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Waterval Smelter ACP Plant



Bucket and Bowl project, Mogalakwena



Thlabane West Primary School



#### **KEY FEATURES**

- R3.5 billion community empowerment transaction completed
- Regrettably 12 employees lost their lives
- Top gender empowered company award received
- Water consumption was 2% below target

OPERATIONAL INDICATORS		2011	2010	% change
Tonnes milled	000 tonnes	41,432	42,242	(2)
4E built-up head grade	g/t	3.24	3.23	_
Equivalent refined Pt ounces <sup>1</sup>	000 Pt oz	2,410.1	2,484.0	(3)
Refined Pt ounce per employee	Per annum	32.5	32.7	(1)
Cash on-mine costs	R/tonne milled	530	472	12
Cash operating costs	R/oz refined Pt	12,869	11,336	14
Cost of sales	R/oz Pt sold	16,306	14,986	9
REFINED PRODUCTION				
Platinum (Pt)	000 oz	2,530.1	2,569.9	(2)
Palladium (Pd)	000 oz	1,430.7	1,448.5	(1)
Rhodium (Rh)	000 oz	337.6	328.9	3
Gold (Au)	000 oz	105.1	81.3	29
PGMs	000 oz	4,887.4	4,936.9	(1)
FINANCIAL PERFORMANCE				
Net sales revenue	R million	51,117	46,025	11
Gross profit on metal sales	R million	8,555	8,034	6
Headline earnings	R million	3,566	4,931	(28)
Net debt	R million	3,662	4,111	(11)
Debt:equity ratio		1:9.5	1:8.3	14
Capital expenditure (including capitalised interest)	R million	7,504	7,989	(6)
Gross profit margin	%	16.7	17.5	(5)
Net sales revenue per platinum ounce sold	Rand	19,595	18,159	8
<b>ENVIRONMENTAL, SOCIAL AND GOVERNANCE</b>	(ESG)			
Employees	Number (as at 31 December)	58,240	54,022	8
HDSAs in management	%	56	50	11
Fatalities	Number	12	8	50
Lost-time injury-frequency rate	Rate/200,000 hrs	1.27	1.17	9
Sulphur dioxide emissions	000 tonnes	18.8	17.8	10
GHG emissions, CO <sub>2</sub> equivalents	000 tonnes	5,991	5,612	6
Water used for primary activities	Megalitres	31,248	28,874	8
Energy use	Terajoules	25,168	24,156	4
Number of Level 3 to 5				
environmental incidents	Number	0	0	
Corporate social investment	R million	186.5	118.7	63

<sup>&</sup>lt;sup>1</sup> Mines' production and purchases of metal in concentrate, secondary metals and other metals converted to equivalent refined production using Anglo American Platinum Limited's standard smelting and refining recoveries.

# DELIVERING ON OUR COMMITMENTS



The key objectives of our SD strategy are the wellness and safety of our employees; the security of the resources we depend on, such as water and electricity; and community and stakeholder engagement

#### **VALUES AND STRATEGY**

By remaining true to our values and staying focused on our sustainability goals, we are able to deliver our ultimate goal of safe, profitable platinum.

The sustainable development (SD) challenges that we encounter are as significant as they are varied, and require considerable effort to overcome. In 2010, we incorporated these priority areas into our overall Company strategy, ie we began to address issues of sustainability at a strategic level. In 2011, we further entrenched SD in our business, in order to achieve competitive advantage for the Company through excellence and innovation in sustainability practices.

The key objectives of this SD strategy are the wellness and safety of our employees; the security of the resources we depend on, such as water and electricity; and community and stakeholder engagement. Because this last aspect had proved to be a particularly weak area in the past, we decided that we needed to achieve a fundamental shift in the nature of our engagements with communities and other stakeholders.

#### **OUR STAKEHOLDERS**

This year we enhanced our stakeholder engagement strategy by conducting sessions with a wide range of stakeholders. The process not only allowed stakeholders to voice their opinion about our material issues, but also afforded them the opportunity to articulate any concerns they felt needed to be addressed.

The communities located near our operations are key stakeholders in our business and we will continue to promote their advancement through our corporate social investment projects, particularly those related to education, health and infrastructural development. In 2011, a total of R187 million was spent on these projects. Moreover, we aim to create value not only through our corporate responsibility projects, but also through local procurement and enterprise development initiatives.

Believing that it is important for our host communities to benefit from the mining activities in their area, in 2011 we embarked on a brand new initiative, Project Alchemy.

#### **Project Alchemy**

For some time, Amplats has been exploring innovative ways of substantially enhancing the benefits that accrue to our host communities and key labour-sending areas. The Company's commitment to community welfare has now been greatly broadened and extended through the implementation of Project Alchemy, a black economic empowerment (BEE) community equity-ownership transaction worth R3.5 billion. The project is set to provide beneficiary communities with shareholder rights by placing shares in community-led structures. It is also intended to ensure the social development and sustainability of communities: firstly by positioning them as partners in the delivery of sustainable solutions; and secondly by providing them with the skills they need to become and remain self-reliant.

We believe that Project Alchemy will achieve all the goals which it has been designed to accomplish, thereby setting a new standard in broad-based social upliftment.

#### **OUR EMPLOYEES**

We provide jobs for around 51,000 employees and 4,800 contractors. In 2011, we were able to house employees and their families through a housing project that forms part of our employer-assisted housing scheme – an initiative started in 2010 to facilitate the building of 20,000 houses over a period of 10 years. The project is intended to empower and substantially improve the quality of life of many employees, by allowing them to become first-time homeowners and to live with their families full-time instead of commuting to distant homes periodically.

#### **BLACK ECONOMIC EMPOWERMENT**

We view black economic empowerment (BEE) as a key requirement for sustainable growth and social development, and remain committed to participating in South Africa's transformation. Over the past 11 years we have concluded a number of significant broadbased BEE deals. This has enabled us to move beyond the BBBEE equity targets set by the Government.

We view BEE as an important requirement for sustainable growth and social development in South Africa, and are devoted to participating in the country's transformation and development. In the last 11 years we have concluded 12 major BEE transactions.

Similarly, we have pushed for the increased participation of women in mining. In 2011, a total of 12% of our employees were women, compared with 10.5% in 2010.

#### Safety

Another major challenge has been and continues to be the safety of our employees. My biggest disappointment in 2011 was that we did not make more significant progress in terms of our safety performance. Regrettably, 12 employees lost their lives during the year as a result of work-related incidents. On 3 November we halted all our operations and assembled all our employees in order to remember colleagues who have lost their lives at work and to highlight the importance of work safety. This gesture of solidarity and of respect for the people we have lost also marked the beginning of our "Zero harm in action" programme. This has been designed to create a safer way of working at Amplats; to incorporate safety into the way we conduct our business; and to build on all the good work that has already been done in terms of Company safety over a number of years.

We know that success in this regard is possible, as we have witnessed it in our own operations. For example, Khuseleka Mine has achieved over 4 million fatality-free shifts, while Mortimer Smelter has operated for over two years without a lost-time injury.

In 2011, our lost-time injury-frequency rate deteriorated to 1.27, against a record low of 1.17 the previous year. Gassing and smoke inhalation incidents have resulted in an increase in medical treatment cases, and this has in turn increased our total recordable case frequency rate to 4.06 (compared with 2.08 in 2010).

#### Wellness

Last year we started on Phase 2 of our programme to silence equipment that emits more than 100 dB(A). Sadly, owing to the long latency period of the disease, we diagnosed noise-induced hearing loss (NIHL) in 53 employees. We are persevering with our existing strategy, however, because we believe that it is sound and will ultimately deliver the result that we desire: a milestone of zero NIHL cases in 2013.



#### A MESSAGE FROM ANGLO AMERICAN PLATINUM LIMITED'S CEO, NEVILLE NICOLAU

We also continued to offer our employees the means by which to improve their health. Our wellness campaigns focused on common diseases such as diabetes, high blood pressure, obesity, HIV and TB.

#### THE ENVIRONMENT

Responsible environmental stewardship and the effective management of scarce natural resources are important to us in living up to our principle of 'zero harm'. Of particular concern are water security and a reliable supply of electricity. Although our year-on-year water consumption increased by 7% mainly as a result of the new Unki Platinum Mine, the actual consumption was 2% below the internal target of 36 million m³.

Our energy usage per refined platinum ounce decreased marginally, by 0.8%. Intensity targets of a 15% reduction in energy use and of a 10% decrease in CO<sub>2</sub> consumption have been set per unit of production for 2014, against the 2004 baseline. An amount of R136 million has already been spent to achieve these targets, while a budget of a further R22 million has been approved.

#### **MOVING FORWARD**

Our main challenge for 2012 will be to improve our performance on the employee safety front. People's safety is always at the top of our agenda and we will continue to devote significant resources to this cause. Our efforts towards "Zero harm in action" will further entrench safety in all aspects of the business.

Project Alchemy will further uplift the communities in which we operate, thereby enabling them to become more self-sufficient and less reliant on our operations. We know that transparency and good engagement practices are central to our success, and we will therefore continue to engage meaningfully with our stakeholders so as to gain a better understanding of their concerns. We will also continue to work together with our independent stakeholder panel, in order to develop a better grasp of potential risks and gains in this area.

Amplats will continue to explore and pursue all innovation potentially leading to enhancements in safety, cost-reduction opportunities, and improvement in the procurement and supply chain. The further we are able to integrate sustainable development into our business processes, the more visible will be the links between the issues we face, and the more solid our competitive edge will become.

Meville Nicolan

Neville Nicolau

Chief executive officer

Johannesburg 9 February 2012

# PROGRESS ON OUR COMMITMENTS

	2011 TARGETS	2011 PERFORMANCE		2012 TARGETS		
	It is unacceptable for anybody to be injured on our operations and we subscribe to the principle of zero harm. Our performance remains unacceptable. We have a comprehensive plan to improve safety performance. Details included from page 78.					
<b>≥</b>	Zero fatalities	Twelve fatalities	X	Zero fatalities		
Employee safety	Continued reduction of injuries	Number of lost-time injuries increased year-on-year from 796 in 2010 to 854 in 2011	X	Continued reduction of total injuries		
Jdw	LTIFR to be less than one	· LTIFR of 1.27	X	LTIFR to be less than one		
ш	Implement audit process to assess consistency and compliance to AFRS	Operations audited against AFRS	V	Conduct self assessments against     AFRS to ensure it is integrated as     part of our operational controls		
	Imbalances in South African society due to its past need to be addressed through a comprehensive transformation programme in line with the Mining Charter. Steady progress is being made. Details on transformation references are on page 38, 99, 102 and 132. Our licence to operate depends on approved Environmental Management Programmes (EMPs), Water Use Licences (WULs) and where applicable Basic Assessments or Environmental Impact Assessments (EIAs) as per listed activities in the National Environmental Management Act. Details on operating licences are on page 37.					
e)Ce	• 26% HDSA ownership of reserves	Plans in place to achieve the 26%		• 26% HDSA ownership of reserves		

<ul> <li>26% HDSA ownership of reserves and resources by 2014</li> </ul>	Plans in place to achieve the 26% ownership		26% HDSA ownership of reserves and resources by 2014
To achieve 43% procurement spend on HDSA vendors     HDSA		<u> </u>	To achieve 43% procurement spend on HDSA vendors
Top management 40%; senior     management 45%; middle     * 50% HDSA achieved in management			Top management 40%; senior management 45%; middle

on HDSA vendors	HUSA		on HDSA vendors
<ul> <li>Top management 40%; senior management 45%; middle management 57%; junior management 69%</li> </ul>	50% HDSA achieved in management	<b>\</b>	Top management 40%; senior management 45%; middle management 57%; junior management 69%
<ul> <li>Targets for women to reflect the EAP demographics</li> </ul>	12.4% women in mining achieved	V	Targets for women to reflect the EAP demographics

- Ensure all $\mathrm{SO}_2$ emissions are below permitted levels	All smelter emissions below target, except Waterval Smelter as a result of shutdowns in February, April and June	X	Ensure all SO <sub>2</sub> emissions are below permitted levels

Maintain ISO14001 certification     All operations maintained certification		<b>/</b>	Maintain ISO 14001 certification
All operations to have approved     Water Use Licence (WUL)	Four operations got approved WUL;     remaining three submitted, but not     approved yet	0	All operations to have approved     Water Use Licence (WUL)

Many communities around our operations remain woefully underdeveloped. Furthermore, communities expect to benefit from the development and expansion of our mines. Details of community development programmes appear on page 118.

• Put plans in place to respond to SEAT 2 assessment recommendations

• Put plans in place to respond to SEAT 2 assessment recommendations

Ŀ	recommendations	
	• 1% of pretax profit to be spent on	R187 million spent year-to-date (1%
	community development	of pretax profit)
	Continue to promote home	• 1,300 units built to date

community development

Continue to promote home ownership. Build 20,000 homes by 2017 (800 in 2011)

**/** 

• 1% of pretax profit to be spent on

Mineral policy and legislative compliance

2017 (800 in 2011)

ownership. Build 20,000 homes by

#### 2011 TARGETS 2011 PERFORMANCE 2012 TARGETS

	It is unacceptable for anybody's health to be affected by our operations and we subscribe to the principle of zero harm. We have comprehensive health programmes to address occupational health issues and HIV/AIDS. Details on page 84.			
	No new cases of NIHL as defined by AA for reporting purposes	53 new cases of NIHL according to the Anglo American definition	X	No new cases of NIHL as defined by AA for reporting purposes
health	<ul> <li>Reduction of all noise below 110 dB(A) at source by 2013</li> </ul>	Number of equipment reduced from 45 in 2010 to 29 in 2011	0	Reduction of all noise below 110     dB(A) at source     by 2013
Employee	Hot commissioning in 2011	RBMR technology changes completed, resulting in personal exposures to nickel being well below the OEL	<u></u>	Hot commissioning in 2011
	· Maintain 97%	49,212 (95% of SA workforce)     employees received VCT	0	Maintain 97%
	Maintain all HIV-positive employees requiring ART on programme	· 3,545 employees on ART (100%)	<b>✓</b>	Maintain all HIV-positive employees requiring ART on programme

Security of energy supply in South Africa is a major issue with Eskom being unable to guarantee electricity supply to our operations. Climate change is a global challenge and may affect events such as droughts and flooding. The threat of water scarcity is very real for Amplats, given that more than 90% of our operations are located in South Africa, a country that is water-stressed. However, sufficient water has been secured to ensure the continuation of our business. Details on page 44, 48 and 50.

secured to ensure the continuation of our business. Details on page 44, 48 and 50.				
Reduce energy consumption per unit of production by 15% against 2004 baseline by 2014	Energy intensity increased in 2011 compared with 2010, by 2.7%	X	Reduce energy consumption per unit of production by 15% of 2004 baseline by 2014	
<ul> <li>Reduce CO<sub>2</sub> emissions by 10% per unit of production by end of 2014</li> </ul>	CO2 equivalent emissions increased in 2011 compared with 2010, by 4%	X	<ul> <li>Reduce CO<sub>2</sub> emissions by 10% per unit of production by end of 2014</li> </ul>	
Operational water targets tracked using the SHE database	2% saving on water consumption target set for 2011 (37 million m³)	<b>✓</b>	Water consumption target for 2012 (41.2 million m³)	
	4% increase year-on-year on actual water intensity (9.9 m³ vs 10.3 m³)	X	Water intensity target of 10.6 m³ per refined ounce of PGMs and gold	
Track water operational targets using SHE database	Operational water targets set. Group achieved 2% below Group target (overall water increased as a result of the new Unki Mine)		Improve water balances per operation to support performance tracking against targets	



Access to and allocation of resources



X Target not met

#### **OPERATIONS AND PRODUCTS**

#### **OUR OPERATIONS**

Anglo American Platinum Limited (Amplats) is the world's leading primary producer of platinum group metals (PGMs) and accounts for approximately 40% of the world's newly mined platinum. The Company is listed on the JSE Limited and has its headquarters in Johannesburg, South Africa. Amplats' wholly owned South African mining operations include the Bathopele, Dishaba, Khomanani, Khuseleka, Mogalakwena, Siphumelele, Thembelani and Tumela mines. Twickenham Platinum Mine remained under development during 2011.

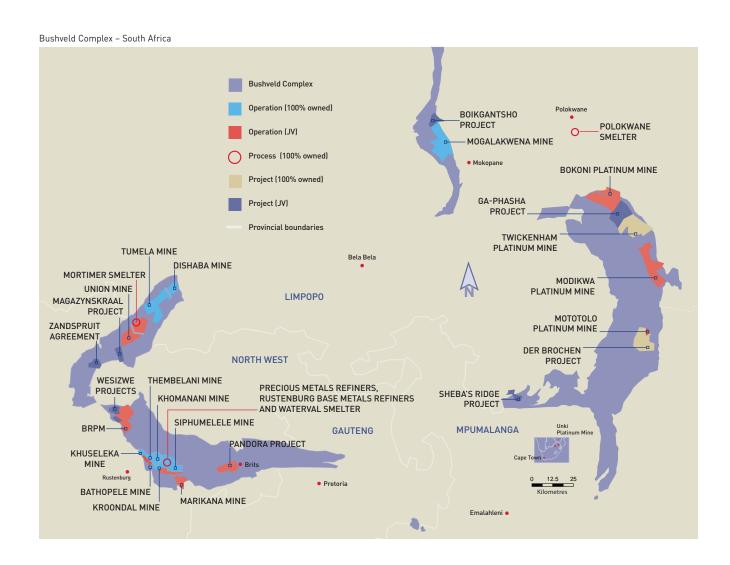
In addition, the Group has a number of joint ventures, as follows: with Anoorag Resources

Corporation over the Bokoni Mine; ARM Mining Consortium Limited over the Modikwa Platinum Mine; Royal Bafokeng Resources over the combined Bafokeng-Rasimone Platinum Mine (BRPM) and Styldrift properties; the Bakgatla-Ba-Kgafela traditional community, which holds a 15% share in Union Mine's north and south mines; Eastern Platinum Limited (a subsidiary of Lonmin Plc) and its partner, the Bapo-Ba-Mogale traditional community, and Mvelaphanda Resources, over the Pandora Joint Venture; and Xstrata Kagiso Platinum Partnership, to operate the Mototolo Platinum Mine. Amplats also has poolingand-sharing arrangements with Aquarius Platinum (South Africa), covering the

shallow reserves of the Kroondal and Marikana Platinum mines that are contiguous with its own Rustenburg mines.

