will start implementing the standard in 2019, prioritising our operations in high-risk environments – Mogalakwena complex, the Der Brochen project and Twickenham. These sites will assess their actual and potential impacts on biodiversity using the tools and resources available such as the new biodiversity overlay assessment tool (a high-level desktop perspective for any exploration or existing operation of significant biodiversity risks in the actual or potential area of influence).

As part of this process, we are reassessing biodiversity risks and opportunities at our operations in high-risk environments. Earlier this year, at Unki in Zimbabwe, we trialled a net positive impact and biodiversity baseline assessment, which identified the need for further site data to fully understand our biodiversity risks and opportunities.

All at-risk operations have biodiversity action plans incorporated into their environmental management systems. A framework assists all operations to understand relevant biodiversity issues, while plans are in place for managing invasive plant species and conserving other important species. Regulatory requirements for environmental-impact offset arrangements, including compensation agreements, have been included as conditions of mining at certain operations.

In South Africa, we participated with the Department of Environmental Affairs in the review of the draft national environmental offset policy, which is due to be presented to cabinet for approval in 2019. Through the National Biodiversity and Business Network, we also participated in a biodiversity offsetting indaba to improve our internal capacity and understanding of biodiversity offsets, including associated risks and obligations for respective operations.

#### **OPERATIONAL DEVELOPMENTS**

Mogalakwena is offsetting its biodiversity risk by managing three farms as conservation areas. It also has a centre providing environmental training for community members of all ages, including sustainable land-use practices. We plan to extend the use of the Mooihoek and Groenfontein farms to form an integrated game farm.

In addition, the mine runs rehabilitation trials to guide future programmes. To improve knowledge of the biodiversity value of two of the farms in 2018, we conducted a small mammal survey. Eight different species of rodents were identified and a follow-up survey will be conducted once the area has received sufficient rain for vegetation growth. The new information is incorporated and shared in the youth sustainable development courses.

The impact of alien invasive plant species is a key risk to biodiversity. Whiskey Creek, Mototolo, Der Brochen, Mogalakwena and Twickenham all have ongoing eradication programmes. To mitigate

some of these activities, we support the annual Arbor Week in South Africa, with year-round tree planting across our operations and neighbouring communities.

As the Der Brochen project is in a biodiversity-rich area, it focuses on removing alien and invasive species while protecting indigenous and endemic fauna and flora. During prefeasibility studies on proposed mining developments, specialists have acquired robust biodiversity information.

At our Whiskey Creek site, in unspoilt indigenous forest, we are conducting a biodiversity stewardship assessment, together with the local conservation authority, to potentially enter into a voluntary agreement to protect and manage the site as a biodiversity priority area. This stewardship agreement will support conservation and sustainable resource use, providing long-term security for Whiskey Creek and helping meet national targets in terms of the Protected Areas Act.

## CONSERVATION AND SOCIO-ECONOMIC DEVELOPMENT

We are adopting a regional approach to identify, formalise and support strategic partnerships at local level, focused on conserving and protecting threatened and endemic species. The objective is to establish a framework with guiding principles and processes applicable across our operational footprint.

In Limpopo province, the socio-economic development (SED) platform was created for multiple stakeholders to partner in identifying and supporting opportunities to generate socio-economic and conservation benefits in the province. This work has included biodiversity-offset and agricultural initiatives that optimise the use of available (non-operational) land at a regional scale in these sectors. This builds on the leading example at Mogalakwena's farms (page 61).

As Amplats owns and manage large tracts of land in South Africa, with only around 20% actually used for mining and related activities, opportunities include linking community-owned land with mining concessions to create locally managed biodiversity conservation areas that contribute to the local economy through wildlife ranching and tourism. The programme is being developed in line with national biodiversity strategies, conservation plans and provincial development initiatives.

#### **AIR QUALITY**

Ensuring that we adequately understand and control the dust and gases we release at our operations is essential to prevent adverse impacts on host communities, and meet current and future legislative requirements.



#### Our management approach

Air quality and air emissions are governed by national and local legislation, as well as national and international conventions. Our Polokwane smelter received a renewed atmospheric emission licence (AEL) in February 2018. Licences for the Rustenburg smelter and refineries are due for renewal in 2021. The AELs are aligned to legislated emissions standards for South Africa.

In addition to GHGs, we monitor and manage the emission of sulphur dioxide  $(SO_2)$  and particulates (largely from our smelters), as well as dust (mainly from our tailings dams). We have three real-time ambient monitoring networks in Rustenburg, Polokwane and near the town of Northam.

We promote ongoing operational improvements in managing air quality risks by implementing the Anglo American group air quality and emissions technical standard, which was finalised and approved in August 2018. The standard guides our approach to effectively identifying risks and improving the management of air quality controls for dust and gaseous emissions (excluding emissions managed for occupational health impacts) that may pose a risk to humans, fauna and flora. In doing so, we reduce adverse impacts on communities, the risk of non-compliances, and strengthen our ability to meet evolving regulatory requirements.

A self-assessment against the standard was completed at Mogalakwena complex in 2018, and will be done at all other operations in 2019. These will inform the development of site-specific plans to address identified gaps and implement multi-year incremental air quality improvements.

#### SO, ABATEMENT

Our most material air quality issue relates to  $SO_2$  emissions from our three smelters in South Africa. These are regulated by the National Air Quality Act, which stipulated reduced  $SO_2$  emission levels by 2015, and a further reduction by 2020.

Our subsidiary, Rustenburg Platinum Mines Limited (RPM), has been granted a postponement for compliance with the 2015 limit for its Mortimer and Polokwane smelters. RPM started constructing an abatement project at its Polokwane smelter in 2018, which will use innovative technology to capture  $\mathrm{SO}_2$  gas from the furnace and convert it to sulphuric acid. The technology will ultimately reduce  $\mathrm{SO}_2$  emissions by an estimated 96% to comply with more stringent limits. Construction is expected to be complete by the end of 2022, with Mortimer to follow. Amplats is therefore applying for a postponement to 2020 limits at both smelters. Postponement will also be requested for Waterval smelter to allow for evaluation of the impact of future high sulphur concentrate.

#### Performance

All our South African operations completed and timeously submitted their process and mining emissions data, including GHGs, to the National Atmospheric Emission Inventory System in line with regulations.

Under national greenhouse gas (GHG) reporting regulations, companies are required to disclose their GHG emissions by 31 March of each year. That means 2018 data will only be submitted and approved by March 2018. As such, the 2017 data is reflected as a total of 14,779 tonnes of  $\mathrm{SO}_2$  (2016: 23,970 tonnes) and 937 tonnes of  $\mathrm{NO}_2$  (nitrogen dioxide) emissions (2017: 1,395 tonnes).

Ambient conditions for  $\mathrm{SO}_2$  at all three smelters remained below the limit of under 88 exceedances of the hourly standard per annum and the internal threshold of 35 exceedances. Except for one month (the analyser had acid forming on the sender/received lenses),  $\mathrm{SO}_2$  stack emissions for Mortimer smelter remained below the AEL limit of 30,000mg/Nm³. At Polokwane smelter, the AEL limit for  $\mathrm{SO}_2$ 

stack emissions of 30,000mg/Nm³ was exceeded in some months due to a higher sulphur content in the concentrate smelted.

Eight air quality-related complaints associated with the Waterval smelter complex in Rustenburg were received. All complaints are investigated and dealt with through the environmental management system.

#### MINE CLOSURE AND REHABILITATION

Our approach to mine-closure planning ensures that the full spectrum of life-of-mine opportunities, risks and liabilities is effectively identified, that plans are fully costed, and adequate provision is made for premature closure. Integrating mine-closure planning into operational strategy is the best way to address many of our mine-closure related risks and opportunities, particularly by rehabilitating land in parallel with mining activities.