The Group's smelting and refining operations are wholly owned through Rustenburg Platinum Mines Limited and are situated in South Africa. These operations treat concentrates, not only from the wholly owned operations, but also from joint ventures and third parties.

Elsewhere in the world, the Group operates Unki Platinum Mine in Zimbabwe and is actively exploring in Brazil with joint-venture exploration partners. The Group has exploration partners in Russia.



#### **OUR PRODUCTS**

Amplats accounts for about 40% of newly mined platinum globally and is the world's leading primary producer of the metal. Through the production of platinum, other platinum group metals (PGMs) are produced. Palladium, rhodium, ruthenium, and iridium are some of the group metals produced, whereas nickel, copper, gold and other base metals are produced as by-products.

One of PGMs uses are in catalysts for refining processes and fuel cells that produce energy with fewer CO<sub>2</sub> emissions. Some 50% of the world's platinum and some 30% of Amplats' production are used

in autocatalysts designed to reduce noxious emissions from vehicles.

Refer to 'Market development and beneficiation' section on page 138 and the 'Market review' section on page 38 of the Integrated Annual Report for more information on the uses of platinum.

The Group is committed to the development of PGM markets, and in cooperation with Johnson Matthey and other entities researches and promotes new products using PGMs, particularly in environmental applications (see page 138 and 139 for details of these efforts). In 1975, Amplats created Platinum Guild

International and funds efforts in the development of the platinum jewellery sector. The Group is active in various industry organisations, including the International Platinum Association, which is an advocacy forum for producers and fabricators, and attends to matters relating to sustainability. The recycling of PGMs is generally done by the fabricator.



#### **VISION AND VALUES**

#### INTRODUCTION

Our six core values underpin the Company's vision and apply to how we conduct our operations and to our dealings with the external stakeholders. Earning and deserving trust is fundamental to the success of our business.

#### **VISION**

To be the premier company in finding, mining, processing and marketing platinum group metals for the maximum benefit of all our stakeholders.

#### Uphold our values



#### We put safety first:

- We all take personal responsibility in ensuring that we work and live safely.
- We believe that zero harm can be achieved by putting safety first.



#### We deliver on our promises:

- We do what we say we are going to do.
- We set challenging but realistic goals and hold ourselves personally accountable for achieving them.
- We learn from our experiences and move forward to greater achievement.



### We value and care about each other:

- We all have a right to be heard and a duty to listen to others.
- We care for each other's wellbeing and treat each other with respect and dignity. This means that we have zero tolerance for racism, sexism or any form of unfair discrimination.
- Our care reaches out to include our communities and the environment.



### We act with honesty and integrity:

- We are open, honest and direct in our interactions.
- We raise and solve issues as they arise.
- We have the courage to confront tough issues and to stand up for what is right.



#### We are one team:

- We work together across functions and teams to improve our performance and solve problems.
- We seek out and are open to new ideas, wherever they may come from.



### We are passionate and take pride in everything we do:

- Individually and together, we strive to be the best we can be.
- We recognise and celebrate dedication, achievement and excellence.



#### **OUR APPROACH TO REPORTING**

Amplats' 2011 Integrated Annual Report offers a complete overview of the Company's financial, social and environmental performance in a single, consolidated report. In preparing the integrated report, the Company has been guided by the principles of integrated reporting as set out in the International Integrated Reporting Committee's discussion paper and the guidance offered in the framework discussion paper released in January 2011 by the Integrated Reporting Committee of South Africa. The Sustainable Development Report provides additional details and information and is intended to supplement the Integrated Annual Report.



This report forms an important component of our overall communication with our stakeholders. It gives us the opportunity to present comprehensive data and information on how we are addressing the many social and environmental aspects associated with our business.

The report is intended to be read by both South African and international stakeholders. Important information found in it will be shared with members of the communities close to our operations through our existing environmental structures (see pages 32 and 33 for information on our stakeholder engagement processes).

It is a requirement of the Mining Charter Scorecard that we report on our progress toward meeting the charter's requirements. The Group continues to use its Sustainable Development Report to provide a public statement of its performance against the scorecard. A scorecard reference table allowing for easy cross-referencing is found on page 38.

Amplats is not a member of the International Council on Mining and Metals (ICMM) or a signatory of the United Nations Global Compact. However, through our major shareholder, Anglo American plc, we are bound by a number of international codes, among which are the 10 principles of the ICMM, the Voluntary Principles on Security and Human Rights, and the Global Compact. A reference table listing these requirements is available on our website tiny.cc/apgri/

### Overview of sustainable development and our business

As an organisation with diverse stakeholders and a workforce of around 58,500 including contractors, we believe that the most important elements of sustainability in our business are the safety, health and wellbeing of our employees and of people who live in the communities within which we operate.

The Group's positive contribution to society includes investments in a number of important areas: job creation; skills development; education; health; local business development; procurement opportunities; payment of royalties and taxes; and infrastructural provision.

The negative impacts of mining typically include economic dependency, social impacts such as the proliferation of informal settlements as job seekers move into areas adjacent to mines, increased crime, environmental impacts (eg noise and dust pollution and the utilisation and the pollution of water), the use of scarce resources such as electricity and water, and the loss of agricultural land for farming.

By mining, however, we extract the platinum group metals (PGMs) we need in order to address issues such as the impact of toxic exhaust emissions on the quality of our air, and various other technological and medical applications. Our business also employs significant numbers of people (many of them sole breadwinners); improves the skills levels of employees and other beneficiaries; generates wealth for our shareholders; and pays taxes. And even

though the mining of PGMs is not sustainable in perpetuity, many of the benefits and skills it creates will outlast the mining activities themselves. Therefore the opportunities Amplats seeks to create for individuals and society are designed to ensure sustainable communities beyond the life of its mines.

Most of Amplats' operations are based in South Africa, a country presenting a unique sustainable development context. South Africa is a developmental state that experienced years of selective development during the period of apartheid. This led to imbalances in South African society which the current Government is rectifying through numerous transformation programmes. To address several of these imbalances in the mining industry the Government developed the Mining Charter with its associated scorecard; this requires mines to have met certain black economic empowerment targets by certain dates. (See page 38 for an update of the Company's performance against the scorecard.)

Under the apartheid government, many traditional communities were forcibly moved into so-called 'homelands'. This resulted in high population densities close to many of our operations, such as those around Rustenburg and the Eastern Limb of the Bushveld Complex. At the same time, in areas such as the Eastern Limb, years of underdevelopment have led to imbalances in water distribution. Together with high population densities and past inequalities, the shortage in these areas of natural resources such as land and water (South

#### **OUR APPROACH TO REPORTING**

Africa is a water-scarce country) has led to competing demands and, in some instances, conflict between mining operations and the surrounding communities. Incidents relating to our operations are discussed on page 125.

Although the Company is based primarily in South Africa, it has to address many global sustainability challenges, such as climate change and the protection of biodiversity. As a result, both South African and global sustainability issues are discussed in this report.

### SCOPE AND BOUNDARIES OF THIS REPORT

Our financial year runs from January to December and this report thus covers developments in, and results for, 2011. The previous report was released in February 2010.

The report covers all of Amplats' managed operations and mentions the key material issues at joint ventures and associate operations. Although the Group is involved in exploration activities in Brazil and Russia, these are not considered to have material impacts in terms of sustainability and are not included in this report.

The only change affecting the scope and boundary of this report is our Unki operation situated in Zimbabwe which is being reported for the first time as it began production in January 2011.

Data for joint-venture operations that are not under the direct control of Amplats' management are generally not covered in the Sustainable Development Report.

Furthermore, a process has been put in place to improve assurance on sustainable development issues at joint-venture operations. All such ventures are required to provide the Amplats' Board with the necessary assurances.

Data measurement techniques are in line with recommended practice and are explained in the relevant section of the report.

This report displays some noticeable changes in the sections on stakeholder engagement, strategy and materiality. These are based on feedback we received during our stakeholder engagement sessions and from our wider stakeholder base; and on the advice we received from our external review panel.

### CONTACT DETAILS AND FURTHER INFORMATION

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### THE EXTERNAL REVIEW PANEL

The external review panel was founded in 2008 to review our draft report prior to publication. The panel's function is to review the report's materiality, inclusiveness and responsiveness, guided by the AA1000 assurance standard. To ensure an independent relationship between the Company and the panel, PricewaterhouseCoopers (PwC) was appointed by Amplats to administer the panel.

For the 2011 report, the panel includes Zithulele Cindi, Valerie Geen, Jonathon Hanks, Tshepo Lenake and Cathy Reichardt. In accordance with the governance rules, Steve Nicolls has been rotated off the panel in 2011. We would like to thank Mr Nicolls for his devoted contribution over the past few years.

The panel members are selected based on the knowledge they have of the industry; and for their expertise in the sustainable development challenges and opportunities that face business in general and the platinum industry in particular.

Members are appointed on a pro-bono basis. They are nevertheless offered the opportunity to nominate a charity of their choice, and Amplats makes a donation of R20,000 on each member's behalf.

For the first time in 2012 the panel will be requested to participate in the identification of material issues as an advisory panel to management and will give feedback to the Safety & Sustainability Development Committee of the Board.

### PROCESS FOR DEFINING REPORT CONTENT

Our Sustainable Development Report for 2012 provides details of our economic, environmental and social programmes. This report also details our performance in 2011 and identifies material sustainable development (SD) challenges and opportunities that are likely to affect the future of the Group.

In accordance with the G3 guidelines we self-declare that this report is aligned to GRI application level A+ and has been assured as such by PwC.

We have referred to the revised G3 mining and metals sector supplement guidelines to ensure that we have aligned our report with the requirements.

### Ensuring that we report on material issues

By engaging in the processes of integrated risk-management and stakeholder engagement, we have been able to identify significant SD risks that concern both us and our stakeholders. To ensure that we address all material issues, we have been guided by stakeholder interaction to steer our reporting.

We have created a dedicated section on stakeholder engagement in order to discuss the feedback received from our wide stakeholder base. The section explains our stakeholder-engagement process and provides feedback on the key issues raised in 2011. Please see page 32 for this information.

### Assurance policies and internal practices

The Group has developed a series of internal systems in order to record, monitor and improve the accuracy, completeness and reliability of the information and data provided in the SD Report. These systems cover the financial, operational, safety, health, human resources and environmental management aspects of the business. Moreover, Amplats' directors:

- recognise unambiguously that they are accountable for the content of the report.
   For this reason, PwC was appointed to provide independent assurance over the selected parameters of the report content, including Anglo American
   Platinum Limited's GRI application level as level A+;
- recognise unambiguously that the assurance provider, PwC, is solely responsible for the content of the independent assurance report and agree, at the onset, to publish the assurance report in full; and
- consider it their duty to ensure that PwC
  has adequate resources and access to
  individuals, groups, sites and records, or
  to any other sources of information
  deemed necessary to compile the
  assurance report.

#### **OUR APPROACH TO REPORTING**

#### THE PANEL

Valerie Geen



Cathy Reichardt



Tshepo Lenake



Jonathon Hanks



Zithulele Cindi



#### Valerie Geen

Valerie is the director of the National Business Initiative's Climate and Energy unit. In this role, she has led member companies to focus on Energy Efficiency, Climate Change and Water Disclosure among other sustainability areas. She leads the NBI role as partner to the Carbon Disclosure project which has mobilised South African business response to climate change from the JSE top 100. She also led Business engagement and showcasing at COP17.

#### Cathy Reichardt

Cathy joined the panel in 2008 while she was a senior lecturer at the University of the Witwatersrand in the school of mining engineering. She is currently a senior manager at Assore Limited where she manages Safety, Health, Environment, Risk and Quality. During the course of her career she has worked with a broad range of commodities throughout sub-Saharan Africa and Australasia.

#### Tshepo Lenake

Tshepo joined the External Review Panel in 2008. He currently represents local government focusing on the environmental and community impacts and the risks associated with businesses operating within that community. Tshepo brings a broad knowledge of mining issues having worked in this industry prior to joining Government.

#### Jonathon Hanks

Jonathon joined the External Review Panel in 2008. He is the managing director of Incite Sustainability, a consultancy and advocacy group that advises many of South Africa's top companies on sustainability issues.

#### Zithulele Cindi

Zithulele Cindi joined the External Review Panel in 2010. He is currently the Executive Director at Unity Incorporation. Previously he was involved in trade unionism when he became part of the Electrical Workers Union affiliated to the National Council of Trade Unions. In 1989, he became the assistant General Secretary for the Metal and Electrical Workers Union of South Africa (MEWUSA). In 2006 Cindi was elected as the National Chairperson of AZAPO a position he still holds.



#### INDEPENDENT ASSURER'S REPORT

#### TO THE DIRECTORS OF ANGLO AMERICAN PLATINUM LIMITED

#### Introduction

We have been engaged by the directors of Anglo American Platinum Limited (Amplats) to conduct an assurance engagement in accordance with the International Standards for Assurance Engagements 3000, "Assurance Engagements other than audits or reviews of historical financial information" (ISAE 3000), issued by the International Auditing and Assurance Standards Board, on selected Identified Sustainability Information reported in Amplats' 2011 Sustainable Development Report (the Report), for the purposes of expressing a statement of independent assurance, for the year ended 31 December 2011.

#### Scope and subject matter

The subject matter of our engagement and related levels of assurance we are required to provide is as follows:

#### Reasonable assurance

The following Identified Sustainability Information was selected for an expression of reasonable assurance:

- Total CO<sub>2</sub> emissions from processes and fossil fuels in kilotonnes (page 153)
- Total CO<sub>2</sub> emissions from electricity purchased in kilotonnes (page 153)
- Total energy use in terajoules (page 153)
- Total number of level 3, 4 and 5 environmental incidents reported (page 154)
- Fatal-injury-frequency rate (FIFR) (page 156)
- Lost-time injury-frequency rate (LTIFR) (page 157)
- Total number of new cases of occupational diseases (page 155)
- Total number of new cases of noiseinduced hearing loss (NIHL) (page 155)

- Number of managers trained in A3 risk (page 79)
- Total amount spent on corporate social investments (page 123)

#### Limited assurance

The following Identified Sustainability Information was selected for an expression of limited assurance:

- Total amount of water used for primary activities in megalitres (page 153)
- Total amount of water used for nonprimary activities in megalitres (page 153)
- Number of employees participating in antiretroviral treatment (ART) (page 155)
- Number of employees participating in voluntary counselling and testing (VCT) (page 155)
- Number of employee dismissals related to breaches of the business principles (page 109)
- Mining Charter Scorecard: Employment equity (page 38)

The self-declaration of the Global Reporting Initiative (GRI) application level (page 15)

Our responsibilities do not extend to any other information.

### Responsibilities of the directors

Amplats' directors are responsible for the preparation and presentation of the Identified Sustainability Information, as incorporated in the Report, in accordance with their internally defined procedures and for maintaining adequate records and internal controls that are designed to support the reporting process.

# Responsibility of the independent assurance provider

Our responsibility is to express a conclusion to the directors, on the selected Identified Sustainability Information contained in the Report for the year ended 31 December 2011, based on our assurance engagement. We consent to the inclusion of this report in the Report to assist Amplats' members in assessing whether the directors have discharged their responsibilities by commissioning an independent assurance report from an appropriately qualified organisation in connection with the selected subject matter.

#### Summary of work performed

We conducted our engagement in accordance with the International Standards for Assurance Engagements 3000, "Assurance Engagements other than audits or reviews of historical financial information" (ISAE 3000), issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain either reasonable or limited assurance on the selected Identified Sustainability Information as per our terms of engagement.

Amplats' internal corporate reporting policies and procedures and the Global Reporting Initiative's (GRI) G3 guidelines were applied as criteria for evaluating the Identified Sustainability Information.

Definitions for the Identified Sustainability Information applied are those determined by Amplats and provided in the glossary (page 164).

Our procedures included examination, on a test basis, of evidence relevant to the selected Identified Sustainability Information. The procedures selected depend on the assurance provider's judgement, including the assessment of the risks of material non-compliance of the selected Identified Sustainability Information with the defined reporting criteria.

Our work consisted of:

- a) reviewing processes that Amplats has in place for determining material Identified Sustainability Information to be included in the Report;
- b) obtaining an understanding of the systems used to generate, aggregate and report data at the sampled operations;
- c) conducting interviews with management at the sampled operations and at head office;
- applying the assurance criteria in evaluating the data generation and reporting processes;
- e) performing a controls walkthrough;
- f) testing the accuracy of data reported on a sample basis for limited and reasonable assurance;
- g) reviewing the consolidation of the data at head office to obtain an understanding of the consistency of the reporting processes compared with prior years and to obtain explanations for deviations in performance trends;

- reviewing the consistency between the Identified Sustainability Information and related statements in Amplats' Report;
- reviewing the accuracy of Amplats' self-declaration of the GRI (G3)
   Application Level in the Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

The evidence-gathering procedures for limited assurance are more restricted than for reasonable assurance and therefore less assurance is obtained with limited assurance than for reasonable assurance.

We have not carried out any work on data reported for prior reporting periods, nor have we performed work in respect of future projections and targets. We have not conducted any work outside of the agreed scope and therefore restrict our opinion to the Identified Sustainability Information.

#### Inherent limitations

Non-financial data is subject to more inherent limitations than financial data, given both the nature and the methods used for determining, calculating, sampling or estimating such data. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements.

Conversion factors used to derive energy used from fuel and electricity consumed, is based upon information and factors derived by independent third parties. Our assurance work has not included an examination of the derivation of those factors and other third-party information.

#### Conclusion

#### Reasonable assurance

Based on our work performed, the Identified Sustainability Information selected for reasonable assurance, for the year ended 31 December 2011, is free from material misstatement.

#### Limited assurance

Based on our work performed, nothing has come to our attention causing us to believe that the Identified Sustainability Information selected for limited assurance, for the year ended 31 December 2011, is materially misstated.

PricewaterhouseCoopers Inc.

Prawaterhouse Gopes Inc.

Director: Wessie van der Westhuizen

Johannesburg 10 February 2012

#### **MATERIAL ISSUES**

Determining materiality is a critical part of reporting. Each year the Company undertakes a formal materiality assessment that is tabled at the Board's Audit Committee and S&SD Committee for discussion and input prior to being finalised. This process is done in accordance with the Global Reporting Initiatives (GRI) guideline.

Determining materiality is a critical part of reporting

#### **MATERIALITY ANALYSIS**

The 2011 materiality analysis was conducted using the GRI's G3 "self-test" methodology for materiality. In determining materiality a number of internal and external factors were evaluated as follows:

#### Internal factors

- Policies Key Company principles and policies encompassing Company integrity and values, company strategy, safety, heath, the environment and labour.
- Risk Significant risks to Anglo American Platinum (Amplats) as defined by the internal risk methodologies described on page 25.
- Opportunities The Company's core products and the manner in which these can, or could, contribute to sustainable development.
- Stakeholders A review of the interests and expectations of stakeholders specifically invested in the success of the Company, eg employees, unions.

#### **External factors**

- Industry-wide issues A review of the material issues reported by other businesses in the sector, including Anglo American plc, Impala Platinum, Lonmin Platinum, AngloGold Ashanti, Rio Tinto, BHP, Xstrata and Teck.
- Mineral policy, legislation and norms A
  review of the requirements of key
  legislation and mineral policy including,
  inter alia, the Minerals Petroleum
  Resources Development Act; the National
  Environmental Management Act; and the

National Water Act. Other key codes and norms are the requirements of the principles of the United Nations Global Compact, the Performance Standards of the International Finance Corporation and core issues relating to ISO 26000.

- Memberships, associations and panels

   An analysis of issues raised through organisations such as the International Platinum Group Metals Association, the Chamber of Mines, the International Council on Mining and Metals, and our external review panel.
- Stakeholders A review of interests and expectation of stakeholders specifically invested in the success of the Company, eg shareholders, suppliers and customers.

#### **OUR MOST MATERIAL ISSUES**

Following the completion of the materiality analysis and deliberation with the Company's Audit Committee, it is the Company's view that the five most material issues affecting the Company's short-, medium- and long-term sustainability are as follows:

- Financial sustainability
- Safety and health performance
- Mineral policy and legislative compliance
- Community impacts and benefits
- Access to, and allocation of, resources

The table on the opposite page is a summary of what each material issue consists of, why it is important, and what the Company is doing to address it. Further detail on the material issues are then included in this report and are denoted by the following symbol .

Material issues	Financial sustainability	Safety and health performance	Mineral policy and legislative compliance
What does this cover?	Headline earnings.     Net debt.     Gross profit margin.	Worker safety (employee and contractor).     Worker health and wellness.	Our mining rights as granted by the Department of Mineral Resources. Adherence to the Mining Charter and implementation of its social and labour plans. Other material licences and authorisations such as approvals of environmental impact assessments (EIAs) and water-use licences.
Why is it important?	Without profits our Company would not exist and its benefits to society would be lost.	The mining business carries inherent risks that may affect the safety and health of our workers.  We want all people who work at Anglo American Platinum Limited (Amplats) to return home safely and healthy at the end of their shift.	Without a valid mining right we would not be permitted to mine.     Non-adherence to the Mining Charter and/or failure to implement the social and labour plans can lead to rights being revoked.     Approved EIAs and water-use licences are key to ensuring that our environmental impacts are minimised.
What do our stakeholders expect from us	Shareholders want a sound return on their investment. The Government wants taxes. The communities close to our operations want benefits from our business. These include procurement benefits, employment and the provision of infrastructure.	<ul> <li>To make safety and health the top priority in any situation and have no injuries as a result.</li> <li>To build, maintain and continually improve safety and health systems.</li> <li>To fix problems promptly and notify anyone who may be affected by them.</li> </ul>	Legal compliance and the validity of all rights, authorisations and permits.     Implementation of the Mining Charter and the social and labour plans.
What are we doing?	Through our Company strategy we will create maximum value by understanding and developing the market for platinum group metals (PGMs); grow the Company to expand into those opportunities; and conduct our business safely, cost-effectively and competitively, thus contributing positively to our host communities.	Safety is one of our values.     We have a safety strategy intent on delivering "zero harm" to our employees.     We have programmes in place to reduce exposure to noise, TB and HIV.	Letters of conversion of mining rights were received in 2010. Fourteen rights have been converted and one is going through the administrative process.     Tracking social and labour plan implementation.     Engaging with the departments of Water and Environmental Affairs to get the four outstanding water-use licences approved.
Page reference	112 to 117	78 to 93	35 to 39

#### **MATERIAL ISSUES**

Material issues	Community impacts and benefits	Access to, and allocation of, resources
What does this cover?	Stakeholder engagement.     Programmes to ensure that society and communities benefit from our activities.	Energy security, energy efficiency and climate change.     Access to water resources and improvements in water-use efficiency.     Access to land and surface rights.
Why is it important?	Company actions have an impact on the socio-political structures and relationships in host communities. The more unstable the society, the more likely it is that external factors will have a negative effect on it by exacerbating instability and conflict). On the other hand a stable society is likely to benefit from the support and stability provided by the Company.	Our ability to mine was recently curtailed – during the energy crisis of 2008, when South Africa ran short of electricity. This had an impact on our output of PGMs. South Africa's electricity-supply position remains tenuous.  Climate-change policy and its effect on taxes has the potential to have a major impact on the Company's cost structure.  Water is a key resource for the mining and processing of PGMs. Without it, we would be unable to produce any metals.  Land is needed to access the PGM ore and develop infrastructure.
What do our stakeholders expect from us?	Engage with stakeholders in the early stages of mining and throughout the mining life cycle in order to gain a societal licence.     Design and implement strong and effective social management systems wherever we operate.     Comply with regulations and demonstrate broad community support.     Leave communities better off as a result of our mining activities.	Consider climate impacts in our business decisions. Operate energy efficiently, reducing our carbon footprint per unit of production. Plan to reduce net emissions, even as our output grows.      Respect the needs of other water users. Plan and operate so as to minimise the mines' water demands. Operate to the highest standard of care in relation to tailings and effluents.      Mining makes land sterile until such time as it is rehabilitated and reclaimed. This impact should be minimised and our mining footprint kept as small as possible.
What are we doing?	Ensuring that we are identifying, managing and mitigating social risks and maximising on opportunities through the implementation of the Anglo Social Way.     Ensuring positive benefits by developing the correct policies and processes, and by employing people with the right skills and abilities in social management.	We have set energy-efficiency targets and have plans in place to meet these targets. We are working with the Government to assist in ensuring energy security, so as to guarantee that production is not disrupted.  We have set water-efficiency targets and have plans in place to meet these. Our water strategy has addressed long-term access to water sources and mandates us to minimise impacts from water discharges.  We have a climate-change strategy and are engaging with the Government on proposed carbon taxes.  We use 54,640 hectares of land for mining purposes. Our rehabilitation liability is R1,412 and R662 has been provided in a trust fund to date.
Page reference	118 to 131	44 to 57 and 62 to 63



#### **STRATEGY**

Amplats' strategy is to maximise value by understanding and developing the market for PGMs, expand our production into that opportunity and conduct our business safely, cost-effectively and competitively.

### Understand and develop markets

Amplats conducts extensive research into the platinum market to develop an understanding of projections regarding supply and demand fundamentals, metal-price forecasts, and uses and new applications for PGMS.

In conjunction with its customers and other key business partners, Amplats continually explores ways to increase the demand for PGMs by finding new applications for the metals and opportunities for their local beneficiation.

Clearly, by having a good understanding of the market and by helping to grow it, Amplats is able to ensure that the business remains sustainable. A review of the PGM market is included from page 30 in the Integrated Annual Report.

#### Sustain and grow the business

By understanding and developing the markets for PGMs, Amplats is able to sustain and, markets allowing, grow the business by leveraging the Company's extensive access to PGM resources.

Current resources are estimated at 649.7 million 4E ounces, with 180.8 million 4E ounces classified as Reserves. A detailed account of Resources and Reserves is included on page 158 of the Integrated Annual Report.

In order to respond to supply-and-demand shifts in the market, the Company is increasing its ability to flex production to meet short-term market growth, steadily rising to 3 million ounces by 2015.

Strong and sound stakeholder relations are fundamental for Amplats to be able to sustain and grow the business. This is achieved through active engagement with our stakeholders. We recognise the value of partnerships in building capacities, improving governance and promoting sustainable development. A detailed description of the Company's approach to stakeholder engagement is included on page 197 of the Integrated Annual Report.

# Conduct the business safely, cost-effectively and competitively

Amplats' strategy of zero harm focuses on finding engineering solutions to remove or eliminate hazards; and on sound management systems, behavioural change and wellness in the workplace.

For Amplats to remain an attractive investment and to ensure ongoing returns and the ability to grow the business, it is imperative that its operations fall with the lower half of the cost curve. To improve the overall cost position, the Company is focusing on four areas: value engineering, people's productivity, cost management and overhead management.

By operating safely and cost-effectively, the Company will be able to maintain its position as a producer.

#### Mine responsibly

For Amplats to achieve its vision and strategy, it has to retain its societal licence to operate. The nature and extent of the impacts from our activities carry with them obligations of respect for human rights, good environmental stewardship and ethical

Clearly, by having a good understanding of the market and by helping to grow it, Amplats is able to ensure that the business remains sustainable

behaviour. The Company endorses the 10 principles of the United Nations Global Compact, to which our majority shareholder is a signatory.

#### **SUMMARY OF RISKS**

Amplats operates a robust and dynamic risk management process by deploying appropriate risk strategies to exploit upside risk and conversely manage downside risk to an acceptable level. Risk management is therefore an integral part of the Group' strategic and business processes and is a key element in achieving our vision, strategic objectives and protecting our core values.

The Company has implemented an Integrated Risk Management (IRM) methodology, which means that each key risk in every part of the Group is included

in a structured framework and systematic process of risk management. The methodology design takes cognisance of best practice requirements and is aligned to the principles of King III Code of Corporate Governance, which ensures that strategy, risk and performance are integrated.

Risk management forms an integral part of the Group's governance framework. The Board recognises that an effective risk management process and systems of internal control are fundamental in ensuring effective governance and sustainability of our business.

Embedding of risks within the business implies a clear link between risk, strategy and business performance. The table illustrates this alignment within AAP.

	Strategy	Strategic objective	Key risks*	Key risk indicators
oup metals, expand our rely and competitively	Understand and develop markets	Market leadership through research and development	Inappropriate economic assumptions     Regulatory changes     Inappropriate market supply/demand assumptions	Customer feedback that contradicts internal views     Unexpected changes in metal prices and exchange rates     Unexpected analysts' ratings of AAP     Unexpected developments in the regulator environment
t for platinum gr fely, cost-effecti	Sustain and grow the business	Leveraging the large resource footprint	Non-delivery of capital replacement and expansion projects on plan/ schedule     Unavailability of bulk infrastructure	Slippage against project investment proposals     Forecasted water, power and transport shortages
To maximise value by understanding and developing the market for platinum group metals, expand our production into that opportunity and conduct our business safely, cost-effectively and competitively		Creating a flexible production base	Lack of underground available ore reserves	Insufficient available and stoppable Ore     Reserves position
		Strong stakeholder relationships	Lack of community support for our business activities     Non-compliance with/response to regional regulatory requirements	Increasing trend in community demonstrations     Negative trends in results of relationship health surveys within communities local to mines     Instances of non-compliance with regional regulatory requirements
e by unders that opport	Conduct business safely, cost-effectively and competitively	Safety strategy	Poor safety performance having an impact on our licence to operate     Deterioration in employee health	Lack of improvement in safety record     Worsening trends in employee health     (TB, HIV, noise-induced hearing loss, etc)
To maximise valu production into		Low-cost producer	Non-achievement of cost and production targets     Inability to attract and retain the appropriate skills	Non-achievement of cost and production budgets     Deterioration in key performance indicators related to people – staff turnover, results from surveys

 $<sup>^{\</sup>star}\,$  Detailed risk mitigation strategies for key risks are included in the table on page 21.





#### PRINCIPLES OF CORPORATE GOVERNANCE AND STRUCTURES

Corporate governance encompasses the concept of sound business practice, which is inextricably linked to the Group's management systems, structures, policies and culture of governance, and ensures that the Group acts towards all stakeholders in a responsible and transparent manner from an economic, social and environmental perspective.

We have aligned our SD-related policies and management systems to comply fully with those of Anglo American and report internally on our performance at prescribed periods

The Board reaffirms its commitment to sound governance. It ensures that the Group's business is conducted in accordance with high standards of corporate governance, using risk management and control in accordance with local and internationally accepted corporate practice. These standards are well embedded in the Group's system of internal controls, which have been implemented to comply with King III recommendations and the governance requirements of the 2008 Companies Act which became effective from 1 May 2011.

A detailed overview of Amplats' governance structures and processes are provided in the Integrated Annual Report from pages 198 to 205. This report is available at www.angloplatinum.com.

### OUR RELATIONSHIP WITH ANGLO AMERICAN plc

Anglo American holds 79.83% of Amplats' shares. As the Company's majority shareholder, it sets the business policy and performance standards to which Amplats adheres. These were developed by Anglo American to enable it to meet its many SD obligations. We have aligned our SD-related policies and management systems to comply fully with those of Anglo American and report internally on our performance at prescribed periods.

Anglo American's investment decisions, their approach to planning and implementing projects, and the way in which they manage their operations and the closure of their mines, are governed by a comprehensive set of mandatory performance requirements that form part of Anglo American's Way documents: the Safety Way, the Social Way, the People Development Way, the Occupational Health Way, the Environment Way and the Projects Way. Each of these documents outline the vision, principles, policies, frameworks and management system requirements for the respective area of focus.

Anglo American requires all service providers acting on their behalf to adopt and follow these Group standards and policies. They also promote the adoption of comparable standards in joint ventures or associate companies.

Implementation of the Anglo American policies is confirmed from time to time via peer-reviews and internal and external audits. The diagram on page 29 is an illustration of the hierarchy of Anglo American policies and documents; and of the ways in which these obligations correlate with Amplats' policies, procedures and guidelines.

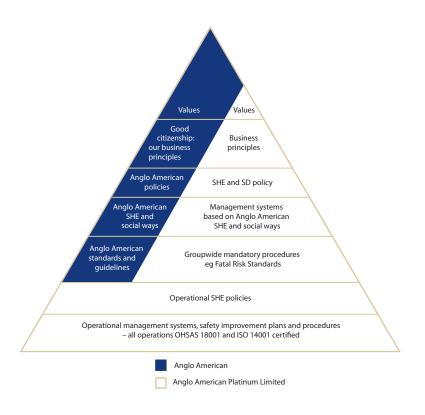
### GOVERNANCE AND OUR JOINT-VENTURE PARTNERS

In 2011, a strategic review of the Company's joint-venture portfolio was undertaken.

A decision was made to move from being a passive investor to an active one. This will ensure more direct involvement with joint ventures to ensure Amplats policies and standards are complied with.

Non-managed joint ventures and associates are governed by monthly steering and

management committee meetings and quarterly joint-venture Executive Committee meetings at which Anglo American Platinum Limited has representation. The agreements make provision for the management committees to constitute subcommittees to monitor areas such as employment equity, resource management, planning, production, safety, health, environment, audit, social development, community engagement and remuneration. The joint-venture governance structures are provided on pages 162 to 163.



#### **AWARDS**

In 2011, Amplats received the following measures of recognition for its sustainability programmes:

- Top gender-empowered company in the resources and overall categories for the Top Women Awards 2011.
- Ranked first in environmental reporting in the materials category of the annual Newsweek Global Green Rankings.
- Ranked fourth in the Excellence in Sustainability Reporting 2011 by Ernst & Young.
- Awarded a 1st runner-up certificate by the Zimbabwe National Chamber of Commerce for regional achievement in Social Corporate Responsibility for the year 2011.



#### **DISCLOSURE OF MANAGEMENT APPROACH**

#### MANAGEMENT STRUCTURE

At Amplats each operation is responsible and accountable to the Board for ensuring that resources are allocated effectively and that attention is given to the implementation of SD principles within the organisation. The Board of directors' Safety & Sustainable Development Committee provides policy direction and monitors our safety, health, environmental and social performance. The Audit Committee of the Board is responsible for setting the direction for sustainable development issues based on the organisation's risk profile.