#### Our management approach

The Anglo American mine-closure toolbox provides a structured approach to closure planning and management. We aim to reduce long-term environmental and socio-economic risks and liabilities, and ensure we leave a positive legacy when our mines end their operational lives. Our mine-closure planning focus areas are:

Establishing the status and prioritisation of our operations' closure plans

- Integrating planning processes
- Calculating and funding closure liabilities
- Engaging with relevant stakeholders.

The toolbox is designed to be used with other standards and toolboxes, including the Anglo American social way, socio-economic assessment toolbox (SEAT), and investment development model. All projects are required to develop a closure plan as part of the development and investment evaluation process.

#### **CLOSURE PLANS**

In 2018, we completed preliminary mine-closure plans for the Unki complex and Mototolo concentrator. All our operations now have standalone mine-closure plans, except Polokwane smelter, which will finalise its plan in 2019. Detailed closure plans are developed within five to 10 years of operational closure. The current life-of-mine for almost all our mines is 2040.

#### Closure-plan focus areas

At Mogalakwena and Amandelbult complexes, the focus in 2018 was on integrating closure planning into life-of-mine plans and concurrent rehabilitation projects. In addition, specialist studies were completed to understand any other potential closure risks such as soil, surface and groundwater contamination. Mogalakwena has integrated closure and rehabilitation actions into its life-of-mine planning and will finalise its long-term rehabilitation strategy in 2019.

At our underground Twickenham mine, under care and maintenance, there is little surface disturbance at present and

therefore no current rehabilitation opportunities. Site management has addressed contamination from hydrocarbon spillages near workshops by concreting the area. Illegal chrome mining in the mining-right area is currently a risk to the health and safety of local communities and to the environment. The DMR is addressing the matter in conjunction with the mining companies.

Key closure actions for Mototolo concentrator are to develop a comprehensive decommissioning plan for the Helena TSF (which has only one to two remaining years of tailings deposition) based on potential future groundwater impact; reinstate biodiversity on the concentrator footprint; and review and update the groundwater liability and related remediation requirements.

#### **CLOSURE LIABILITIES**

All our operations have detailed closure liability assessments that are updated annually, as legally required. These assessments are also used to determine the required financial provision for the operations as reported to the DMR, where required, and in the group accounts. Annual closure liability assessments are based on EMPR commitments and design criteria for closure planning for the operations.

#### **Independent assessment**

The 2018 liability has been estimated by an independent consultant using the standardised reclamation cost-estimating model, customised to South African conditions and populated with data relevant to Amplats' operations. As such, final closure liability estimates are more conservative and practical than the DMR model.

The 2018 liability estimate include the following main categories of costing for our operations:

- Infrastructure demolition and rehabilitation
- Rehabilitating mine residue deposits (tailings storage facilities, waste rock dumps, slag dumps, etc)
- Backfilling and rehabilitating open pits
- Environmental remediation such as rehabilitating contaminated soil, water courses and riparian ecosystems, etc
- · Lawful disposal of hazardous and non-hazardous waste
- Residual liability, mainly for ground and surface-water remediation, including post-closure monitoring and maintenance.

Amplats is still determining the residual liability for some of its operations (see table below). An overview of per-operation 2018 closure liabilities is also provided (see table on page 101). A detailed bill of quantities per operation is available on request from the company secretary office.

The 2018 closure liability assessment is based on identified closure risks (predominantly environmental) at each operation and developing a mitigation plan over the remaining life of operation. The table on page 102 summarises closure and rehabilitation risks at our operations.

The financial provision to address premature liability has two components – funds in the environmental rehabilitation trust and financial guarantees. The Platinum Producers' Environmental Trust is the main rehabilitation facility for Amandelbult and Mogalakwena complexes and Twickenham project. Mototolo concentrator is





provided for under the Mototolo Environmental Rehabilitation Trust. Please refer to the table on page 102 for further details.

Trust funds are invested over the life of relevant operations to ensure there will be sufficient funds at the end of life to sustainably close them. The annual financial statements for these trusts are available from the company secretary office.

#### **Surface and groundwater liabilities**

We have estimated and phased in surface and groundwater liabilities into the overall closure liability assessment for all our operations, specifically Mogalakwena, Amandelbult, Mototolo and Unki in 2018.

Assessing the groundwater liability and remediation requirements for all operations was a key project initiated in 2017 and expected to be finalised by end-2019. At year end, groundwater flow and transport models had been updated for Amandelbult, Unki, Mototolo concentrator and Mogalakwena. The liability based on the current groundwater contamination plume has been finalised for these operations. In addition, modelling work is under way at Rustenburg process operations, Polokwane smelter, Twickenham and Mortimer smelter and expected to be complete in 2019. The groundwater liability for the remaining operations will be finalised in 2019.

#### Closure liability estimates and corresponding financial provisions for year end 2018

	Operations	Remaining life of operations (as per mining rights) (years)	Premature closure liability as at end 2018 (excluding residual liability, DMR weighting factor, Ps and Gs, cont and VAT) (ZAR million')	Residual liability related to ground and surface water remediation (ZAR million')	Total premature closure liability (including residual liability, DMR weighting factor, Ps and Gs, cont and VAT) (ZAR million')	Types and extent of damages covered in the premature liability	Closing balance in the rehabilitation trust as at end 2018 (ZAR million*)	Financial guarantees in place as at end 2018** (ZAR million*)	Name of the rehabilitation trust/ beneficiaries
North West	Mortimer smelter Precious Metals Refiners (PMR) Waterval smelter and ACP  Rustenburg Base Metals Refiners (RBMR)	Dependent on the life of mining operation they process the ore from	38 141 122 569	Will be finalised by end 2019	Since process operations are not governed under MPRDA or NEMA financial provision regulation, they are not required to calculate and provide financial provision	Infrastructure demolition and rehabilitation     Rehabilitation of mine residue deposit (slag dump)     Disposal of hazardous and non-hazardous waste     Remediation of environmental contamination, such as soil contamination     Post-closure monitoring and maintenance	governed under Department of		Since process operations are not governed under MRPDA or NEMA financial provision regulations, they are not required provided the financial provision
	Amandelbult complex	22	526	6	745	Infrastructure demolition     and rehabilitation	135	610	Platinum Producers'
ououmil	Mogalakwena complex  Twickenham platinum project	22	1,048	Will be finalised by end 2019	76	Rehabilitation of mine residue deposit (tailings storage facilities, waste rock dumps, slag dumps, etc) Backfilling and rehabilitation of open pits Disposal of hazardous and non-hazardous waste	17	1,084	Environmental Trust/Anglo American Platinum Operations Mototolo Environmental Rehabilitation Trust/AAP and
Zimbahwa	Mototolo concentrator  Unki Mine	The mineral rights tenure in Zimbabwe is not restricted to certain number of years	63 USD5.1m	11 USD1m	Zimbabwe legislation does not require to calculate and provide the financial provision	Remediation of environmental contamination, such as soil contamination     Residual liability, mainly related to ground and surface water remediation including post-closure monitoring and maintenance	51  Zimbabwe legi	slation does not req trust provision	Glencore

<sup>\*</sup> ZAR is only used for South African operations, the closure liability for Zimbabwe operations (Unki Mine) is estimated in USD.

<sup>\*\*</sup>The guarantee amounts include the 2018 top-ups that will be submitted to the DMR in Q1 2019.

#### Closure and rehabilitation risks and corresponding remedial actions at end 2018

Top five risk/ remediation	Mortimer smelter	Precious Metals Refiners (PMR)	Waterval smelter and ACP	Rustenburg Base Metals Refiners (RBMR)	Amandelbult complex	Mogalakwena complex	Twickenham project	Mototolo concentrator	Unki Mine
Risk <b>1</b>	Successful rehabilitation of slag dump	Groundwater contamination due to processing activities	Groundwater contamination due to processing activities	Groundwater contamination due to processing activities	Degradation of land productivity	Successful rehabilitation of the waste rock dumps	Groundwater contamination due to mining activities	Groundwater contamination due to concentrating activities	Groundwater contamination due to mining activities
Risk <b>2</b>	Groundwater contamination due to mining and processing activities	Soil contamination	Soil contamination	Soil contamination	Soil contamination	Access to open	Illegal mining in the surrounding areas	Stability of the Helena TSF	Illegal mining in the surrounding areas
Risk <b>3</b>	Soil contamination	-	Air quality impact	-	Loss of biodiversity	Soil contamination	Soil contamination	Loss of biodiversity	Lack of natural growth medium such as top soil
Risk 4	Air quality impact	-	-	-	Successful rehabilitation of open-cast operations	Loss of biodiversity	-	Lack of natural growth medium such as top soil	-
Risk <b>(5</b> )	-	-	-	-	Groundwater contamination due to mining activities	Groundwater contamination due to mining activities	-	-	-

#### **REHABILITATION**

#### Operational footprint and impact (Ha)

	Company- managed land	Total land altered for mining and commercial activities, and supporting infrastructure	Land fully rehabilitated and land rehabilitated but not yet meeting agreed land use objectives	Area available for rehabilitation	Rehabilitation target for 2018	Reshaping completed YTD 2018	Growth medium construction completed YTD 2018	Seeding completed YTD 2018
Amandelbult	44.470.40	4 400 00	47.04	100 55	55.40	00.5		0.04
complex	11 172.42	1 422.99	17.01	198.55	55.42	26.5	8.2	0.61
Mogalakwena								
complex	14 985.78	3 798.57	2.3	_	2.68			1.12

One of our most important responsibilities is to rehabilitate the land we disturb to a condition that meets the expectations of affected communities and other stakeholders.

Amplats manages 41,594ha of land, of which 7,538ha have been altered for mineral-extraction activities. The decrease in 2018 land managed and altered areas compared to 2017 reflects the sale of Union section in the review period.

All our mines are underground operations, except the open-pit Mogalakwena Mine. Our most significant surface disturbances are TSFs and waste-rock dumps, as well as roads and infrastructure and Mogalakwena's open pits.

All our mining operations have rehabilitation plans that are reviewed annually and updated. Disturbed land is rehabilitated concurrently, where possible, which involves the staged rehabilitation of disturbed areas over mining project phases instead of large-scale work when the mine closes. All TSFs have concurrent rehabilitation plans that include revegetation as well as dust and water management.

Our South African operations follow prescribed standards for remediating contaminated land as per the Waste Act. Mogalakwena has a bioremediation site to treat soil contaminated by hydrocarbons.

The total estimated undiscounted rehabilitation liability for our managed mining operations (excluding process operations and joint ventures) at the end of 2018 was at R1.62 billion.

#### Rehabilitation targets

Mogalakwena and Amandelbult complex set annual targets that are aligned with five and 10-year rehabilitation targets, as required by the group rehabilitation strategy. Our other operations do not set specific rehabilitation targets as they have a less significant impact on the land.

In 2018, the overall rehabilitation target for Amplats was 58.1ha, comprising 55.42ha at Amandelbult and 2.68ha at Mogalakwena. At year end, Amplats had met 33% of this target:

- Amandelbult's 2018 rehabilitation targets related predominantly
  to open-pit rehabilitation of 44.5ha. Altogether 35ha of pit area
  was being fully backfilled, of which 8.2ha was reshaped and top
  soiled. Given cash constraints towards the end of the year,
  management revised the concurrent rehabilitation plan and
  deferred rehabilitation by a year. As such, remaining rehabilitation
  could not be completed. In addition, an old shaft site spanning
  8ha was sealed and rehabilitated. The remaining 1 ha of side
  slopes were revegetated at Amandelbult TSF.
- At Mogalakwena, 1.2ha of waste-rock dump side slopes have been rehabilitated in trials and are being monitored for efficacy. The remaining 2018 target of 1.48ha was to revegetate side slopes at the Vaalkop TSF, with 1.18ha completed. Due to limited revegetation success and dust issues, the revegetation plan was stopped and reviewed for more efficient options. In 2019, a revised mitigation plan will be implemented of the TSF.

#### **PRODUCT STEWARDSHIP**

Society is increasingly demanding sustainable products made with sustainable materials. We are committed to meeting this need and, thus, understand the risks and opportunities of materials we produce throughout the lifecycle.

In 2018, we made significant progress in addressing several market-access risks for platinum, which stem primarily from regulation or customer expectation.

#### **REGULATORY COMPLIANCE**

Our mandatory product-compliance obligations are mainly derived from two sources. First, implementation of the European Union's registration, evaluation, authorisation and restriction of chemicals (REACH) regulation – a leading initiative to improve the protection of human health and the environment from potential risks associated with chemicals. Secondly, the UN's globally harmonised system of classification and labelling of chemicals (GHS), which influences standards for hazard assessment and communication in the global trade of our products and sets operational standards in many countries where we operate. Regulations similar to REACH are being developed in China, Korea and Taiwan.

REACH and GHS apply to all chemical substances, including minerals and metals, and failure to comply with these obligations would put our ability to access markets at risk. Comprehensive systems are in place to ensure ongoing compliance.

In 2018, we successfully finalised the REACH registration of our PGMs. This has generated high-quality data on our products and their applications, which will ensure they are used appropriately – maximising their benefit to society. We have a strategy in place to ensure continued REACH compliance under various potential scenarios once the United Kingdom leaves the European Union.

We are also ensuring ongoing compliance with regulations in other regions where we sell our products, establishing a continuous process of product testing, hazard assessment and communication via safety-data sheets. In 2018, we updated product safety-data sheets for nearly all our major outbound products and initiated training programmes to ensure that where products are deemed to be 'dangerous goods', the relevant packaging, labelling and consignment procedures are met – as defined in the United Nation's international maritime dangerous goods code.

#### **CUSTOMER EXPECTATION**

In 2018, we recorded a marked increase in customers, including high-profile automotive and chemical manufacturers, seeking assurance on our business practices. This ranged from business ethics and anti-corruption to sustainability credentials and even animal-testing policies and use of animal-derived chemicals in production processes. We are collaborating with Anglo American in responding to enquiries and evolving expectations.