Societal performance indicators relating to bribery, corruption and anti-competitive behaviour, undue influence in public policymaking and monopoly practices are addressed through our good citizenship business principles policy

The executive management team relies on two dedicated corporate departments – Sustainable Development and Safety, and Health and the Environment (SHE) – to ensure that all the key aspects of SD that are pertinent to the Group's activities are addressed.

SD is fully integrated into our management approach. As a result, areas such as human rights; economic, environmental and labour practices; and societal and product responsibility remain line-function duties. Key Group functions are tasked with various components of sustainable development. The typical SD issues addressed and managed by the various executive functions are summarised in the table on page 31.

Amplats' Corporate Affairs function is tasked with ensuring that social and community issues, lobbying and relations with Government are attended to in the day-to-day running of the business. Monthly operations committee meetings are used to facilitate and track the progress of impact assessments and the formulation of necessary management plans. Societal performance indicators relating to bribery, corruption and anti-competitive behaviour, undue influence in public policymaking and monopoly practices are addressed through our good citizenship business principles policy. The impacts the Company has on the communities in which it operates, and also the risks associated with

these impacts, are addressed on pages 118 to 131. Our interaction with other stakeholders has been covered in the "Our stakeholders" table on page 144.

Amplats has policies in place on community engagement and human rights, including security and resettlement. Our Company policy is that any resettlement has to be carried out in accordance with international best practice and that we are thus bound to proceed on the basis of the following principles: the avoidance of resettlement; freely conducted negotiation; continuing consultation with credible community representatives; fair compensation; the provision of mechanisms for resolving grievances; a presumption of collective resettlement; and, as a minimum, the restitution of livelihoods. Our key successes and likely areas of difficulty in future are described on page 125. Security and human rights issues are dealt with through our Security Department, and our performance in this respect is recorded on page 109.

Emergency preparedness and recovery are formulated at Group level, and are integrated into both the ISO 14001 and the OHSAS 18000 management systems at each Company site.

Targets have been set for all the individual areas that have been deemed material for the organisation. These targets and our performance against them are shown on the inside cover of this report.

Executive representation	Relevant sustainable development (SD) topic as managed by the function		Page ref
Corporate affairs	SOCIAL PERFORMANCE – SOCIETY  Government relations Social and community issues Community engagement and development Host community settlement and/or resettlement Community safety, health and welfare SOCIAL PERFORMANCE – HUMAN RIGHTS Security and human rights Bribery/corruption Security Economic performance Socio-economic development	Corporate centre and shared services	118 to 131
Finance	ECONOMIC PERFORMANCE     Corporate social investment     Enterprise development     Supplier relations	Corporate centre and shared services	112, 132 to 137
Human resources	SOCIAL PERFORMANCE – LABOUR PRACTICES AND DECENT WORK  • Skills development (including young professional development and adult basic education and training)  • Recruitment  • Transformation  • Diversity and equal opportunity  • Employee/labour relations		94 to 101
Marketing	SOCIAL PERFORMANCE – PRODUCT RESPONSIBILITY  Market development  Product beneficiation and stewardship  Research and development  Industrial development  REACH	Corporate centre and shared services	138 to 141
Safety, health and the environment	SOCIAL PERFORMANCE – HEALTH AND SAFETY  Employee safety Safety and heath management systems Hazardous material management Wellness in the workplace (includes HIV and TB) Occupational healthcare Public healthcare Rehabilitative and palliative care ENVIRONMENTAL PERFORMANCE Environmental aspects and impacts Biodiversity Water management Air quality management Emissions management Waste management Raw materials usage	Corporate centre and shared services	78 to 93 42 to 76
Capital projects and engineering	Engineering and technical solutions     Project SD reviews     Initial environmental management programme reports     Initial community liaison     Energy efficiency	Operational functions	-
Mining	SD is a line management function supported by dedicated SHE, social, HR, economic and engineering resources. Each operation has its own management system and is certified against OHSAS 18001 and ISO 14001. Anglo American's Socio-Economic Assessment Toolkit (SEAT) is used as a means to determine our social impacts.	Operational functions	-
Processing	SD is a line management function supported by dedicated SHE, social, HR, economic and engineering resources. Each operation has its own management system and is certified against OHSAS 18001 and ISO 14001. SEAT is used as a means of determining our social impacts.	Operational functions	-
Mining joint ventures	Participate in committees such as the Corporate Governance Committee, which takes decisions regarding safety and sustainable development issues.	Operational functions	_

#### STAKEHOLDER ENGAGEMENT

At Amplats we improve our understanding of society, and of our place within it, through active engagement with those around us. Our principal accountability remains to our investors. At Amplats we seek to maximise shareholder value over time. We believe that this is best achieved through an intelligent regard for the interests of other stakeholders and through a reputation for acting with integrity. Our stakeholder engagement process is guided by key relationships that are material to the organisation's success and our impacts on specific stakeholder groups.

We recognise the value of partnerships in building capacities, improving governance and promoting sustainable development

Our key stakeholders include our investors and potential investors, employees and unions, governments, local communities and NGOs and associations. Our policy in dealing with these stakeholders is as follows:

#### **INVESTORS**

We will ensure full compliance with relevant laws and rules. We will observe high standards of corporate governance and are committed to transparency and fair dealing.

#### **EMPLOYEES**

We are committed to the safety of our employees and to treating them with care and respect. We will invest in their development and ensuring that their careers are not constrained by discrimination or other arbitrary barriers to advancement. We recognise the importance of family life and of allowing our employees to achieve a satisfactory work-life balance. We will deal honestly, and maintain regular two-way communication, with our workforce.

#### **GOVERNMENTAL BODIES**

We will comply with the laws of our host countries while observing, across our activities, the best practice standards developed by the leading intergovernmental organisations.

#### **COMMUNITIES**

We aim to create and maintain strong and respectful relationships with the communities of which we are a part. We will seek regular engagement about issues that may affect them. We aim to contribute to the creation of more prosperous, empowered and adaptable communities. We will regularly assess our operations' impact upon local social and economic development and report upon it. We will provide local mechanisms for the consideration and resolution of complaints and grievances in a fair, timely and accessible manner.

#### **BUSINESS PARTNERS**

We seek mutually beneficial relationships with our customers, contractors, suppliers and other business partners, based on fair and ethical practices, including prompt payment within the negotiated terms.

We require our supply chain to strive to meet the standards set out in these principles.

NON-GOVERNMENTAL ORGANISATIONS

Civil society can play a crucial role in promoting pluralistic and more adaptable societies.

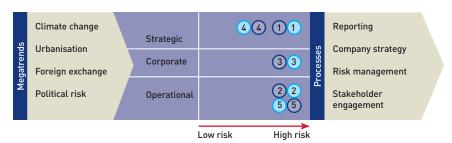
APPROACH TO ENGAGEMENT

The Company's approach to engagement with stakeholders includes formal meetings, dialogues, one-to-one

meetings, internal and external surveys and, regular engagement with local authorities and communities at each operation. Engagement with stakeholders focuses on those issues that have the greatest potential to affect operational performance, long-term sustainability and/or financial performance. Engagement is planned and conducted in accordance with the AA 1000 Stakeholder Engagement Standard.

The material issues related to the various stakeholder groupings with cross-referencing to relevant information is included in a comprehensive table on page 144.

The diagram below displays our assessment of risk against a consolidated opinion of our stakeholders.



- 1. Economic environment (which includes financial sustainability).
- Safety and health (which includes safety of our people, HIV/AIDS and noise-induced hearing loss).
- 3. Regulatory and mineral legislation.
- 4. Access to resources (which includes access to water, energy and land).
- 5. Community impacts and expectations.

- Amplats risk rating
- Stakeholders risk rating



# MINING LICENCES AND BLACK ECONOMIC EMPOWERMENT

Anglo American Platinum (Amplats), having achieved execution on 14 out of 15 mining licences, remains committed to meeting the requirements of South Africa's Mineral and Petroleum Resources Development Act and the Mining Charter. The Group is

proud of the contribution it has made to empowerment in South Africa through the numerous transactions it has facilitated since 2000. These have resulted in the significant and meaningful empowerment of historically disadvantaged South Africans (HDSAs) in various operations and projects. Below is a brief summary of these transactions:



Date	Summary of transactions
August 2000	Sale of a 17.5% (and facilitation of an additional 5%) in Northam to Mvelaphanda Resources.
August 2001	Formation of 50:50 Modikwa JV with ARM Mining Consortium, an empowerment company that includes the Mampudima and the Matimatjatji communities of approximately 60,000 rural residents as broad-based participants.
August 2002	The establishment in July 2002 of a 50:50 unincorporated joint venture with Royal Bafokeng Nation over the Bafokeng-Rasimone Platinum Mine (BRPM) and the Styldrift project area. Following the restructuring of the BRPM joint venture in December 2009, Royal Bafokeng Platinum Limited (RB Plat) acquired a 67% interest as well as operational control of the BRPM Joint Venture on 4 January 2010. RB Plat listed on the JSE Limited on 8 November 2010 and the Group currently holds a 12.6% equity interest in RB Plat, in addition to the 33% direct interest in BRPM.
February 2003	The formation, in August 2002, with Lonmin plc, of the Pandora Joint Venture, which includes the participation of the Bapo-Ba-Mogale Mining company and Mvelaphanda Resources (on behalf of Northam) as empowerment partners, each having a 7.5% interest in the joint venture.
December 2005	The disposal in October 2005 of the rights on the property Elandsfontein 440 JQ to Eland Platinum Mines (EPM), with the Ngazana Consortium holding a 26% interest in EPM.
July 2006	The development of a chromite recovery plant at the Group's Union Mine with Siyanda Chrome Investments, an HDSA company.
November 2006	The transaction, in December 2006, with the Bakgatla-Ba-Kgafela (Bakgatla), who are the traditional community at Union Mine, giving the Bakgatla a 15% stake in Union Mine as well as a 26% stake in the Magazynskraal project and a 55% stake in the Rooderand project.
September 2007	The announcement of The Group's sale to Anooraq Resources Corporation (Anooraq) of an effective 51% of Bokoni Platinum Mine (Bokoni) and an additional 1% of the Ga-Phasha, Boikgantsho and Kwanda Joint Venture projects. Anooraq now owns and controls an effective 51% of Bokoni, Ga-Phasha, Boikgantsho and Kwanda. This transaction gave Anooraq control over the third-largest PGM resource base in South Africa.
September 2007	The disposal of the Group's 50% interest in the Booysendal project and of its 22.4% interest in Northam to Mvelaphanda Resources, for a total consideration of R3.7 billion. Mvelaphanda Resources injected the Booysendal project into Northam in return for Northam shares, resulting in Mvelaphanda Resources acquiring majority control of Northam. This transaction gave Mvelaphanda Resources control over the fifth-largest PGM resource base in South Africa.
September 2007	Announcement of the establishment of an employee share ownership plan (ESOP) that effectively owns 1.5% of Amplats to benefit all permanent employees not participating in any other Company share scheme. More than 90% of the scheme's beneficiaries are HDSAs.
December 2008	The Group swapped its 37% interest in the Western Bushveld Joint Venture for a 26.6% equity interest in Wesizwe Platinum Limited (Wesizwe), an HDSA company.
February 2011	Announcement of the Group's R3.5 billion (circa. 2.33% of market capitalisation) community economic empowermen transaction, Project Alchemy. See details on page 36, 120 and 124.

### **REGULATION AND MINERAL LEGISLATION**

# MINERAL RIGHTS UNDER CONTENTION

Amplats is geared for growth should market demand for PGMs increase, with an exploration right-holding of 856.6 Moz 4E in South Africa and Zimbabwe. However, 8.3% of Amplats's exploration ground is subjected to legal contestation and as a result the Company is at the advanced stage of engagement with the DMR to amicably resolve these disputes. None of mineral resources associated with the rights under dispute are included in Amplats' declared resource estimates. These disputes relate to exploration rights to the following properties, Middellaagte 382 KQ, Brakspruit 299 JQ, a portion of Tigerpoort 426 KS, Rooderand 46 JQ and the Modikwa deeps.

#### MINING CHARTER

The end of 2011 marked seven years since the Mining Charter and its associated scorecard for broad-based socio-economic empowerment for South Africa took effect. Amplats remains committed to the transformation of the South African mining industry and welcomed the release of the revised Mining Charter in September 2010. The charter retained the requirement, set in 2002, of a historically disadvantaged South African (HDSA) ownership of 26% by 2014. The revised charter provides clarity in a number of areas, for instance in its definition of the term 'beneficiation'. This is the first year in which we are reporting against the new Mining Charter scorecard.

The Company continues to meet all its Mining Charter obligations. The table on page 38 provides a summary of its performance against the charter. It also shows where to obtain more information regarding particular sections of the new scorecard.

#### **PROJECT ALCHEMY**

An multibillion rand economic empowerment transaction, called Project Alchemy, has been designed to promote long-term sustainable development in host communities and key labour-sending areas that are not currently benefiting from the Company's extensive BEE programmes. This groundbreaking initiative heralds a new approach that emphasises broad-based black economic empowerment and engagement with communities.

Alchemy is a R3.5 billion transaction aimed at ensuring the long-term sustainable development of four of our host communities and major labour-sending areas. The transaction is notionally vendor-financed over 10 years at a fixed 9.5% notional interest rate and includes an upfront discount of 5%. Amplats has issued a total of 6,290,365 ordinary shares of 10 cents each to the Lefa La Rona ("Our Inheritance") Trust. The market value of such shares (inclusive of the 5% discount) is R528.59 per share, determined with reference to the share price immediately prior to the announcement date for the transaction. The Alchemy shares issued represent 2.33% of Amplats ordinary shares in issue prior to the issue of the former.

The Lefa La Rona Trust has been established to act as a conduit between the Company and four development trusts (Development Trusts), to be set up for the benefit of host communities within an approximate radius of 15 km from the Amandelbult, Rustenburg, Twickenham and Mogalakwena mines (collectively "the Mines") and a non-profit company (Non-profit Company) incorporated for the benefit of the labour-sending areas. The Development Trusts and the Non-profit Company will benefit from the following cash flows: annual dividend receipts; a

guaranteed minimum dividend flow of R20 million per annum to provide an annual cash amount to the Development Trusts and the Non-profit Company, after taking into consideration the annual dividends received; rechannelled CSI spend of R30 million to the extent that the Development Trusts secure approval for development projects within the host communities; health and safety cash-flow benefits for the Development Trusts if key performance indicators relating to on-and-off-mine health and safety targets are achieved; proceeds from the potential increase in the Amplats share price after settling of the notional vendor funding, to the extent that the shares are disposed of by the Development Trusts and the Non-profit Company at the expiry of the term of the transaction.

The Company's ultimate ambition in this transaction is to make a meaningful and sustainable contribution to the ability of those communities to thrive well beyond the life of our mining operations.

# MINE NATIONALISATION – SOUTH AFRICA

The African National Congress (ANC), South Africa's ruling political party, has completed research into the pros and cons of mine nationalisation in South Africa. In 2011, the ANC appointed researchers to conduct a global study into mine nationalisation models. A first draft report was tabled in November 2011. The ANC's secretary general has asked the researchers to make amendments to the report and it is expected that the document will be made public in the first half of 2012. Thereafter, the ANC will debate the matter of mine nationalisation at its policy conference in mid-2012.

We continue to work with representative bodies of the mining industry in order to be able to make a contribution to finding, together with the ruling party and other stakeholders, a collective and sustainable model capable of addressing the country's current challenges of poverty, unemployment and inequality in a constructive manner. We remain of the opinion that mine nationalisation will not solve the economic and transformational challenges South Africa faces, but will instead have a negative impact on the country's economy and ability to create jobs.

# INDIGENISATION ACT – ZIMBABWE

The Indigenisation and Economic Empowerment Act (Indigenisation Act) was signed into law on 9 March 2008 and seeks to ensure that at least 51% of the shares of every public company and any other business is owned by indigenous Zimbabweans. The Minister of Youth Development, Indigenization and Empowerment, published regulations for the mining sector on 25 March 2011. The regulations apply to every mining business not controlled or 51% owned by indigenous Zimbabweans. Such businesses were required to submit an indigenisation plan by 9 May 2011 and were also required to dispose, by 25 September 2011, of at least 51% of their shares to entities specifically designated in the regulations.

Amzim Holdings Limited, the holding company for the Zimbabwean investment, submitted its indigenisation plan in line with these deadlines. At year end, negotiations with the Minister of Youth Development, Indigenization and Empowerment, regarding this plan were still in progress. As

part of its overall plan to comply with the requirements of the Indigenisation Act, Unki made a \$10 million donation to the Tongogara Rural District Community Share Ownership Trust. This trust was established by Amzim Holdings Limited to advance the empowerment of the Unki Platinum Mine host communities. It is also envisaged that, subject to conclusion of negotiations with the Zimbabwean Government, the trust will subscribe for shares equivalent to 10%, on a fully diluted basis, of the issued share capital of Amzim Holdings Limited.

#### WATER USE LICENCE

Our operations with approved water use licences (WUL) are Twickenham Platinum Mine, Polokwane Metallurgical Complex, Mogalakwena Mining area and the Mototolo Concentrator and Der Brochen Project (whose integrated WUL was approved in April 2011. Although submitted as far back as 2004, three of our operations, Rustenburg, Union and Amandelbult, located in the North West Province of South Africa, remain without approved WULs. These operations have valid water permits under the old Act. We continue to engage with and support the regulator, Department of Water Affairs, both at the regional level and at National level through our Government Relations department, in relation to the approval of our WULs.