#### **Environmental indicators**

for the year ended 31 December

	2018	2017	2016	2015	2014
MATERIALS – kilotonnes					
Rock broken – managed operations (100%)	97,369	98,340	112,433	152,414	143,219
Ore milled – managed operations (100%)	25,378	26,066	37,165	36,305	29,593
Accumulated low-grade stockpiles	59,909	55,710	49,060	41,811	37,586
Coal	133.96	142.27	132.58	137.02	134.2
Liquid petroleum gas (LPG)	5.68	4.62	4.84	4.17	4.65
Grease	0.29	0.34	0.37	0.37	0.33
FUELS – megalitres	79.55	74.88	75.68	70.8	67.46
Lubricating and hydraulic oils	2.83	7.66	53.14	15.97	8.31
ENERGY – terajoules					
Energy from electricity purchased	13,402	14,889	18,112	18,751	16,376
Energy from processes and fossil fuels	6,609	6,608	6,516	6,428	6,257
Total energy consumed	20,011RA	21,497	24,628	25,178	22,633
WATER – megalitres					
Total water withdrawals#	24,433	26,533	32,687	33,197	27,137
Potable water from an external source	6,142	9,433	12,327	14,408	13,581
Non-potable water from an external source <sup>†</sup>	6,189	5,595	10,021	4,961	7,618
Surface water used	1,418	1,396	4,521	9,343	2,590
Groundwater used	10,684	10,110	5,826	4,695	3,369
Water recycled in processes <sup>†††</sup>	25,783	28,791	54,631	60,170	51,462
LAND - hectares					
Land under company charge for current mining activities	98,374	109,299	108,202	117,266	116,792
Land under management control	41,594	43,240	42,142	46,644	53,042
Land used for current mining and related activities	7,539	8,600	7,903	10,321	8,612
Total tailings dam area	1,316	1,564	1,593	2,326	2,326
Total waste rock dump area	1,134	928	947	1,097	1,043
All land owned	13,685	13,685	13,685	21,154	33,543
EMISSIONS – kilotonnes					
GHG emissions, CO <sub>2</sub> e (scope 1 and 2 only)	4,118	4,612	5,579	5,878	5,363
From electricity purchased (scope 2 GHG emissions)	3,560 <sup>RA</sup>	4,049	5,034	5,316	4,817
Internally generated – from fossil fuels (scope 1 GHG emissions)	558RA	563	545	561	547
Nitrous oxides	NM	0,937	1,395	NM	NM
Sulphur dioxide**	NM	14.78	23.97	19.66	15.46
Particulates (point sources)	0.03	0.04	0.18	0.16	0.15
DISCHARGE – megalitres					
Discharge to surface water	352	769	913	278	557
QUALITY					
Surface water quality monitored at all operations	Yes	Yes	Yes	Yes	Yes
Surface water quality deterioration off-site	Yes	Yes	Yes	Yes	Yes
Adverse surface water impact on humans	No	No	No	No	No
Groundwater quality monitored at all operations	Yes	Yes	Yes	Yes	Yes
Groundwater quality deterioration	Yes	Yes	Yes	Yes	Yes
Adverse groundwater impact on humans	No	No	No	No	No

#### **Environmental indicators** continued

for the year ended 31 December

	2018	2017	2016	2015	2014
WASTE - kilotonnes					
Mineral waste accumulated in:					
Tailings dams (active and inactive)*	400,059	467,072	439,118	841,963	830,176
Rock dumps	1,488,359	1,184,522	1,115,410	1,053,785	972,125
Slag dumps	6,340	5,820	5,218	4,728	4,257
Non-mineral waste generated					
Hazardous to landfill	5.60 <sup>LA</sup>	9.22	15.51	9.01	9.85
Hazardous incinerated	0.09	0	0	0.02	0.01
Non-hazardous to landfill	2.30 <sup>LA</sup>	3.58	5.82	9.76	8.27
Non-hazardous incinerated	-	_	_	_	_
ENVIRONMENTAL INCIDENTS AND COMPLAINTS					
Level 1	209	381	603	453	525
Level 2	12	10	28	18	37
Level 3	O <sup>RA</sup>	0	0	0	0
Level 4 and 5	O <sup>RA</sup>	0	0	0	0
Formal complaints	8	9	23	2	9
Substandard acts and conditions	1,536	1,480	1,786	2,135	1,957
PRODUCTS – ounces					
Total refined PGMs and gold	4,507,335	4,621,211	4,641,604	4,766,736	3,626,867

Total water withdrawals or abstractions (total water inflows).

Water reporting requirements changed in 2017 to align with ICMM. Water use for primary and non-primary activities are no longer reported.

Non-potable water from external sources includes waste or second-class water (prior years).

Lower recycled water reported in 2017 is mainly due to sale of Rustenburg concentrator which accounted for over 40% of measured recycled streams in 201.

Annual calculated tonnage of SO<sub>2</sub> from Amplats processes only available for reporting by 31 March 2019 as per NAEIS (DEA reporting) system.

NM = not measured.

Reasonable assurance provided by PwC. Refer to page 106 for the independent assurance report.

LA Limited assurance provided by PwC. Refer to page 106 for the independent assurance report.

### INDEPENDENT AUDITOR'S ASSURANCE REPORT

ON THE SELECTED SUSTAINABILITY INFORMATION IN ANGLO AMERICAN PLATINUM LIMITED'S 2018 INTEGRATED AND SUPPLEMENTARY REPORT

#### TO THE DIRECTORS OF ANGLO AMERICAN PLATINUM LIMITED

We have undertaken an assurance engagement in respect of the selected sustainability information, as described below, and presented in the 2018 integrated report and 2018 supplementary report of Anglo American Platinum Limited (the 'company', 'Amplats' or 'you') for the year ended 31 December 2018 (the Reports). This engagement was conducted by a multidisciplinary team including health, safety, environmental and assurance specialists with relevant experience in sustainability reporting.

#### **SUBJECT MATTER**

We have been engaged to provide a reasonable assurance opinion and a limited assurance conclusion on the selected sustainability information, marked with either "RA" or "LA" on the relevant pages in the Reports. The selected sustainability information described below has been prepared in accordance with the company's reporting criteria that accompanies the sustainability information on the relevant pages of the Reports (the accompanying reporting criteria).

#### REASONABLE ASSURANCE

Selected sustainability information	Unit of measurement	Integrated report page number	Supplementary report page number
Total work-related fatal injuries	Number	80	31
Fatality injury frequency rate (FIFR)	Rate	80	31
Total recordable case frequency rate (TRCFR)	Rate	80	31
Total number of new cases of noise-induced hearing loss (NIHL)	Number	81	34
Total Scope 1 carbon emissions	Kilotonne CO <sub>2</sub> e	85	104
Total Scope 2 carbon emissions	Kilotonne CO₂e	85	104
Total energy used	Terajoules	84	104
Total number of level 3, 4 and 5 environmental incidents	Number	85	105
Corporate social investment spend (CSI)	ZAR	84	69
Employment equity per the mining charter	%	83	45
Total employee turnover excluding VSPs	%	83	50

#### LIMITED ASSURANCE

Selected sustainability information	Unit of measurement	Integrated report page number	Supplementary report page number
Workers potentially exposed to inhalable hazards above the exposure limit	Number	81	34
Workers potentially exposed to carcinogens above the exposure limit	Number	81	34
Hazardous waste to landfill	Kilotonnes	85	105
Non-hazardous waste to landfill	Kilotonnes	85	105

We refer to this information as the 'selected sustainability information for reasonable assurance' and 'selected sustainability information for limited assurance', respectively, and collectively as the 'selected sustainability information'.

#### YOUR RESPONSIBILITIES

The directors are responsible for the selection, preparation and presentation of the selected sustainability information in accordance with the accompanying reporting criteria as set out on page 113 of the 2018 supplementary report (the 'reporting criteria').

This responsibility includes:

- The identification of stakeholders and stakeholder requirements, material issues, commitments with respect to sustainability performance
- The design, implementation and maintenance of internal control relevant to the preparation of the Reports that is free from material misstatement, whether due to fraud or error.

The directors are also responsible for determining the appropriateness of the measurement and reporting criteria in view of the intended users of the selected sustainability information and for ensuring that those criteria are publicly available to the report users.

#### **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, energy and other emissions conversion factors derived by independent third parties, or internal laboratory results, our assurance work will not include examination of the derivation of those factors and other third party or laboratory information.

### **OUR INDEPENDENCE AND QUALITY CONTROL**

We have complied with the independence and other ethical requirements of the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board for Auditors (IRBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The IRBA Code is consistent with the International Ethics Standards Board for Accountants Code of Ethics for Professional Accountants (Part A and B).

The firm applies the 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 RESPONSIBILITY**

Our responsibility is to express either a reasonable assurance opinion or limited assurance conclusion on the selected sustainability information as set out in the subject matter paragraph, based on the procedures we have performed and the evidence we have obtained. We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000 (Revised)), and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements (ISAE 3410) issued by the International Auditing and Assurance Standards Board. These standards require that we plan and perform our engagement to obtain the appropriate level of assurance about whether the selected sustainability information are free from material misstatement.

The procedures performed in a limited assurance engagement vary in nature and timing, and are less in extent than for a reasonable assurance engagement. As a result, 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.

### (a) Reasonable assurance

A reasonable assurance engagement in accordance with ISAE 3000 (Revised), and ISAE 3410, involves performing procedures to obtain evidence about the measurement of the selected sustainability information and related disclosures in the Reports. The nature, timing and extent of procedures selected depend on the auditor's professional judgement, including the assessment of the risks of material misstatement of the selected sustainability information, whether due to fraud or error.

In making those risk assessments we have considered internal control relevant to the company's preparation of the selected sustainability information. A reasonable assurance engagement also includes:

- Evaluating the appropriateness of quantification methods, reporting policies and internal guidelines used and the reasonableness of estimates made by the company
- Assessing the suitability in the circumstances of the company use
  of the applicable reporting criteria as a basis for preparing the
  selected sustainability information
- Evaluating the 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) Limited assurance

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 information, assessing the risks of material misstatement of the selected sustainability 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 information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Accordingly, for the selected sustainability information where limited assurance was obtained, we do not express a reasonable assurance opinion about whether the company's selected sustainability information have been prepared, in all material respects, in accordance with the accompanying reporting criteria. The procedures we performed were based on our professional judgement and included enquiries, 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 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 judgements made by the directors in the preparation of the selected sustainability information

## INDEPENDENT AUDITOR'S ASSURANCE REPORT

# ON THE SELECTED SUSTAINABILITY INFORMATION IN ANGLO AMERICAN PLATINUM LIMITED'S 2018 INTEGRATED AND SUPPLEMENTARY REPORT CONTINUED

 Evaluated whether the selected sustainability information presented in the Reports are consistent with our overall knowledge and experience of sustainability management and performance at the company.

## REASONABLE ASSURANCE OPINION AND LIMITED ASSURANCE CONCLUSION

### (a) Reasonable assurance opinion

In our opinion and subject to the inherent limitations outlined elsewhere in this report, the selected sustainability information set out in the subject matter paragraph above for the year ended 31 December 2018 are prepared, in all material respects, in accordance with the reporting criteria.

### (b) Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, and subject to the inherent limitations outlined elsewhere in this report, nothing has come to our attention that causes us to believe that the selected sustainability information as set out the subject matter paragraph above for the year ended 31 December 2018 are not prepared, in all material respects, in accordance with the reporting criteria.

#### **OTHER MATTERS**

Our report includes the provision of limited assurance on 'workers potentially exposed to inhalable hazards above the exposure limit' and 'workers potentially exposed to carcinogens above the exposure limit'. We were previously not required to provide assurance on these selected sustainability information.

The following reasonable assurance selected sustainability information were assured at a limited assurance level in the prior year:

- Corporate social investment spend (CSI)
- Total employee turnover excluding VSPs
- Employment equity per the mining charter.

The maintenance and integrity of Amplats' website is the responsibility of Amplats' 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 Amplats' 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 information to the directors of the company 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 the company, for our work, for this report, or for the conclusion we have reached.

PricewaterhouseCoopers Inc.
Director: **Jayne Mammatt** 

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Registered auditor

Johannesburg 8 March 2019

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◆ IR Integrated report

SR Supplementary report

Annual financial statements

Amplats adopted GRI standards in 2017. This index guides readers to relevant data or notes reasons for omission as permitted by GRI.

GRI index						
Standard				Page	Omission	
GRI 102	General disclosures	102-1	Name of the organisation	Cover		
		102-2	Activities, brands, products and service	<b>♦</b> 6		
		102-3	Location of headquarters	♦ 8		
		102-4	Location of operations	♦ 8		
		102-5	Ownership and legal form	<b>1</b> 40		
		102-6	Markets served	<b>♦</b> 6		
		102-7	Scale of the organisation	♦ 8		
		102-8	Information on employees and other workers	♦ 8		
		102-9	Supply chain	<b>•</b> 78		
		102-10	Significant changes to the organisation and its supply chain	Zero		
		102-11	Precautionary principle or approach	● 83		
		102-12	External initiatives	<b>6</b> 1		
		102-13	Membership of associations	● 75		
		102-14	Statement from senior decision-maker	<b>♦</b> 35		
		102-15	Key impacts, risks and opportunities	<b>◆</b> 23		
		102-16	Values, principles, standards and norms of behaviour	<b>2</b> 0		
		102-17	Mechanisms for advice and concerns about ethics	<b>◆</b> 99, 140		
		102-18	Governance structure	<b>◆</b> 98		
		102-19	Delegating authority	<b>◆</b> 98, 103		
		102-20	Executive-level responsibility for economic, environmental and social topics	<b>◆</b> 98		
		102-21	Consulting stakeholders on economic, environmental and social topics	<b>◆</b> 10		
		102-22	Composition of board and its committees	<b>◆</b> 98		
		102-23	Chair of board	<b>♦</b> 92		
		102-24	Nominating and selecting the board	<b>1</b> 00		
		102-25	Conflicts of interest	<b>◆</b> 103		
		102-26	Role of board in setting purpose, values and strategy	<b>◆</b> 102		
		102-27	Collective knowledge of board	<b>1</b> 01		
		102-28	Evaluating the board's performance	<b>♦</b> 99		
		102-29	Identifying and managing economic, environmental and social impacts	<b>◆</b> 102		
		102-30	Effectiveness of risk management processes	<b>◆</b> 102		
		102-31	Review of economic, environmental and social topics	<b>◆</b> 102		
		102-32	Board's role in sustainability reporting	<b>◆</b> 115		
		102-33	Communicating critical concerns	<b>◆</b> 16		
		102-34	Nature and total number of critical concerns	<b>◆</b> 16		
		102-35	Remuneration policies	<b>♦</b> 121		
		102-36	Process for determining remuneration	<b>◆</b> 121		
		102-37	Stakeholders' involvement in remuneration	<b>◆</b> 125		
		102-38	Annual total compensation ratio	<b>◆</b> 126		
		102-39	Percentage increase in annual total compensation ratio	<b>◆</b> 126		
		102-40	List of stakeholder groups	<b>◆</b> 10		
		102-41	Collective bargaining agreements	• 48		