## PRINCIPLES OF CORPORATE GOVERNANCE AND STRUCTURES

# Mining scorecard reference table

Description	Measure	2011 target	2011 progress against target	Compliance target by 2014	Page ref	
Reporting		•		'		
Has the Company reported the level of compliance with the charter for the calendar year?	Documentary proof of receipt from the department	March 2012	Reports submitted on a quarterly basis	Annually	_	
Ownership						
Minimum target for effective HDSA ownership	Meaningful economic participation		A plan was established and 53% was achieved at the end of 2011	26%	35	
	Full shareholder rights		Good progress to achieving 2014 target	26%	35	
Housing and living conditions						
Conversion and upgrading of hostels to attain the occupancy rate of one person per room	Percentage reduction of occupancy rate towards 2014 target	25%	The housing strategy has been adopted by organised labour as the key beneficiary of the houses. All hostels have been converted. Promotion of home-ownership programmes continues and plans are in place to build 20,000 homes by 2017	Occupancy rate of one person per room	104 to 105	
Conversion and upgrading of hostels into family units	Percentage conversion of hostels into family units	25%	All hostels converted	Family units established	104 to 105	
Procurement and enterprise deve	lopment					
Procurement spent from BEE entity	Capital goods	10%	48%	40%	133	
	Services	40%	44%	70%	133	
	Consumable goods	15%	34%	50%	133	
Multinational suppliers' contribution to the social fund	Annual spend on procurement from multinational suppliers	0.5%	This programme is currently being addressed and work is underway. The identification of suppliers is complete. The next step is to develop a strategy for the management of the funds.	0.5% of procurement value	_	
Employment equity						
Diversification of the workplace to reflect the country's demographics to attain competitiveness	Top management (Board) level	25%	44%	40%	158	
	Senior management (Exco)	25%	41%	40%	158	
	Middle management	35%	56%	40%	158	
	Junior management	40%	63%	40%	158	
	Core skills	20%	81%	40%	158	

# Mining scorecard reference table

Description	Measure 2011 target		2011 progress against target	Compliance target by 2014	Page ref	
Sustainable development and grov	vth	<b>!</b>	<u> </u>	1	'	
Improvement of the industry's environmental management	Implementation of approved EMPs		Regulation 55 performance reviews are done by the environmental managers and are submitted to the DMR by the operations. The schedules are aligned with the EMPR commitments	100%	72 to 73	
Improvement of the industry's mine health and safety performance	Implementation of the tripartite action plan on health and safety	tripartite action plan on ali		100%	78 to 93	
Utilisation of South African-based research facilities for analysis of samples across the mining value chain	Percentage of samples in South African facilities			100%	_	
Beneficiation						
Contribution of a mining company towards beneficiation (this measure is effective from 2012)	· · · · · · · · · · · · · · · · · · ·		The Company continues with implementation of its beneficiation strategy. The offset guidelines have not been finalised by the Department of Mineral Resources and therefore the Group cannot calculate what offsets it qualifies for. Furthermore the DMR released its beneficiation strategy but with no reference to base-line levels and targets.	Section 26 of the MPRDA (percentage above baseline)	_	
Human resource development						
Development of requisite skills, incl support for South African-based research and development initiatives intended to develop solutions in exploration, mining, processing, technology efficiency (energy and water use in mining), beneficiation as well as environmental conservation and rehabilitation		3.5%	6.3% has been achieved against this target	5%	94 to 100	
Mine community development						
Conduct ethnographic community consultative and collaborative processes to delineate community needs analysis	Implement approved community projects		Projects in communities surrounding our operations implemented to the value of R186,5 million	Up-to-date project implementation	118 to 124	





#### **OUR ENVIRONMENT**

Environmental management at our operations is characterised by an increased focus on conducting mining and its related activities in a sustainable manner. We endeavour to conduct prospecting, new projects, mining and mineral processing in accordance with the generally acceptable SD principle of integrating social, economic and environmental factors so as to secure our licence to operate, minimise harm and deliver long-term benefits to our stakeholders. Environmental compliance and cost pressures, such as increasingly stringent legislation and rising prices, make it more costly to produce commodities through standard processes. In coming to grips with these pressures we have set targets for reducing energy inputs and water use at our operations and compliance with all applicable legal and other requirements.

We endeavour to conduct prospecting, new projects, mining and mineral processing in accordance with the generally acceptable SD principle of integrating social, economic and environmental factors so as to secure our licence to operate, minimise harm and deliver longterm benefits to our stakeholders

### ENVIRONMENTAL STRATEGY AND MANAGEMENT SYSTEMS

Our environmental mission is based on engagement, review and best-practice advice to minimise harm to the environment, from exploration to beyond closure. The Environmental Department, in close collaboration with the SD Department, sets its strategy to achieve this mission. To ensure that we strive towards continual improvement to comply with legal and other requirements, all our managed operations have environmental management systems (EMSs) that are certified against the ISO 14001: 2004 standard. Furthermore, the system and performance standards contained in the Anglo Environment Way (AEW) support the operations' efforts to improve our environmental performance beyond compliance.

Since the initial milestone of ISO 14001 certification in 2004, all mines, concentrators, smelters and refineries in operation have maintained their certification to date. During 2011, all operations (except at Amandelbult) were reassessed by an

independent service provider, the DQS German Association for Certification of Management Systems Proprietary Limited against the ISO 14001: 2004 standard. Amandelbult's 2011 recertification ISO 14001 audit was postponed to 2012 owing to operational reasons. One of the key performance objectives during the ISO 14001 audits in 2011 was to avoid the repeat of major non-conformances. The environmental managers for mining and processing conducted internal ISO 14001 reviews at each operation before each external DQS audit. The outcome was a total of only three major non-conformances for the Group in 2011, compared with the seven major non-conformances the previous year. These non-conformances were raised at three process operations in the Rustenburg mining area and were the result of the improper close-out of previous findings. The major non-conformance at Waterval Smelter was closed out within the 90 days prescribed by the assessment. However, owing to late resolution of the findings, the two major non-conformances at the two refineries will be closed in 2012, after the completion of follow-up legal reviews.

At one operation, Mogalakwena Mine, no major or minor non-conformances were raised. This indicates the extent to which the ISO 14001 system is embedded at the operation. The newly commissioned Unki Platinum Mine in Zimbabwe achieved ISO 14001 certification for the first time in July 2011.

Two of our joint venture operations, the Modikwa Platinum Mine and the Pandora Joint Venture, are currently not certified in terms of ISO 14001. Modikwa intends to get recertified in 2013. The Bokoni Platinum Mine Joint Venture maintained its ISO 14001 certification in 2011, with no major non-conformance reported. The Bafokeng-Rasimone Platinum Mine (BRPM) Joint Venture also maintained its ISO 14001 certification, without major non-conformances being reported. Other joint ventures, such as Aquarius (Marikana and Kroondal) in Rustenburg and the Mototolo concentrator that forms part of the Xstrata Joint Venture, also maintained their ISO 14001 certifications in 2011.

Amplats does not require its joint-venture partners to implement and maintain ISO 14001, but legal compliance with environmental obligations is mandatory.

#### **ENVIRONMENTAL RISKS**

Each operation is responsible for considering all the aspects of activities that interact with the environment; and for developing a related-aspects register. Detailed understanding of each aspect and its related environmental impact provides the basis for a baseline risk-assessment based on the Anglo American 5 x 5 risk matrix. As part of the risk-assessment process, all applicable legal and other requirements are identified

through the assistance of a legal register. Specific measurable and practicable objectives and targets are set for each significant aspect, and are then tracked through the operational EMS. The process is supported by means of a monthly report that provides a comprehensive overview of each operation's targets and progress against the set targets. The monthly report is verified and communicated to the senior environmental manager, as well as to the general manager at each operation. This assists each operation to maintain its focus on the key risk areas and show continued improvement over time.

In addition to this, the monthly report also requires each operation to indicate the top three environmental aspects posing the highest risk to that operation. This provides a good basis for the identification of material environmental risks in the Group. In 2011, the material environmental risks identified were related to water and air (mostly unauthorised water discharges and exceeded air-quality permit conditions). Apart from breaching legal requirements, such incidents can also have negative reputational consequences. Another material risk related to water is that three of our water-use licences have not yet been approved by the Department of Water Affairs, despite significant effort by the operations to obtain these licences. Where the science is uncertain, Amplats will always act to diminish harm.

#### **MATERIALS**

Our demand for and consumption of materials are dependent on the availability of non-renewable resources. Considering the worldwide focus on greenhouse gases (GHGs) and their direct relationship with the eco-efficiency of materials, more emphasis is

being placed on materials recycling and reuse, and on ways of cutting GHG emissions.

Key bulk materials used include rock mined in underground and open-pit operations, liquid fuels, coal, grease and lubricants.

Bulk-material use increases over the years as operations expand. Other key materials used include wood, chemicals and packaging.

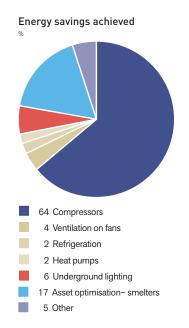
Although different types of packaging materials are used, their volumes are minimal and therefore not material. Amplats does not currently use waste, processed or unprocessed, from external sources.

The combined rock broken and mined tonnes for managed operations were 8.8% higher in 2011 than in 2010, mostly as the result of increased production at the Mogalakwena and Unki mines. This contributed to an increase of 14% in liquid fuels usage such as diesel.

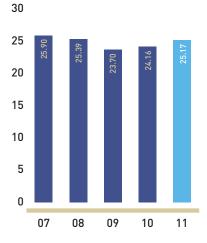
Tonnes milled from managed operations decreased marginally compared with those for the previous year, by 2.6%. Other materials showing significantly reduced consumption included grease (down by 38%) and LPG (down by 13%).

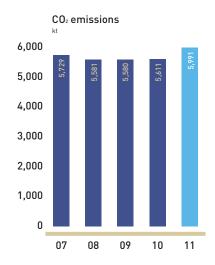
#### **ENERGY**





# Energy consumption





South Africa's energy sector is critical to the economy as the country relies heavily on its large-scale, energy-intensive mining industry. South Africa has only small known deposits of natural gas and uses its large coal resources for most of its energy needs. As a result, the country's carbon emissions and intensity levels are relatively high.

To address the electricity-supply risk issues that manifested in the power interruptions of 2008, South Africa's electricity utility, Eskom, responded with several programmes. On the supply side, it is addressing the issue with an aggressive new-build programme to add generation capacity to the grid. On the demand side, it is actively pursuing a more integrated demand-management programme, with more funding allocated to enhanced electricity savings, thereby creating a virtual power station by means of savings. If these interventions are not implemented rapidly, however, the result may be short-term to medium-term electricity supply shortfalls that result in power-supply interruptions. Eskom has also been granted a 25% year-on-year electricity price increase for three years, from 2010 to 2012, by the National Energy Regulator of South Africa, which is contributing to cost increases in all electricity markets.

Carbon taxation in one form or another is being considered. A carbon tax could have a negative effect on our operating margins, but should a tax incentive regime encouraging energy efficiency and savings be introduced, we may well be in a position to benefit from it.

# Energy-consumption modelling and targets

The energy-consumption modelling and target-setting exercise that began in 2009 was developed during 2010, with inclusion of the reporting function into the safety,

health and environment (SHE) database. The decision was made to use a single reporting platform, in order to minimise the potential for the conflicting reporting and interpretation of important business drivers. In 2011, the system was further enhanced through integration with our central electricity management support system (CEMSS).

Anglo American has also embarked on a programme of measuring, monitoring, reporting and target-setting for energy and emissions management. This programme was named ECO2MAN (an acronym for energy and CO<sub>2</sub> management). Owing to an almost linear one-to-one relationship of energy consumed to greenhouse gas emitted, this programme will result in energy targets being set until 2025. The South African Government has proposed a target of 34% reduction against a business-asusual (BAU) baseline by 2020 (42% by 2025). We are currently assessing the impact that this proposed target will have on our business, since energy requirements for the mining industry tend to increase as mines age and mining activities move deeper and further away from the main shaft. Ore grades also tend to decrease over time as the high grade ores get mined out, and the increase in energy is thus often not followed by an increase in production output.

We have continued to develop and implement energy efficiency projects during 2011 (see pie chart). We also continued to

engage with Eskom on how some of our energy-savings projects can be developed through their DSM programme.

The energy consumption and CO<sub>o</sub> emissions graphs highlight an absolute increase in energy consumption and CO<sub>2</sub> emissions of 4% year-on-year. This is attributable to the increase in production associated with the ramp-up of new projects, most notably Unki Platinum Mine in Zimbabwe and the increase in tolled concentrate tonnes.

### Overall energy-efficiency performance

Our overall energy-efficiency performance is calculated by dividing the managed operations' total energy consumption by the total refined ounces of precious metals produced through Precious Metals Refiners (PMR). Energy intensity increased in 2011 compared with 2010, by 2.7% to 5.32 GJ/oz, owing to the increase in tolled concentrate being processed through our smelting and refining processes. This is in line with the average annual increase of 2.2% that we expect as the result of increased ventilation, transportation and processing requirements as mines get deeper and the contribution of UG2 Reef ore increases. Although PMR's total ounces of PGMs and gold are used to calculate the intensity, the energy consumed for the production of concentrate from our non-managed operations and other suppliers of concentrate is not considered in the efficiency calculation.

In setting internal targets for energy efficiency at the mines and the concentrators, energy efficiency is calculated in terms of tonnes broken and mined for the mines and in terms of tonnes milled for the concentrators.

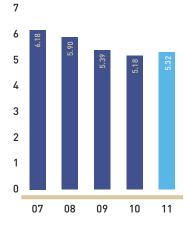
The energy-intensity graph for mi indicates that the year-on-year trend is flat, despite the fact that mining operations are moving deeper and further away from the surface and underground shaft stations. This flat trend can be attributed to the myriad energy-saving initiatives under way throughout the Company. The marginal difference between the 2010 and 2011 intensities is the result of day-to-day business-related operational changes, such as the number of plant start-ups, maintenance requirements and the ore-grade profile.

### **Energy footprint**

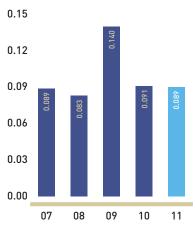
The diagram on page 46 illustrates the total 2011 energy footprint for our managed operations. In absolute terms, total energy consumption increased by 4.2%, from 24.16 PJ in 2010 to 25.17 PJ in 2011. The concentrators reported a decrease in energy use of 0.3% compared with the previous year's, while mining, smelting and refining energy use increased by 3%, 8% and 9% respectively. Mining operations remain the largest user of energy, followed by smelting and concentrating. At only 11% of the total, the refineries use the least energy. Key energy users at mining operations are compressors, winders, pumps, ventilation and cooling systems. At the smelter, the key energy users are the furnaces and the flash driers.

The total direct-energy consumption for our managed operations increased by 11%, from 5.6 PJ in 2010 to 6.1 PJ in 2011. This is the result mainly of increased production at Mogalakwena Mine and ramp-up at Unki Platinum Mine. Direct consumption by primary energy sources includes coal, petrol, diesel, paraffin, light fuel oil and liquefied petroleum gas. These direct energy sources account for 24% of the Group's total energy use.

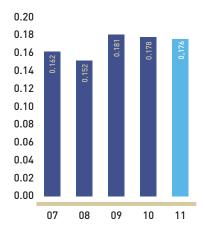
### Overall energy intensity - based on total refined PGMs and gold



#### **Energy intensity** for mines



### Energy intensity for concentrators



#### **ENERGY**

The total indirect energy consumption for our managed operations increased by a marginal 2.6%, from 18.56 PJ in 2010 to 19.05 PJ in 2011. The main source of indirect energy consumption by primary source comes from the electricity supplied by Eskom and consisted of 76% of our total energy consumption.

#### Use of renewable energy

Heat pumps, which are classified as a renewable energy source, are in the process of being installed in all mine change-houses, thus replacing the boilers using electricity. They are also being considered as the preferred technology for replacing all geysers in our Company-owned housing (instead of solar water-heaters, which have a high cost and a limited load factor, being dependent on the sun).

Now that the deregulation of powergeneration plants is making possible the establishment of independent power producers (IPPs) and in the wake of various Government incentives on renewable energy, we are investigating, among other things, several proposals from such potential IPPs. These include a 20-MW photo-voltaic plant, a 15-MW biomass plant, and several wind-generation options.

### **Energy-efficiency projects**

While Eskom's Power Conservation
Programme (PCP) had still not been
implemented by the end of 2011, mostly as
a consequence of spare generation capacity
following the worldwide economic recession
that caused a concurrent slowdown in the
South African economy, it is anticipated that
electricity shortages will occur during 2012,
and that PCP could be implemented during
the year. This will impose punitive electricity
tariffs on users who exceed allocated
electricity limits, and our CEMSS will be
used to manage this. To further enhance our
energy efficiency, the following projects are
noted:

- Heat pumps were installed at all the mining change-houses at the Rustenburg and the Amandelbult mines. These use ambient heat to heat the water used for showering, in the place of conventional resistive elements in the boilers.
- At Union Mine heat pump installation in the mining change-houses is in progress. The

- installation of heat pumps in staff houses in the village at Union Mine is being considered, using an Eskom rebate scheme announced in the course of 2011.
- The energy-efficiency projects for the optimisation of air networks that commenced at the Rustenburg, BRPM, Amandelbult and Modikwa mines during 2010 have largely been completed, with measurement and verification taking place.
- The projects started during 2010 on the installation of controllable inlet guide vanes on the main ventilation fans at Amandelbult and Rustenburg were submitted as an Eskom demand site management (DSM) funding project at the end of 2010. The DSM funding will be used to install an active control system that allows the fans to be throttled to match lower ventilation demand, with concurrent electricity savings.