## **GRI INDEX**

◆ IR Integrated report

SR Supplementary report

Annual financial statements

Standard				Page	Omission
		102-42	Identifying and selecting stakeholders	<b>1</b> 0	
		102-43	Approach to stakeholder engagement	<b>◆</b> 10	
		102-44	Key topics and concerns raised	<b>1</b> 0	
		102-45	Entities included in the consolidated financial statements	<b>•</b> 1	
		102-46	Defining report content and topic boundaries	<b>•</b> 2	
		102-47	List of material topics	<b>◆</b> 16	
		102-48	Restatements of information	Zero	
		102-49	Changes in reporting	Zero	
		102-50	Reporting period	<b>♦</b> 2	
		102-51	Date of most recent report	<b>♦</b> 2	
		102-52	Reporting cycle	<b>♦</b> 2	
		102-53	Contact point for questions on the report	<b>1</b> 40	
		102-54	Claims of reporting in accordance with the GRI standards	<b>◆</b> 1	
		102-55	GRI content index	<b>1</b> 06	
		102-56	External assurance	<b>◆</b> 1	
GRI 103	Management approach	103-1	Explanation of the material topic and its boundary	<b>4</b> 2	
		103-2	Management approach and its components	<b>•</b> 16	
		103-3	Evaluation of the management approach	<b>1</b> 6	
GRI 201	Economic performance		Management approach disclosures	<b>4</b> 0	
		201-1	Direct economic value generated and distributed	<b>♦</b> 5	
		201-2	Financial implications and other risks and opportunities due to climate change	• 93	
		201-3	Defined benefit plan obligations and other retirement plans	■ 39	
		201-4	Financial assistance received from government	Zero	
GRI 202	Market presence		Management approach disclosures	<b>◆</b> 54	
		202-1	Ratios of standard entry level wage by gender compared to local minimum wage	_	Confidential negotiated
		202-2	Proportion of senior management hired from the local community	• 44	
GRI 203	Indirect economic impacts		Management approach disclosures	<b>◆</b> 75	
		203-1	Infrastructure investments and services supported	<b>•</b> 70	
		203-2	Significant indirect economic impacts	<b>•</b> 70	
GRI 204	Procurement practices		Management approach disclosures	● 78	
		204-1	Proportion of spending on local suppliers	● 78	
GRI 205	Anti-corruption		Management approach disclosures	<b>◆</b> 103	
		205-1	Operations assessed for risks related to corruption	<b>◆</b> 103	
		205-2	Communication and training about anti-corruption policies and procedures	<b>◆</b> 103	
		205-3	Confirmed incidents of corruption and actions taken	<b>◆</b> 103	
GRI 206	Anti-competitive behaviour		Management approach disclosures	<b>◆</b> 99	
		206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	Zero	
GRI 300	Environmental		Management approach disclosures	● 83	
GRI 301	Materials	301-1	Materials used by weight or volume	<b>1</b> 04	
		301-2	Recycled input materials used		

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Standard				Page	Omission
GRI 302	Energy	302-1	Energy consumption within the organisation	<b>9</b> 2	
		302-2	Energy consumption outside of the organisation	<b>9</b> 2	
		302-3	Energy intensity	• 93	
		302-4	Reduction of energy consumption	• 93	
		302-5	Reductions in energy requirements of products and services	• 93	
GRI 303	Water	303-1	Water withdrawal by source	● 87,90	
		303-2	Water sources significantly affected by withdrawal of water	<b>9</b> 0	
		303-3	Water recycled and reused	<b>1</b> 04	
GRI 304	Biodiversity	304-1	Operational sites owned/leased/managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas	<b>9</b> 8	
		304-2	Significant impacts of activities, products and services on biodiversity	<b>9</b> 8	
		304-3	Habitats protected or restored	<b>9</b> 8	
		304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	<b>9</b> 8	
GRI 305	Emissions	305-1	Direct (scope 1) GHG emissions	<b>1</b> 04	
		305-2	Energy indirect (scope 2) GHG emissions	<b>1</b> 04	
		305-3	Other indirect (scope 3) GHG emissions	<b>1</b> 04	
		305-4	GHG emissions intensity	• 93	
		305-5	Reduction of GHG emissions	• 93	
		305-6	Emissions of ozone-depleting substances (ODS)	• 93	
		305-7	Nitrogen oxides (NO <sub>v</sub> ), sulfur oxides (SO <sub>v</sub> ) and other significant air emissions	• 93	
GRI 306	Effluents and waste	306-1	Water discharge by quality and destination	<b>9</b> 0	
		306-2	Waste by type and disposal method	<b>9</b> 6	
		306-3	Significant spills	Zero	
		306-4	Transport of hazardous waste	<b>9</b> 5	
		306-5	Water bodies affected by water discharges and/or runoff	<b>9</b> 0	
GRI 307	Environmental compliance	307-1	Non-compliance with environmental laws and regulations	● 85	
GRI 308	Supplier environmental assessment	308-1	New suppliers screened using environmental criteria		
		308-2	Negative environmental impacts in the supply chain and actions taken		
GRI 400	Social		Management approach disclosures	<b>5</b> 5	
GRI 401	Employment	401-1	New employee hires and employee turnover	<b>5</b> 0	
		401-2	Benefits provided to full-time employees not provided to temporary/part-time employees	■ 39	
		401-3	Parental leave	<b>3</b> 9	
	Labour/management				
GRI 402	relations	402-1	Minimum notice periods on operational changes	<b>4</b> 8	
GRI 403	Occupational health and safety	403-1	Workers' representation in formal joint management-worker health and safety committees	<b>4</b> 8	
		403-2	Types and rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities	● 25, 31, 34	
		403-3	Workers with high incidence or high risk of diseases related to their occupation	<b>3</b> 4	
		403-4	Health and safety topics covered in formal agreements with trade unions	<b>3</b> 2	

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GRI index					
Standard				Page	Omission
GRI 404	Training and education	404-1	Average hours of training per year per employee	<b>5</b> 1	
		404-2	Programmes for upgrading employee skills and transition assistance programmes	• 49	
		404-3	Percentage of employees receiving regular performance and career development reviews		
GRI 405	Diversity and equal opportunity	405-1	Diversity of governance bodies and employees	◆ 103, ● 45	
		405-2	Ratio of basic salary and remuneration of women to men	<b>◆</b> 121	
GRI 406	Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	Zero	
GRI 407	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	Zero	
GRI 408	Child labour	408-1	Operations and suppliers at significant risk for incidents of child labour	Zero	
GRI 409	Forced or compulsory labour	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	Zero	
GRI 410	Security practices	410-1	Security personnel trained in human rights policies or procedures	● 80	
GRI 411	Rights of indigenous peoples	411-1	Incidents of violations involving rights of indigenous peoples	Zero	
GRI 412	Human rights assessment	412-1	Operations subject to human rights reviews or impact assessments	<b>•</b> 74	
		412-2	Employee training on human rights policies or procedures	<b>•</b> 74	
		412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	• 74	
GRI 413	Local communities	413-1	Operations with local community engagement, impact assessments and development programmes	• 55	
		413-2	Operations with significant actual and potential negative impacts on local communities	<b>•</b> 55	
GRI 414	Supplier social assessment	414-1	New suppliers screened using social criteria	● 78	
		414-2	Negative social impacts in the supply chain and actions taken	<b>•</b> 78	
GRI 415	Public policy	415-1	Political contributions	Zero	
GRI 416	Customer health and safety	416-1	Assessment of health and safety impacts of product and service categories	_	Information not available – disclosure from FY19 above
		416-2	Incidents of non-compliance for health and safety impacts of products and services	_	Not available
GRI 417	Marketing and labelling	417-1	Requirements for product and service information and labelling		Not applicable
		417-2	Incidents of non-compliance on product and service information and labelling		Not applicable
		417-3	Incidents of non-compliance on marketing communications		Not applicable
GRI 418	Customer privacy	418-1	Substantiated complaints on breaches of customer privacy and losses of customer data	Zero	
GRI 419	Socio-economic compliance	419-1	Non-compliance with laws and regulations in the social and economic area	Zero	

ACP	Amplats converting process, a pyrometallurgical process used at the Waterval smelter complex in Rustenburg.
Aids	Acquired immune deficiency syndrome, a disease of the immune system caused by HIV infection.
AMCU	Association of Mineworkers and Construction Union.
Au	The symbol for gold.
Base metal	A common metal that is not considered precious, eg copper, tin or zinc.
BBBEE	Broad-based black economic empowerment. This is a broadening of earlier BEE (see below) policy and attempts to spread the benefits of economic empowerment to the widest possible spectrum of black South Africans.
BEE	Black economic empowerment, a policy of the South African government aimed at increasing the access of black South Africans to productive assets. It seeks to 'promote new opportunities for and increase the levels of participation of black people in the ownership, management and control of economic activities'.
Bioremediation	Treatment or waste-management technique that uses naturally occurring organisms to break down hazardous substances into less toxic or non-toxic substances.
BRPM	Bafokeng Rasimone Platinum Mine.
CDP	An independent not-for-profit organisation that acts as an intermediary between shareholders and corporations on all issues related to climate change. It provides the global marketplace with primary climate-change data gathered from the world's largest corporations.
CO <sub>2</sub>	Carbon dioxide.
Company- managed land	An area of land under the direct management of the company. It includes company-owned land, land managed/mined on behalf of third parties, land leased from third parties, company land leased to third parties, land under servitude, land set aside for biodiversity offsets, etc at the end of the reporting period. The parameter excludes privately owned land above company mineral/mining rights areas, and undeveloped projects/prospects where the land does not yet fall under the direct management or ownership of the company. It also excludes prospecting licences and claims.

### Concentrating

The process of separating milled ore into a waste stream (tailings) and a valuable mineral stream (concentrate) by flotation. The valuable minerals in the concentrate contain almost all the minerals found in base and precious metals. They are treated further through smelting and refining to obtain pure metals: Au, Cu, PGMs and Ni (see relevant entries for full names).

### Corporate Social Investment Spend (CSI)

Categories for corporate social investment expenditure include charitable donations, community investment and commercial initiatives. CSI is reported in South African rand and converted from the currency of the operations at the average foreign exchange rate applied by Anglo American for financial reporting purposes. Data is prepared in accordance with the principles of preparation for financial information.

Charitable donations include cash donations; contributions in kind; employees' working hours spent on charity projects during work hours; and the cost of initiatives designed to inform communities about community-benefit initiatives (eg the production of reports that are issued to communities for the purpose of reporting progress). Not included is expenditure that is necessary for the development of an operation (eg resettlement of families) or for receiving a licence.

Training expenditure for individuals who will be employed by the company following completion of training is not included.

Community investment includes the funding of community partnerships which address social issues; the costs of providing public facilities to community members who are not employees or dependants; the marginal value of land or other assets transferred to community ownership; and income-creation schemes or mentoring/volunteering initiatives which do not have a principally commercial justification.

Commercial initiatives include enterprise development and other community initiatives/partnerships that also directly support the success of the company (such as supplier development). There must, however, be a clear and primary element of public benefit.

We prohibit the making of donations for political purposes to any politician, political party or related organisation, any official of a political party or candidate for political office in any circumstances, either directly or through third parties.

## **GLOSSARY** CONTINUED

Cu	The symbol for copper.	Greenhouse	Quantity of CO <sub>2</sub> from electricity purchased and	
DMR	Department of Mineral Resources.	gas emissions, CO <sub>2</sub> equivalent  Hazardous waste to legal landfill	generated internally. Conversion factors used are those recommended by the Intergovernmental Panel on Climate Change.	
DWS	Department of Water and Sanitation.			
EBIT	Earnings before interest and tax.		Gases include CO <sub>2</sub> , CH <sub>4</sub> , NO <sub>2</sub> (nitrogen	
Employee turnover	Calculated from the total number of employees who left the company during the reporting period and expressed as a percentage of total headcount and excluding VSPs.		dioxide), HFCs, PFCs, SF <sub>6</sub> and other CO <sub>2</sub> equivalents (see GHG).  Consider only waste generated during the reporting period. This should include the	
Equivalent refined platinum	Mine production and purchases of metal in concentrate, converted to equivalent refined platinum production using Amplats' standard smelting and refining recoveries.		following as a minimum: heavy metal contaminated sludges (excluding SX sludge); contaminated containers (reagent containers, oil/grease containers, anti-freeze drums, etc); medical waste, vehicle batteries and oil	
Energy use	Sum of energy from electricity purchased, total energy from fossil fuels and total energy from renewable fuels.		contaminated material (gaskets, filters, soaking agents, rags, etc).	
Fatal Injury Frequency Rate (FIFR)	The rate of fatalities, calculated as the number of fatalities per 1,000,000 hours worked.		A legal landfill is a landfill designed and operated to contain the wastes and result products in a manner compliant with legislation or internationally accepted practice.	
Flotation	In the flotation process, milled ore is mixed with water to form pulp, which is passed through a series of agitating tanks. Various chemicals are added to the pulp in a sequence that renders the valuable minerals hydrophobic (water-repellent) and the non-valuable minerals	Non-hazardous waste to legal landfill	Consider only domestic (non-hazardous) waste generated during the reporting period. A legal landfill is a landfill designed and operated to contain the wastes and resultant products in a manner compliant with legislation or internationally accepted practice.	
	hydrophilic (strong affinity for water). Air is dispersed through the tanks and rises to the surface. The hydrophobic particles attach to rising air bubbles and are removed from the main volume of pulp as a soapy froth. In this manner, various combinations of flotation cells in series are used to produce a concentrated stream of valuable mineral particles, called the concentrate, and a waste pulp stream, called	HDSA	Historically disadvantaged South African. Refers to 'any person, category of persons or community, disadvantaged by unfair discrimination before the Constitution of the Republic of South Africa (Act 200 1993), came into operation'. The company definition of HDSAs includes employees classified as African, Asian, coloured or female.	
GHG	tailings.  Greenhouse gas. As outlined in the Kyoto protocol to the United Nations framework convention on climate change (1998), GHGs comprise: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons	HEPS	Headline earnings per share – additional earnings number permitted by IAS 33 that excludes separately identifiable remeasurements (as defined), net of related tax (current and deferred) and related non-controlling interest, other than	
	(HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ). The term refers to gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and remit infrared radiation.	HIV	remeasurements specifically included in headline earnings.  Amplats committed to the new 90/90/90 UNAIDS targets. Based on this:  • Know your status: 90% of our employees	
GJ	Gigajoule (1,000 Megajoules).		should know their HIV status	
Grade	The mass of desired metal(s) in a given mass of ore. Ores bearing PGMs are normally low grade. Grades are usually expressed as grams per tonne, equivalent to parts per million.		Treatment: 90% of our HIV-positive employees are receiving ART.	

Total number of environmental incidents	We classify environmental incidents on a scale of 1 to 5 based upon increasing severity, in accordance with the Anglo American 5 x 5 risk matrix, which plots potential incidents against	mg/Nm³/hour	Milligrams per cubic metre per hour under normal conditions, where normal conditions are defined as a temperature of 20°C and a pressure of 1.01 bar.
LTI	their likelihood of occurring and the severity of their consequence.	MPRDA	Mineral and Petroleum Resources Development Act 28 2002.
	A level 1 incident will have a minor impact on the environment, while at the other extreme, a level 5 incident will have a major impact on the environment. Correct classification of incidents is important as it determines the level of response, investigation and reporting required.  From 1 January 2018, we implemented an updated classification process for	New water used	New water used (1,000m³).  New water, or make-up water, is water required to replace losses from the water circuit. It excludes water reused or recycled within the operation. New water can be drawn from several possible external sources (ie seawater, rainfall, municipal water, external raw or sewage water, dewatered groundwater, etc).
	environmental incidents. The updated approach maintains the level 1 to 5 classification scale, while providing	NEMA	National Environmental Management Act 107 1998.
	substantially greater guidance and rigour to the classification process.	NEMWA	National Environmental Management: Waste Act 59 2008.
	The following components are taken into consideration when rating the severity of	NEMAQA	National Environmental Management: Air Quality Act 39 2004.
	environmental incidents:	Ni	The symbol for nickel.
	Scale: How significant is the size/scale of the impact relative to the size/scale of the receiving environment?  Sensitivity: How sensitive is the receiving environment to the impact? How special or unique is the area that has been impacted?	NIHL	<ul> <li>Number of employees diagnosed with NIHL in the reporting period. New cases are recorded when:</li> <li>The rules for diagnostic criteria for occupational disease in Anglo American have been met</li> <li>There is a pattern consistent with NIHL on the audiogram</li> <li>The average hearing loss at frequencies 0.5, 1, 2, 3 and 4kHz for both ears is greater than 25dBA</li> </ul>
	<b>Remediation</b> and clean-up: How difficult is the impact to contain, remediate and/or clean up? How much time and/or resources are required to manage the incident?		
	The classification criteria for environmental incidents matches the potential complexity of actual environmental incidents. It was developed by our global environmental leadership team with input from practitioners.		<ul> <li>There is a 10dBA change in the average hearing loss since the preplacement audiogram recorded on employment by Anglo American</li> <li>The employee has not been previously counted as NIHL.</li> </ul>
	Lost-time injury. Refers to an injury resulting in the person being unable to attend/return to work to perform the full duties of his/her	NOx	Emissions of nitrogen oxides from diesel engines.
	regular work, as per the advice of a suitably	NWS	National waste strategy (South Africa).
	qualified medical professional, on the next calendar day after the injury.	OHSAS 18001	Occupational Health and Safety Assessment Series, which provides specifications for
LTIFR	Lost-time injury frequency rate. The number of employee and contractor lost-time injuries (see entry) per 1 000 000 hours worked. From 2018, Amplats will no longer report the lagging indicator LTIFR, replacing this with the leading indicator of total recordable case frequency rate (TROER see entry)		management systems for occupational health and safety.