While we are constantly considering energy-efficiency projects for their clean development mechanism (CDM) potential, the uncertainties with regard to the sustainability of the carbon market resulted in no CDM projects coming to fruition.

# Energy footprint Direct and indirect energy

Total energy					
25.17 PJ					
E L/F C G					
19.05 2.17 3.73 0.22					

Mining						
8.71 PJ						
E L/F C G						
6.60	2.11	_	_			

Compressed air Ventilation fans Winders Fridge plants Pumps

Concentrator						
6.66 PJ						
E	E L/F C G					
6.64	_	_	0.02			

Milling Flotation Tailings Crushing

Smelting						
6.98 PJ						
E L/F C G						
4.92 0.02		1.84	0.20			

Furnaces Flash dryers ACP

E - electricity L/F - liquid fuel C - coal G - gas

Refining						
2.82 PJ						
E L/F C G						
0.89	1.89	_				

Leaching Purification Tankhouse Boilers Compressor



Peet Swanepoel making adjustments to the micro-hydropower generator

#### Micro-hydropower generation

Energy conservation is now firmly established as a central business principle; and Amplats is always on the lookout for ways in which to reduce its energy consumption and generate its own power. Recently it has developed a way of doing both, albeit on a rather small scale.

The hydrometallurgical process used at several of our operations entails pumping fluids (water and slurries) to various heights and then allowing them to proceed to a lower head level through the force of gravity. Within this mundane process lies an opportunity which, until recently, the Company was not taking advantage of and which is based on using the potential energy trapped in the fluid when it is gravitating.

Typically, fluid gravitation takes place at several locations within our plants:

- Thickener overflows for clean water
- Cyclone overflows
- Slurry feed boxes
- Tailings dam penstocks

A typical thickener installation can easily be configured to recover energy: all that is needed is to install a waterwheel generator in the overflow pipe in which the water is already being channelled from the top of the thickener. Special applications on slurry streams are similarly straightforward. (They also generate a little more power, since the higher density of a slurry stream means that it has greater potential energy than water.)

Peet Swanepoel, production overseer at Western Limb Tailings Retreatment, recently decided to turn this opportunity into reality. Having obtained a 1-kilowatt wind turbine generator assembly and a waterwheel with a 2-metre diameter, he had them installed at the plant's cleaner thickener, utilising the thickener overflow as an energy source. The unit was configured by mounting the waterwheel directly onto the shaft of the wind turbine in the place of the wind blades, and installed so that the water from the thickener overflow could turn the wheel.

Owing to the low revolutions required for a wind turbine to generate power, and the fact that the waterwheel turns at a similar speed, the conversion to a waterwheel generator was very easy. The power generated by the wind turbine is used as is, with each kilowatt of electricity being fed directly into the plant's electrical supply. The unit will be tested and refined in-house to eliminate splashing and spillage.

Because the amount of power produced is small, the Company's investment will obviously be a long-term one. Nevertheless, the innovation has distinct advantages: the power generated by the wheel comes from an in-house source that is the Company's own, does not cost anything and is ideally suited to supplement the plant's lighting power requirements. Moreover, it is helping to reduce the Group's carbon footprint, one tiny step at a time.

#### **CLIMATE CHANGE**

Our Board is ultimately responsible for, among other things, performance, which includes climate-change response and strategy. Our S&SD Committee reviews the necessary framework, policies and guidelines for S&SD management and also ensures their implementation. It also monitors our compliance with the relevant legislation and evaluates material SD impacts in light of the precautionary principle, advising the Board accordingly. Annually we evaluate the opportunities that SD-related aspects, including climate change, present via our strategy formulation and review processes.

We are a signatory to the Energy Efficiency Accord of the Department of Mineral Resources and we have committed to a 10% reduction in CO<sub>2</sub> emissions and a 15% reduction in energy consumption per unit of production by 2014, with 2004 being the baseline year

We have our own Group energy policy, which is in line with the Anglo American climate-change policy. The three pillars of our policy are energy efficiency, security of supply and emissions management. A climate change strategy was agreed by Anglo American's Executive Committee in June 2010 and the supporting climate-change policy was approved in September 2010. The Group's approach emphasises the improvement of short-term performance, and this helps to prepare us for future developments in policy.

Climate change risks are real and certainly apply to us. Carbon tax and the physical impacts that climate change can produce pose real threats to production, safety and the communities in which we operate. On the positive side, however, we are in the unique position of producing PGMs for use in autocatalysis, which reduces toxic emissions from internal combustion engines. Autocatalysis produce water and carbon dioxide rather than carbon monoxide, nitrous oxides and particulates.

At the local level, South Africa has taken a major step forward in its procurement of

renewable energy for feed-in to the national electricity grid. During COP17, the Government announced its first list of preferred independent power producers. These 28 preferred bidders will contribute over 1,400 megawatts of electricity through wind- and solar-energy plants. The establishment of these facilities and feed into the grid represents a new regime in South African energy generation.

We are a signatory to the Energy Efficiency Accord of the Department of Mineral Resources and we have committed to a 10% reduction in CO<sub>o</sub> emissions and a 15% reduction in energy consumption per unit of production by 2014, with 2004 being the baseline year. Our progress against our targets is monitored closely considering the National Climate Change Response White Paper that was published ahead of COP17. More than 90% of our greenhouse gas emissions are indirect emissions attributed to our electricity consumption. Therefore the key factor in our strategy to reduce greenhouse gas emissions is our energyefficiency drive. As we become more energy efficient, we should be emitting less greenhouse gas per PGM ounce produced.

Anglo American's climate-change strategy covers the next 10 years, and aims to achieve the maximum economically sustainable energy and carbon savings in our business and in the use of our products. It covers carbon and energy performance management, standards and targets.

#### Greenhouse gas emissions

As stated above, the South African Government published the National Climate Change Response White Paper. On the issue of emissions, the paper states that, after 2025, South Africa's carbon emissions will level out for 10 years, before declining in absolute terms by 2036. The new "trajectory range" provided in the white paper seeks to raise the level of a national emissions peak to a high of 614 Mt CO<sub>2</sub> eq in 2025. This is considerably higher than the previous level of 550 Mt per year from 2020.

We quantified our greenhouse gas (GHG) emissions in 2011 in accordance with ISO 14064-1 in order to determine our carbon footprint. According to this ISO standard, a baseline year restatement is required if ownership and control of GHG sources were transferred into, or out of, organisational boundaries during the year. GHGs were calculated for all managed operations. In accordance with international protocols, all greenhouse gas emissions are reported as tonnes CO<sub>2</sub> eq. Any changes in the inventory boundary, methods, data and any other factors affecting emission estimates are transparently documented and justified.

The following emissions were considered:

- Direct GHG emissions (Scope 1), such as the emissions from the combustion of diesel, petrol, coal, LPG, paraffin and light fuel oils.
- Indirect GHG emissions (Scope 2), which relate to the emissions associated with the production and distribution of electricity from the national grid, which in South Africa is coal-based.
- Indirect GHG emissions (Scope 3), which cover the transportation and distribution of sold products in vehicles not owned or controlled by the reporting company.

#### Direct emissions (Scope 1)

CO<sub>2</sub> emissions generated internally from fossil-fuel use increased by 18% to 541 kt in 2011. Quantities of coal and fuel used rose by 11% and 14% respectively, with the increase attributable to the rise in direct emissions.

Direct  ${\rm CO_2}$  emissions generated internally per refined ounce of precious metal from managed operations increased by 9.8% to 114 kg in 2011.

# Indirect emissions – electricity (Scope 2)

Indirect  ${\rm CO_2}$  emissions resulting from imported electricity from the national grid increased by 2.7% to 5.45 Mt in 2011.

Indirect  $\mathrm{CO}_2$  emissions from imported electricity per refined ounce of precious metal from managed operations increased by 4%, to 1,153 kg in 2011.

# Indirect emissions – transportation (Scope 3)

Indirect CO<sub>2</sub> emissions of 31 kt resulting mainly from transportation was reported for the first time in 2011. Scope 3 emissions represent 0.52% of total emissions.

#### **TRANSPORT**

The transport of concentrates to the various smelters, and of furnace matte from the Polokwane and Mortimer smelters to Waterval Smelter, is done by road, by third-party contractors. The transport of products such as copper, nickel, sulfuric acid and sodium sulphate is effected by road and rail. Precious metals are transported to customers by road or air. Contract agreements contain environmental clauses that support the prevention of pollution. For instance, any spillage must be cleaned by the contractor involved, to our satisfaction and that of the relevant authority.



#### **WATER**



As part of our watersupply strategy, we have designed water-supply scenarios for 2018 onwards We require water to mine and process ore, and to refine base and precious metals. If our access to water resources is restricted and if we have a negative impact on water resources, then our ability to produce is directly affected.

The threat of water scarcity is very real for Amplats, given that more than 90% of our operations are located in South Africa, a country that is water-stressed. However, sufficient water has been secured to ensure the continuation of our business. Based on the needs of our operations, our water-scarcity-abatement programme aims to:

- develop new water resources for mutual benefit:
- identify and secure post-consumer domestic effluent for use as industrial grade water;
- use water resources efficiently by adopting our waste-hierarchy principles of reduce, reuse and recycle; and
- implement water-intensity targets.

Through this approach we continually strive to manage our water use so that we do not compete with other sectors for the same water resource. Over time, this approach should prevent material impacts on the environment, downstream ecosystems and food security.

### Water strategy

Our aim as a responsible water steward is to maximise the value we obtain from our water resources while seeking to avoid long-term net harm. We recognise that we act within a broader strategic water-resource framework. Hence we strive to:

- protect the quality of our water resources;
- use water wisely; and
- develop alternative water resources.

#### Water supply strategy

As part of our water-supply strategy, we have designed water-supply scenarios for 2018 onwards. To ensure the long-term security of water availability for our operations and surrounding communities, we have also developed a bulk water strategy and infrastructure plan, to protect, manage and maintain the water supply.

#### Our water supply

In 2010, we reported on the Olifants River Water Resources Development Project, which includes the construction of the De Hoop Dam and associated distribution components. This public-private partnership initiative will help to meet some of the mining sector's requirements and will also provide water to local people, agriculture and industry.

The construction of the De Hoop Dam is progressing well and the storage of water began in October 2011. Owing to the 2008/9 economic downturn and slow economic growth in 2009/10 and 2011, progress on the development of the bulk-distribution pipeline has been delayed. As a result, renewed negotiations with the Department of Water Affairs (DWA) were necessary to reconfigure the scheme. The current proposal to amend the scheme is as follows:

 Complete the De Hoop Dam as planned in 2013 and build the Phase 2c pipeline from the dam to link into the existing southern extension pipeline of the Lebalelo Water Users' Association.

- Delay or cancel the building of the other pipelines, except for the Phase 2b pipeline from the Flag Boshielo Dam to Mogalakwena.
- Develop new resources to augment the scheme by:
  - treating acidic mine-generated water from coal mines in the Emalahleni area;
  - transferring purified effluent from the Ekurhuleni area into the Olifants River; and
  - purifying and transferring gold-mine water from the same area into the Olifants River.

This proposal will increase the available water for the scheme from 160 MI/d to 400 MI/d, which will be sufficient to cater for demand until 2030. The new approach will reduce the cost of the scheme by approximately 30%, and the cost per kilolitre of water will also be reduced. In order to develop the scheme successfully, it is important to break it down in smaller entities and set up appropriate partnerships between the different roleplayers involved in each.

The proposal is currently with the DWA for final consideration and the various studies for the implementation will be conducted in 2012. The target remains to start delivery of water into the area by 2015.

#### Water supply to Rustenburg

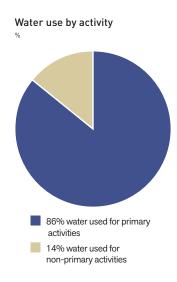
Water supply to Rustenburg is a concern because of a continued increase in the demand for potable water in the area. This means that we have to reduce our water consumption. As a result, we signed an off-take agreement with the Rustenburg Local Municipality to use 15 Ml/d of treated sewerage effluent from its sewage treatment plant. However, inconsistent

water quality is limiting the optimal use of the treated water. We are exploring several options to maximise our use of this water resource. A R15-million water-treatment plant was commissioned at our Rustenburg operations in November 2011, to improve the quality of the treated sewage water introduced into our water-reticulation system. The objective is to reduce potable water consumption by replacing potable water with upgraded treated sewage water. Since November 2011, the substitution of treated sewage water for potable water has resulted in the conservation of 60,000 m³ of potable water.

In addition, and in conjunction with other stakeholders, we initiated a pre-feasibility study to increase the supply of water to Rustenburg. The DWA has since taken over the investigation and increased the area of supply to the Bojanala District area, and they are currently busy with the feasibility study. Amplats and the other mines will participate in the study as stakeholders through the Western Limb Producers' Forum (WLPF). This study is expected to be completed by the end of 2012.

Furthermore, the WLPF has embarked on a water-conservation and water-demand management process. The studies will be conducted during 2012.

Other options being examined are the upgrading of municipal wastewater treatment plants to support increased capacity, improved water quality and the use of wastewater as a replacement for potable water in the mining industry.



#### Our water resources

In order to support the consistent interpretation and reporting of our water resources, we apply the following:

- New water consumed is separated into
  water used for primary activities and water
  used for non-primary activities. Primary
  activities include all water used to
  produce our products, from mining to
  refining. It excludes domestic use
  (villages) and recreational use (soccer
  fields, golf courses, swimming pools, etc),
  which are classified under water use for
  non-primary activities. Internally recycled
  water is also excluded from the water
  used for primary activities, as this water is
  accounted for when it enters the system.
- Potable water is sourced from water utilities such as Rand Water, Magalies Water, Lepelle Northern Water and Rustenburg Municipality. These water utilities source their water from various dams, but in no instances do our abstractions account for more than 5% of the average annual yield of these water bodies.
- Non-potable water use at managed operations is low and comes from the pipeline of the Lebalelo Water Users' Association, in the Eastern Limb, which abstracts water from the Olifants River based on an approved allocation.

- Surface water is consumed by Unki Platinum Mine (Unki) in Zimbabwe, from the Lucilia Poort Dam. Surface water consumption for Unki was included in Amplats figures for the first time in 2011, as Unki converted from a project into an operation.
- Treated sewage effluent is classified as waste or second-class water and is sourced from municipal sewage plants to supply process water to two operations, namely Mogalakwena Mine and one of our operations in the Rustenburg mining area.
- The groundwater parameter includes groundwater from boreholes used for primary and non-primary activities, as well as fissure water ingress from underground operations where this can be measured or estimated. Water used by Mogalakwena Mine from the open pits is assigned to groundwater use.
- Rainfall harvested is defined as rain
  water collected or harvested by the
  operation, regardless of collected quality,
  that is used or stored for use in the
  operation. It is a predicted number from
  a rationalised water balance and
  reporting model developed for each of
  our operations. Rainfall harvested for use
  finds its origins in contained dirty-water
  circuits, open dams, water tanks and
  tailings facilities.
- Discharge to surface water is defined as
  the total volume of water discharged
  from our operations to a receiving
  environment, such as rivers, during the
  reporting period regardless of the
  quality. Included is the excess water
  pumped from mines and not used for
  primary or non-primary activities at
  Dishaba Mine.

No water source, ecosystem (such as a Ramsar-listed wetland) or habitat is materially affected by our extraction and use of water.



### Our water consumption

During 2011, we consumed 36.3 million m³ of new water, against a total usage of 33.8 million m³ in 2010. The anticipated 2011 water consumption was 37.0 million m³ calculated using our water target methodology, which resulted in a 2% saving in water consumption against the set target. The 7% increase in new water used is principally the result of commissioning Unki Platinum Mine. Water used for primary activities increased by 8%, to 31.2 million m³, while water used for non-primary activities increased by 3% to 5.1 million m³.

#### Waste or second-class water

We strive to use as much waste or secondclass water as possible, as this offsets the need for potable water for use in the catchments where we operate. Our 2011 intake of waste or second-class water was 10.6 million m³, a marginal decrease against the 10.7 million m³ intake of 2010. At the Rustenburg operations, the focus in 2012 will be on further reducing the consumption of potable water by substitution with the treated sewage water from the water-treatment plant commissioned at Rustenburg (see 'Recycled water' on page 54).

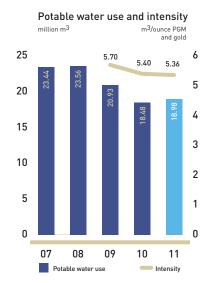
#### Potable water

Potable water used for primary and non-primary activities increased by 3% to 18.9 million m³ during 2011, compared with 18.5 million m³ during 2010. The increase in potable water consumption was influenced by challenges experienced with the use of recycled water and delays experienced in commissioning the water-treatment plant at Rustenburg.

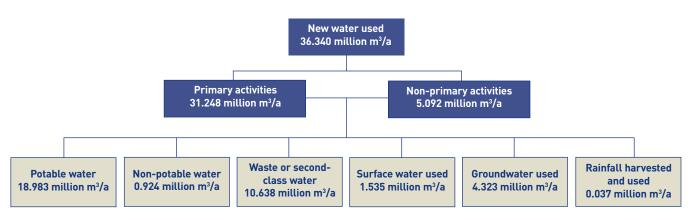
However, our potable-water-use intensity improved by 1%, from 5.40 m³/oz precious metal in 2010 to 5.36 m³/oz precious metal in 2011. We remain committed to striving towards the zero use of potable water in our operations.