rate (TRCFR, see entry).

## **GLOSSARY** CONTINUED

Particulates	Particulate matter consists of airborne particles in solid or liquid form. Particles are a type of air pollution that commonly affects people's health. 'Big' particles are between 2.5 and 10 micrometres and named PM10. 'Small' particles are under 2.5 micrometres. They are named PM2.5 and cause more severe health effects. Our data on particulates refers to the mass of particulates released to atmosphere from point sources.	Total work- related fatal injuries	A fatality is an employee or contractor death resulting from a work-related injury. Anglo American records all work-related losses of life for the purposes of internal and external investigation, management action, legal process and compensation. However, while fatal injuries that result from criminal activity and public-road incidents are recorded for management purposes, these are not included in formal statistics and frequency-rate calculations.
Primory	Platinum group metals. Six elemental metals of the platinum group, nearly always found in association with one another. Some texts refer to PGEs (platinum group elements). The metals are platinum, palladium, rhodium, ruthenium, iridium and osmium.	Section 54 stoppage	Issued when a mining inspector orders a work stoppage after a death or other accident at a mine, or when the inspector believes working conditions are unsafe. Such stoppages are legislated by section 54 of the Mine Health and Safety Act.
Primary activities	Activities in an operation to produce product(s), including dust suppression in the operational area.	SLPs	Social and labour plans. Stipulated in the MPRDA (see entry), these plans aim to promote employment in South Africa and advance the social and economic welfare of all South Africans, while ensuring economic growth and socio-economic development in the country.
Pt	The symbol for platinum.		
Pt oz	Equivalent refined platinum ounce(s). Equivalent ounces are mined ounces expressed as refined ounces.		
ROCE	Return on adjusted capital employed attributable to equity shareholders of Amplats; excludes the portion of the return and capital	SO <sub>2</sub>	Mass of SO <sub>2</sub> released from point sources and fugitive emissions to atmosphere in reporting period.
	employed attributable to non-controlling interests in operations where Amplats has control but does not hold 100% of the equity. Calculated as annualised underlying EBIT divided by adjusted capital employed.	Tailings	That portion of ore from which most valuable material has been removed by concentration, and which is therefore low in value and rejected.
Total Scope 1 carbon emissions	Scope 1 emissions include CO <sub>2</sub> e emissions from fossil fuels, coal seam gas fugitive emissions, renewable fuels, and operational processes. Process emissions include those	ТВ	Pulmonary tuberculosis refers to tuberculosis of the respiratory organs, confirmed by positive sputa microscopy or culture for mycobacterium tuberculosis.
	associated with on-site and managed sewerage facilities, on-site water-treatment	Terajoule	Measure of energy, one terajoule = 1,000,000,000,000 joule (10^12).
	facilities, the use of carbonates in acid leaching processes at copper-processing facilities, fugitive emissions during the production of phosphates.	Tonne	Unless otherwise defined, this refers to a metric tonne (1,000kg).
Total Scope 2	Scope 2 emissions include CO <sub>2</sub> from electricity		

carbon emissions

purchased and reported in kilotonne CO<sub>2</sub>e.

### Total recordable case frequency rate (TRCFR)

The TRCFR is a rate per 1,000,000 hours of employee and contractor fatal injuries, lost-time injuries, and medical treatment cases. First aid cases – minor work-related injuries which, in normal circumstances, are able to be treated successfully in accordance with recognised first aid training – are not included in this calculation. Injuries are diagnosed by medical and safety professionals according to Anglo American criteria. These criteria are additional to local legal reporting and compensation requirements.

From 2018, we have reported injury frequency rates per million hours worked to align with ICMM and other global mining companies. This will allow for a more granular view, which will be valuable as our injury numbers have reduced significantly in recent years.

## Total social investment

CSI spend including contributions paid to community trusts and dividends paid to communities. Payments to trusts and dividends paid to communities occurred in 2018.

# Total water consumed (million m³, Mm³)

Total withdrawals or abstractions (total inflow excluding estimate of surface run-off or precipitation harvested).

Tonnes per month.

### tpm

## Water used for primary activities

Total new or make-up water entering an operation and used for the operation's primary activities. This definition includes mine dewatering water used for primary activities, but excludes internally recycled water and mine dewatering water discharged to surface or evaporated and not used for any primary activities.

Workers
potentially
exposed to
inhalable
hazards above
the exposure
limit and
workers
potentially
exposed to
carcinogens
above the
exposure limit

Total number of employees assigned to Homogenous Exposure Groups in an "A" classification band, ie ≥OEL (without taking into account PPE) for inhalable hazards for the reporting period.

Inhalable hazards and carcinogens include the following:

- coal dust (respirable particulate)
- respirable crystalline silica
- diesel particulate matter
- nickel (water soluble compounds)
- copper dusts and mists
- sulphuric acid mists
- sulphur dioxides
- arsenic
- coal tar pitch volatiles
- cobalt
- dust (respirable and inhalable)
- welding fumes
- VOCs.

Total number of employees (including long-term contractors) exposed to one or more known cause of occupational cancer including but not limited to arsenic, coal tar pitch volatiles, cobalt, diesel particulate matter, nickel (soluble and insoluble) and solar radiation at levels ≥ OEL. For solar radiation: the number of workers working in open environments (without roof cover) for periods in excess of four hours per shift exposed to excessive sunlight.

## **ADMINISTRATION**

## DIRECTORS EXECUTIVE DIRECTORS

C Griffith (chief executive officer) I Botha (finance director)

### **INDEPENDENT NON-EXECUTIVE DIRECTORS**

MV Moosa (independent non-executive chairman) RMW Dunne (British)

NP Mageza

NT Moholi

D Naidoo

JM Vice

### **NON-EXECUTIVE DIRECTORS**

M Cutifani (Australian) S Pearce (Australian) AM O'Neill (British) AH Sanggu

### **ALTERNATE DIRECTORS**

PG Whitcutt (alternate director to R Médori)

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### **Anglo American Platinum Limited**

Incorporated in the Republic of South Africa
Date of incorporation: 13 July 1946
Registration number: 1946/022452/06
JSE code: AMS – ISIN: ZAE000013181

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