#### Groundwater

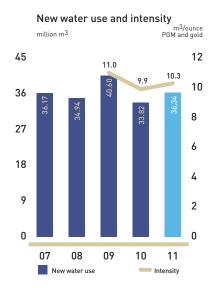
Groundwater consumption increased by 19%, from 3.6 million m³ in 2010 to 4.3 million m³ in 2011. Efforts to reduce potable-water use, by using fissure water instead, contributed to the observed trend in groundwater consumption.



#### Water allocation



#### **WATER**



### Ratio recycled to new water



#### Surface water

Some 1.5 million m³ of surface water were consumed in 2011. The parameter of surface-water consumption was reintroduced in 2011, as a result of the start of operations at Unki Platinum Mine in Zimbabwe, which is supplied with water from the Lucilia Poort Dam.

#### Stormwater management

The rainfall harvested for use has decreased by 59%, from 0.093 million m<sup>3</sup> in 2010 to 0.037 million m<sup>3</sup> in 2011, following the implementation and upgrade of the stormwater-management systems at the Rustenburg and Amandelbult mining areas. One of the set of regulations that applies to the mining industry in South Africa is "Regulations on use of Water for Mining and Related Activities Aimed at the Protection of Water Resources (GN704)". Section 6 (a) of GN704 requires a mine to "confine any unpolluted water to a clean water system, away from any dirty area". Our operations are at different stages of implementing and upgrading stormwater-management plans and systems to ensure compliance with the regulations.

#### Recycled water

Water recycled from internal sewage plants, tailings return-water dams, mine service water and other internal water sources, such as pollution control and stormwater dams, is not included in water used for primary or non-primary activities. Total recycled water reported decreased by 3% to 51.3 million m³ in 2011 (from 53 million m³ in 2010), with the ratio of recycled to new water consumed standing at 1.4.

Increasing the ratio of recycled water at our operations from 1.0 in 2009 to 1.6 in 2010 has caused the build-up of salts in some water circuits. This had to be diluted, which partially explains the increase in potable water consumption.

Overall, our emphasis remains on optimising the use of recycled water, and improving our water-monitoring and water-measuring initiatives.

### Our water-intensity target

Our water-intensity target for 2011 was 9.7 m³ per refined ounce of platinum group metals (PGMs) and gold from managed operations. This target was calculated using a projected production of 3.8 million ounces of PGMs and gold.

Actual water intensity for primary and non-primary activities per refined ounce of PGMs and gold from managed operations was 10.3 m³ in 2011, an increase of 4% over the figure of 9.9 m³ in 2010. This actual intensity was calculated using the actual production of 3.5 million ounces of PGMs and gold in 2011. The lower production accounts for the increase in the water-use intensity in 2011.

Water used for primary activities per refined ounce of PGMs and gold from managed operations increased by 4%, from 8.4 m³ in 2010 to 8.8 m³ in 2011. The potable water-use intensity per refined ounce of PGMs and gold from managed operations improved by 1% to 5.36 m³ (compared with 5.40 m³ in 2010).

Owing to the nature of the projects planned for 2012, it is predicted that water-use intensity will increase by 3% to 10.6 m³ per refined ounce of PGMs and gold. New water consumption is predicted at 41.3 million m³ in 2012. To stabilise our demand for water into the future, a new programme called Water Efficiency Target Tool (WETT) has been introduced that aims to align water targets across the Group. As a result, we investigate a medium-term water use target to the year 2020.



Vinesh Dilsook monitoring the inflow of water into the Klipgat return-water dam

### Applaud all round: major achievements in water savings

Vinesh Dilsook, a water specialist based at the Rustenburg mines' environmental office, kept the Group's sustainability flag flying high in 2011. One of four winners of the yearly internal Applaud Awards for sustainability, he has been responsible for devising and testing the Company's water efficiency target tool (WETT), which is the framework the Company now employs to set water targets. Vinesh has also been responsible for the entire target-setting process at Amplats. To date this has:

- developed and implemented robust and consistent water balances at all operations;
- · raised awareness of water conservation throughout the Company;
- ensured alignment between operations;
- guaranteed Company alignment with Anglo American's water programme;
- helped to reduce Amplats' water-use intensity by 10% overall (well above the target of 2.2% set for 2010);
- assisted in decreasing the use of new water by 16% during 2010, from 40.5 million m<sup>3</sup> in 2009 to 33.8 million m<sup>3</sup> in 2010.

These savings were equivalent to reducing water consumption from 11.0 m³ per refined ounce of precious metal in 2009 to 9.9 m³ per refined ounce of precious metal in 2010. In 2010, water used for primary activities decreased by 15%, to 28.9 million m³, while water used for non-primary activities decreased by 23%, to 4.9 million m³.

The platform created by the target-setting programme encouraged several operations to identify further water-saving measures over and above those of the mainstream water projects. These initiatives included the prompt repair of water leaks and the installation of low-volume showers.

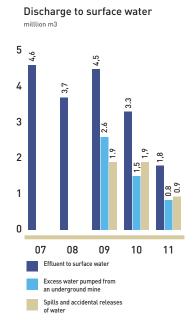
Vinesh's drive, leadership and close collaboration with operational and corporate personnel have also resulted in the following secondary benefits:

- Improved understanding at Company operations of the risks and opportunities related to water use.
- Shared ownership of water-sustainability challenges across Company functions such as the environmental, geological, engineering, mining, processing and long-term planning functions. This has resulted in more active and effective water committees at both the corporate and the operational levels.
- More accurate reporting on water consumption.

These gains have allowed Vinesh to play a key role in the governance and validation of information sent to the Department of Environment and Water Affairs as part of the water-use licence application process.

Owing to Vinesh Dilsook's exceptional ability to innovate and collaborate, many Company engagements involving Government departments and the communities living close to our mines take place with him in attendance. Vinesh is also an active member of Anglo American's Water Community of Practice, which aims to share knowledge and information with other Anglo American divisions in order to align in its approach to water management.

#### **WATER**



# EFFLUENTS Discharge to surface water

Total excess water discharged decreased by 47%, from 3.3 million m³ in 2010 to 1.8 million m³ in 2011. The average discharge for 2011 was 4.8 million litres per day (compared with 9.1 million litres per day in 2010). A contributing factor to reduced discharge was increased awareness created through our process of diligent incident reporting and investigation.

The total dissolved loads of discharges to surface water were 1,278 tonnes for solids and 267 tonnes for sulphates.

Some 47% of the total authorised discharge is from the Amandelbult mining right area, where excess water pumped from the Dishaba Mine is discharged into the Crocodile River and the Bierspruit. To manage the excess water ingress, the mine continues with measures to reduce groundwater ingress. The excess water discharge from Amandelbult has been reduced by 68%, from 2.5 million m³ in 2009 to 0.83 million m³ in 2011. Despite the current efforts, however, the mine still discharged an average of 2.2 million litres per day during 2011 (4 million litres per day in 2010).

Bio-monitoring surveys continue to be conducted in the Crocodile River and the Bierspruit to determine any possible decline in the biotic integrity of the receiving water bodies, with the last survey conducted in November 2011. It appears that the biotic integrity of the Crocodile River is unaffected by any potential impacts originating between upstream and downstream sites. The biotic integrity of the Bierspruit may be affected during the dry season by its reduced dilution capacity, but survey results indicate that toxicity risks associated with the river have not increased as a result of the discharge.

The heavy rainfalls experienced at Mogalakwena Mine in the summer of 2010/2011 resulted in high seepage and large volumes of runoff into the open pits. Owing to the lack of infrastructure to reuse this water, the mine was granted a temporary authorisation by the Department of Water Affairs to release the water. Between January and April 2011, 0.56 million m<sup>3</sup> of water was released to the Mohlosane River. In April a new pipeline was commissioned to return the water back into the operation. During the discharge a comprehensive water quality monitoring programme was in place and the integrity of the receiving environment was not compromised.

The rest of the excess water discharge occurred as the result of spills owing to high rainfall or accidental discharges from various operations. These are reported as incidents, and investigated and managed through our environmental management system.

# Surface-water and groundwater quality around our operations

Surface water and groundwater are monitored at all mines and process plants, both upstream and downstream of operations, as well as inside and outside the mining areas in the catchments where we operate. Groundwater monitoring results are used to model groundwater flows and contaminant plumes, if any, and surfacewater and groundwater monitoring results are compared with various regulatory standards. Bio-monitoring of surface water bodies is also conducted. The tailings return-water dams at all operations continue to provide a good habitat for fish, birds and plant life. The quality of groundwater is affected at all mining operations, mainly as the result of seepage from the tailings dam complexes. The contamination is, however,

localised in all instances and no external groundwater users are affected. The contamination contributes mainly to increased salinity of localised groundwater bodies.

Groundwater beneath Rustenburg Base Metal Refiners (RBMR) has been impacted owing to historical operations. A groundwater remediation plan was developed and several scenarios were evaluated. Recommended was "pump and treat". Following a lengthy approval process, authorisation was granted by the DWA. Abstraction of contaminated groundwater commenced during June 2011. To date, 1,337 m<sup>3</sup> of groundwater have been abstracted and remediated for reuse using a pilot reverse-osmosis desalination water-treatment plant. The brine arising from the plant has been reintroduced into the RBMR's process.

At Twickenham Platinum Mine (Twickenham), shaft dewatering has led to a reduction in water yield from a surface spring on which the community is reliant for water. The mine is now supplying water to the affected community. In 2011, Twickenham completed a water study within a two-kilometre radius to improve its understanding of the groundwater regime. The key objective of this study is to identify what groundwater impacts there may be as the mine develops and to develop measures to deal with them.

While still in its development phases, Twickenham Platinum Mine has encountered a positive water balance. The mine is evaluating water-treatment scenarios in order to manage this.

At Rustenburg, surface-water quality, notably at Klipfontein Spruit, Klipgat Spruit,

Paardekraal Spruit and the Hex River, is affected by mining and process activities as well as by non-mining-related activities. Guideline values for electrical conductivity, sodium, chlorides, sulphates, calcium, magnesium, nitrites, nitrates and phosphate are exceeded for a section of the Hex River. This is the result of both industrial activities and non-industrial activities (ie agriculture). The Hex River has been shown to have good assimilative capability, with the result that the exceeded parameters are assimilated and water entering the Bospoort Dam complies with the Class I SANS 241:2006 drinking water standard.

At Mogalakwena Mine, the total dissolved solids and the sulphate levels in the vicinity of the tailings dam increased slightly in the groundwater, as predicted in the contaminant model for the operation. The groundwater model was recalibrated during 2011 and concluded that impacts of mining activities are limited to the shallow aquifer and surface-water bodies within the vicinity of the lease area. The current action plan calls for the continual monitoring and updating of the model as data become available. There are no users of this water.

#### Acid rock drainage

Acid-base accounting to determine acid rock drainage and hazardous heavy metal leachate potential on both the Merensky and the UG2 tailings has indicated that such tailings have a negligible potential to generate acid or to mobilise metals. Although acid production and metal mobilisation do not occur, the sulphide content is sufficient to produce some soluble sulphates under oxidising conditions. This may increase the sulphate concentration in water that comes into contact with the tailings if there is not sufficient buffering capacity.



Boipuso Semenya taking a pH reading at a groundwater obstruction borehole

#### **AIR QUALITY**

Air-quality performance is established using indicators that measure standard releases of pollutants to the environment, for example GHGs and non-greenhouse gas emissions that are regulated under international conventions and/or national laws or regulations, including those listed on the environmental permits of the reporting organisation's operations. Of the six main GHG emissions carbon dioxide (CO<sub>2</sub>), is the most material.

Total SO<sub>2</sub> emissions (stack and fugitives) for the refineries and smelters were 18.77 kt in 2011, which is higher than the 17.65 kt emitted during 2010

The main GHGs for platinum operations are covered under the 'Climate change' section on page 48 to 49. Other significant air emissions applicable to our operations include refrigerants, persistent organic pollutants, sulfur dioxide ( $SO_2$ ), particulate matter ( $PM_{10}$ ) and total dust fallout.

#### Ozone-depleting compounds

Ozone-depleting compounds have been phased out at all major installations, but there are some minor installations in which these compounds are still present. All Amplats mining refrigerants are ozone friendly, including small air-conditioning applications consisting of either ammonia or R134a, both of which are environmentally acceptable replacement compounds used in existing medium- and low-temperature refrigeration.

Our fire extinguishers contain monoammonium phosphate powder in all applications except the protection of electric/electronic circuits. All applications using the ozone-depleting compound, halon, have already been replaced.

### Persistent organic pollutants

The key persistent organic pollutants for the Company are polychlorinated biphenyls (PCBs), dioxins and furans. The Stockholm Convention requires that equipment containing PCBs be phased out by 2025.

Any PCBs recovered from such equipment in the interim must be treated and eliminated by 2028. Current in-situ equipment, such as transformers and capacitors, may remain in place and operational as long as all reasonable steps are taken to prevent leaks. Some of our transformers still contain PCBs. These will be phased out over time to ensure compliance with the Stockholm Convention.

Dioxins and furans are emitted principally at PMR during the incineration of general and process wastes. The incineration is not a continuous process. A new after-burner unit and other engineering solutions were completed in 2011 to reduce emissions.

# Sulfur dioxide and particulate emissions

Key emitters of sulfur dioxide ( $\mathrm{SO}_2$ ) are the Waterval, Mortimer and Polokwane smelters, with minor contributions from RBMR and PMR.

Total SO<sub>2</sub> emissions (stack and fugitives) for the refineries and smelters were 18.77 kt in 2011, which is higher than the 17.65 kt emitted during 2010. Some of the increase is attributed to the Waterval Smelter complex. Total SO<sub>2</sub> emissions from the complex increased from 7.5 kt in 2010 to 7.9 kt in 2011. Permit emission levels of 20 tonnes per day were exceeded in three

months (February, April and July) of the year during acid-plant maintenance. The production throughputs from the smelting complex rose year-on-year, resulting in the increased SO<sub>2</sub> emissions in 2011. During high-emission periods associated with acid-plant shutdowns, we communicated with our stakeholders to make them aware of potential increases in emissions.

 ${\rm SO}_2$  emissions at the Polokwane Smelter increased from 5.3 kt in 2010 to 7.2 kt in 2011, as the result of an increase of 37% in tonnes smelted. On average, 20.2 tonnes per day were emitted, against the scheduled process registration certificate limit of 25 tonnes per day.

The  $\mathrm{SO}_2$  emissions at Mortimer Smelter in 2010 were 4.6 kt and decreased to 3.7 kt in 2011. The new furnace was commissioned in 2011 and an average 9.3 tonnes per day were emitted against the scheduled process registration certificate limit of 24 tonnes per day.  $\mathrm{SO}_2$  emissions from RBMR and PMR remain low.

# Monitoring of ambient air quality

The National Ambient Air Quality Standards were published in December 2009 and set the limits for ambient concentrations of priority pollutants (sulfur dioxide, nitrogen dioxide, particulate matter, ozone, benzene and carbon monoxide). Ambient-air monitoring is conducted in the Rustenburg, Polokwane and Mortimer smelter lease areas.

The Rustenburg network monitoring the quality of ambient air comprises seven stationary monitoring stations, while Polokwane Smelter has six monitoring stations and Mortimer Smelter has a newly commissioned ambient station. The ambient stations are equipped to measure sulfur dioxide (SO<sub>2</sub>), particulate matter (PM<sub>10</sub>) and meteorological data from all sources in the region.

A comprehensive data set is available for the seven stations in Rustenburg, as shown below.

#### SO,

There were no exceedances of the SO<sub>2</sub> annual average standard of 50 µg/m³ at any station during 2011. This is consistent with results obtained in previous years.

There were no exceedances of the national  $SO_2$  daily standard ( $125 \, \mu g/m^3$ ) and 83 exceedances of the hourly standard ( $350 \, \mu g/m^3$ ). This represents a decrease compared with 2010 (when there were two and 100 exceedances for the daily and hourly standard respectively) and continues the general downward trend over the previous five years.

#### PM<sub>10</sub>

Six of the seven stations showed a decrease in annual PM $_{10}$  concentrations compared with those in 2010. The exception is the Paardekraal station, which showed a small increase, from 54.4  $\mu$ g/m $^3$  (2010) to 58.4  $\mu$ g/m $^3$  (2011). Three stations exceeded the DEAT annual average (50  $\mu$ g/m $^3$ ).

## RPM ambient-air-quality monitoring statistics for the annual period 1 January to 31 December 2011

Station name	SO <sub>2</sub> data capture (%)	Number of exceedances of national SO <sub>2</sub> hourly average (>350 µg/m³)	Number of exceedances of national SO <sub>2</sub> daily average (>125 µg/m³)	SO <sub>2</sub> annual average (µg/m³)	PM <sub>10</sub> data capture (%)	Number of exceedances of national PM <sub>10</sub> daily average (>120 µg/m³)	PM <sub>10</sub> average (µg/m³)
Bergsig	75.3	0	0	13.6	83.3	0	22.7
Brakspruit	83.8	2	0	15.5	29.0	3	30.2
Hex	85.4	3	0	12.5	74.3	0	30.0
Klipfontein	90.4	2	0	9.6	73.9	2	59.5
Mfidikwe	94.5	50	0	22.2	81.2	1	49.3
Paardekraal	79.6	24	0	31.4	85.0	3	58.4
Wonderkop*	63.9	2	0	14.5	41.2	33	89.4
Total		83	0			42	

 $<sup>^{\</sup>star}\,\text{Please note that the Western Limb Tailing Retreatment (WLTR) station was renamed to Wonderkop in November 2011.}$ 

#### **AIR QUALITY**

Exceedances of the national  $PM_{10}$  daily standard (120 µg/m³) were recorded at five of the seven stations during the year owing to wind-blow tailings dust. Four stations measured three or fewer exceedances during this period. The majority of exceedances (33) were recorded at the Wonderkop station which are surrounded by TSFs. These results are consistent with those in 2010.

#### Data capture

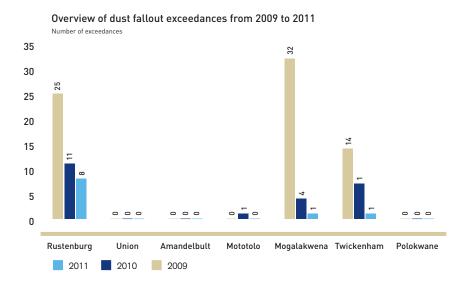
The capture of SO<sub>2</sub> data was above 85% at three of the seven stations, and three of the remaining four stations obtained data-capture rates of over 75%. The capture of PM<sub>10</sub> data was generally poorer than that of SO<sub>2</sub> data, although average data capture across all stations was consistent with that in previous years (66% in 2011 and 68% in 2010). At four stations there was an increase in data collection compared with the previous year. A number of PM<sub>10</sub> analysers developed faults over the course of 2011, most notably at Brakspruit and Wonderkop where the analysers were out of operation for eight and seven months respectively.

Some  $PM_{10}$  data were lost owing to problems associated with analyser filter tapes, although to a much smaller extent than in previous years.

Loss of both  ${\rm SO}_2$  and  ${\rm PM}_{10}$  data was associated mainly with analyser malfunctions and power-failure problems throughout the year. It should be noted that repeated power-supply problems can affect the functioning of the analysers and thus these two causes cannot necessarily be considered in isolation.

#### **Dust fallout**

Total dust deposition is determined at all operations in accordance with the ASTM D1739 standard test method for the collection and measurement of dust fallout. Dust-fallout buckets are used and samples are analysed by external laboratories. The gravimetric results are compared with the proposed guidelines for dust deposition as described in the SANS 1929: 2005, Edition 1.1. The guidelines set four levels of dust-fall rates (measured in milligrams per cubic metre per day), namely: residential, industrial, action and alert rates.



An internal dust fallout survey was conducted in 2011 to assess the effectiveness of dust fallout monitoring systems within Amplats. It was found that the significant sources of dust within mining are unpaved haul roads, opencast activities and tailings facilities. The Rustenburg, Mogalakwena and Twickenham mines have shown significant improvement in reducing their dust levels. The improvement can be explained by the various dust-suppression initiatives and management interventions implemented at these sites over the years. These have included:

- water spray pods implemented on the tailings facilities;
- the revegetation of tailings dams;
- chemical dust suppressants on the surface of the tailings and on unpaved haul roads;
- wind barriers and enclosed structures where possible;
- continued focus on the quarterly tailings meetings;
- the compilation and implementation of air-quality management plans; and
- more inspections by environmental coordinators.

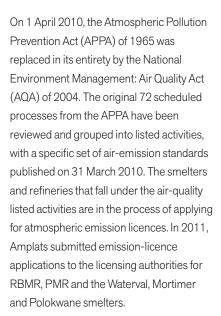
In addition, Rustenburg Concentrators has introduced a dust-control plan for the Paardekraal tailings facility that will extend over six years and will include changes to deposition strategies.

The Amandelbult and Union mines have historically reported low dust levels, but an external review conducted on their current monitoring systems in 2011 found them to be inadequate. A representative monitoring network was subsequently installed at Amandelbult, with Union to follow. The concentrator at Mototolo and the smelter at Polokwane also indicated low dust levels. A summary of the number of exceedances of the SANS 1929 industrial

limit (1,200 mg/m<sup>2</sup>/day) from 2009 to 2011 is provided (see chart on page 60).

### Focus on air-qualityimprovement initiatives

In addition to the dust-suppression initiatives on the tailings facilities at Rustenburg Concentrators and the Western Limb Tailings Retreatment (WLTR) plant, we are investigating SO<sub>2</sub> abatement technologies for our Polokwane and Mortimer smelters. Test work is being conducted on the off-gas systems to measure the composition of the gases produced in the furnaces in order to finalise the design of the equipment to meet the new emission standards.



Mortimer Smelter received a provisional atmospheric emission licence on 17 November 2011, in line with the commissioning of a new furnace. The existing 6-in-line furnace power has been increased from the previous 18 MW to a maximum of 38 MW. The flash drier has also been upgraded to accommodate the increased throughput and a new electrostatic precipitator has been installed as an emission-reduction measure.



#### LAND



We hold mining, surface and freehold rights over large tracts of land. Land owned, leased or where surface rights exist and that is under our direct management and control, comprises 54,640 hectares, and has increased from 39,049 hectares in 2010. This figure is not equal to the total surface area of the mining right areas as we do not control or manage all of the surface them. The main reason for this increase in managed land in 2011 is the inclusion of Unki Platinum Mine in the reporting statistics during 2011. The land altered for mining and associated activities comprised 14,791 hectares in 2011, a marginal increase over the 14,185 hectares altered in 2010.

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Our current managed mining operations consist of mainly underground mining, except at Mogalakwena Mine, which is an open-pit operation. It is not possible to report annually on newly rehabilitated land as would be the case for opencast mining, as the pits at Mogalakwena are not rehabilitated concurrently with their mining. There is still a mined-out opencast pit at Rustenburg. Although mined over 12 years ago, it has not been rehabilitated as it is intended to be used as a regional landfill site for the Rustenburg Municipality once specific legal requirements have been met. The environmental impact assessment (EIA) for the proposed landfill site is in the final stages of approval and the construction of the new landfill site will most probably commence in 2012.

At our joint-venture operations, mined-out opencast pits exist at Bafokeng-Rasimone Platinum Mine (BRPM), Aquarius (Marikana and Kroondal) and Modikwa Platinum Joint Venture. The status of these pits is as follows:

 The rehabilitation of the BRPM pit has not yet begun, because it is currently filled with water from the overflowing returnwater dam, seepage and rainfall. A geohydrological study was completed during 2009, which concluded that the impacts of the overflowing return-water dam are localised and detected only in boreholes within the immediate vicinity of the dam. Sufficient funds are available to commence with the backfilling of the opencast pit, and this is planned for when the pit has been emptied. A watertreatment feasibility study is being undertaken to determine ways to treat the water in the pits for reuse in the mining process. Because a listed activity (the treatment of gray (waste) water) is triggered via the National Environmental Management Act (NEMA), an EIA is currently in progress. BRPM has also engaged the DWA regarding authorisation to abstract water from the opencast pits for treatment. The application is still awaiting the department's approval.

- At the Aquarius Joint Venture, both the Marikana and the Kroondal mines have open pits that are being actively mined.
- Modikwa Platinum Mine has one existing opencast pit. This consists of 7 hectares, four of which have been backfilled. The remaining 3 hectares are currently being mined to a depth of 30 to 40 metres. The intent is to backfill the completed opencast pit and to commence with four additional pits in future.

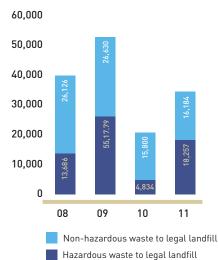


#### **WASTE**

Our strategy adopts an integrated approach to waste management, using the waste hierarchy delineated in the National Environmental Management: Waste Act of 2008 (NEMWA) and the National Waste Strategy (NWS). We aim to reuse products where possible and to recover value from products when they reach the end of their lives, through recycling, composting or energy recovery.

Waste target to reduce landfilling 45.000 39.812 38,816 40.000 37,846 36.900 35,000 30.000 25,000 20,000 15.000 10,000 5,000 80 N9 10 11 Landfill target Waste Waste to

Waste to landfill



Although the elimination of waste in its entirety will not be feasible, through the systematic application of the waste hierarchy it may be possible to reach a point in future where recovery, reuse and recycling and alternative disposal technologies overtake landfills as the preferred means of disposal. The strategy furthermore seeks to provide norms and standards to ensure Group uniformity in managing waste.

The key elements of our waste-management strategy are:

- waste-stream identification, categorisation, classification and quantification;
- adhering to permitting requirements;
- waste minimisation, reuse, recycling and target setting;
- internal and external reporting; and
- responsible waste disposal and treatment.

The focus in 2011 was on waste minimisation, target monitoring and compliance with the requirements of NEMWA, including adhering to permitting requirements. Our objectives are, inter alia, to stabilise the quantity of waste disposed to landfill and then reduce this volume by increasing our reuse and recycling of waste, using disposing as a last resort. To this end Amplats has set a waste target, using 2008 as a baseline, to reduce our quantities of waste disposed to landfill by 15% in 2014.

Hence, we aim to reduce our quantities of waste disposed to landfill by at least 2.5% a year. To achieve the set target, waste minimisation was included as a key performance indicator in the scope of works for all our waste-management contractors. The emphasis was on further increasing the reuse and recycling of waste streams.

As can be seen from the waste-target graph, Amplats has achieved a 13% reduction in waste sent to landfill when compared against the 2008 baseline. However, the data for 2011 indicate that the quantities of general and hazardous waste disposed to landfill increased by 67% compared with those for 2010. This increase is attributable to the cleaning of historical "tar dams" in the Rustenburg mining area during 2011. Over 10.8 kt of tar was removed and disposed of at a registered hazardous waste site. A review of the waste target is currently under way.

# Non-mineral, non-hazardous waste management

All non-mineral waste at the operations is segregated into different waste streams. Waste that can be recycled is sent to salvage yards at the operations for final recycling to external users. Most of our operations contract an external company to salvage, reclaim, sort and recycle waste. Some 98.6 tonnes of waste paper, 21.9 tonnes of glass, 15,614.8 tonnes of steel and

266.4 tonnes of plastic were collected for external recycling in 2011. The total waste recycled was significantly lower than in 2010, owing mainly to a change in wastemanagement contractors in most of Amplats' mines. A total of 5.7 kilotonnes of other general non-hazardous waste was refurbished for internal reuse.

Non-mineral waste that cannot be reused, recycled or sold is sent to landfill sites. Just over 16.2 kilotonnes of non-mineral, non-hazardous waste were sent to landfill during 2011.

# Non-mineral hazardous waste sent to landfill

Hazardous wastes include oils, grease, fluorescent tubes, medical waste and chemical containers. The final collection and transportation of such waste is carried out by waste contractors. To ensure that 'cradle-tograve' principles are adhered to, a waste manifest system has been implemented whereby safe disposal certificates are issued by these contractors. Owing to the special requirements for the handling and disposal of medical waste, all medical waste generated at our operations is collected, treated and disposed of by a specialist contractor. Safe-disposal certificates are issued for such wastes and are audited by independent external auditors during ISO 14001 surveillance assessments. We also conduct audits at the hazardous-waste disposal sites. Some 18.3 kilotonnes of non-mineral hazardous waste went to hazardous waste landfill during the year, while 25.6 tonnes of medical waste were incinerated.

We do not transport, import or export any waste deemed "hazardous" under the terms of annexes I, II, III and VIII of the Basel Convention.

#### Mineral waste

# Mineral waste – accumulated tailings

We have 16 active tailings storage facilities (TSFs), five dormant TSFs, four TSFs where remining is taking place and two TSFs where remining has been completed. These TSFs are managed via standing contracts with specialist consultants who provide us with guidance on the environmental and geotechnical aspects of managing these facilities. All operations have implemented additional criteria for TSF management, including:

- extensive surface and groundwater sampling programmes around the TSFs;
- improved revegetation methods for tailings' side-slopes; and
- a mandatory code of practice for TSFs, defining all associated risks and their management.

In 2011, all the TSFs were assessed by an independent environmental risk assessment. The scope of the assessment focused on potential risk associated with:

- air pollution as the result of dust;
- the establishment of vegetation;
- · groundwater contamination; and
- · surface-water contamination.

All identified risks were assessed using the standardised risk matrix, first without any controls, then with current controls and finally with planned future control measures. In order to implement effective mitigation measures, recommendations were proposed for each potential risk identified. The key mitigation measures include:

- the development, revision and updating of groundwater models for each TSF;
- updating the surface-water balances to manage the water sources feeding into return-water dams:

#### **WASTE**





- additional dust-suppression measures and monitoring systems; and
- establishing a biodiversity management plan for invader species and developing specific seed mixes for vegetation cover.

Management plans will be implemented in 2012, based on these recommendations.

Mineral waste accumulated in active and inactive TSFs includes all accumulated tailings from the concentrator plants and the co-disposal of excess slag from the Waterval and Mortimer smelters. The tailings at the Klipfontein TSF complex are currently being reprocessed through the WLTR plant. The tailings from this plant are sent to the Hoedspruit TSF. An aerial inspection of all TSFs was conducted in 2011. Each TSF is subjected to a third-party audit every two years.

Post-control instability-risk assessments indicate a medium risk of loss of life at only one tailings dam should the dam fail. All other TSFs were rated as having a low risk of loss of life in the event of failure.

The identified risks are managed on a continual basis through regular operational and Group inspections and through the implementation of proactive solutions.

# Mineral waste – accumulated waste rock

All our mining operations have waste-rock dumps at the different shafts. The most substantial volume of waste rock is found at the Mogalakwena open-pit mine.

The waste-rock dumps at the Richard and Spud shafts at Union Mine are being remined, crushed and reprocessed at the Mortimer concentrator to recover PGMs. The rock dumps are also a resource in many

areas, as they can be used as aggregates for road construction. Aggregate production companies and companies owned by historically disadvantaged South Africans have been given the contracts to process this waste rock, and this has created local employment opportunities.

#### Mineral waste - slag

Some of the slag produced at Waterval
Smelter is disposed of together with tailings
on the Paardekraal TSF, while a portion is
supplied to a third-party company for
sandblasting grit. An Environmental
Management Programme (EMP)
amendment process was initiated in 2011 to
authorise storage and stockpiling of slag, as
well as slag usage for sandblasting purposes.

There are also slag dumps at the Mortimer and Polokwane smelters. The current Mortimer Smelter slag arisings is transferred to the concentrators at Union Mine and deposited onto the operational Union TSFs.

The slag pads at Polokwane Smelter are designed to take cognisance of the potential environmental impact of seepage and run-off from the slag stockpiles, even though the slag could be considered inert. Slag at Polokwane Smelter is currently stored on a 2-mm-thick HDPE-lined area, known as the "environmentally compliant pad". A slag stockpile area has been designed and will eventually consist of five pads built progressively, covering approximately 10.5 hectares in total. Polokwane has been working with a number of technology providers to identify commercially viable uses for the slag generated through its industrial processes. A number of commercially viable uses are in place, for example building material. Applications have been submitted to the relevant authorities for commercial use of the slag.



Caption to follow

### Waste recovery at Union Mine benefits the local community

#### **Background**

Union Mine, which is situated in the North West province, operates a permitted solid-waste landfill site. Established in 1996, the site is used to dispose of all general waste from the shafts, the process areas and Swartklip Village. The establishment of an informal settlement close to the site created challenges for the mine and its running of the site, as residents began to scavenge waste (in particular steel) from the landfill. To make it easier to access the area, some of the people involved in the illegal scavenging removed the perimeter fence encircling the site, resulting in serious health and safety issues and the widespread pollution of the surroundings. On the site itself the conditions for the waste reclaimers were particularly hazardous owing to moving vehicles. Moreover, livestock and children were often found within the site.

#### Better results through partnerships

Through the collaborative efforts of Union Mine's environmental and community engagement departments, several interventions were made to combat littering and improve circumstances at the site. Anti-littering and clean-up campaigns were conducted in the surrounding communities, and a waste-recovery plan was developed. Importantly, this incorporated community needs by building them into the waste value-chain.

#### Formation of a waste reclamation group

Consensus was reached with a group of waste reclaimers at the site, resulting in the formation of a reclamation group comprising 86 registered members and a set of operating rules. The group was registered as the Vukuzenzele Waste Recovery Project in November 2010. Personal protective equipment, including work suits, safety shoes and gloves, was provided to members by the mine in January 2011. The mine also erected ablution facilities and issued the project members with ID cards. Training was organised, covering safety and health issues.

#### A success story built on waste

The project's commercial viability and its adherence to our Company-wide principle of zero harm can be accomplished only through the creation and nurturing of meaningful and sustainable partnerships; and through awareness-raising and the active involvement of all partners. To date, the following has been achieved:

- The sorting and storage of waste take place at an established recycling area within the landfill site. No
  material is taken outside the site.
- Fencing has been re-erected, with signage indicating that trespassing will not be tolerated. No one has tried
  to remove or break the fence. In addition, Anglo Protection Services manages access to the site.
- The relationship between Union Mine and the waste reclaimers has improved and is now well coordinated.
- The mine has negotiated access to markets for the reclaimers, with companies such as Reclaim and Remade.
- A community leadership committee ensures that the waste reclaimers operate freely and safely.

#### **BIODIVERSITY**

To ensure that our biodiversity action plans (BAPs) are appropriate we requested Fauna and Flora International to conduct high-level biodiversity risk assessments (HLBRAs) at each of our managed operations.

The HLBRA reports identified high, medium or low risks or opportunities for each of the following assessment criteria:

- Proximity to protected areas.
- · Proximity to threatened species.
- Land-cover classification.
- Landscape alteration.
- · Hydrology and water-resource availability.
- Climate change vulnerability.

In 2011, this information was used, in addition to available information in the existing detailed biodiversity action plans, to rank the sites in terms of their priority risks and opportunities. The exercise involved a qualitative assessment of the "perceived biodiversity value" of all the land under Company charge. It used the HLBRAs, the existing BAPs at the operations, Anglo American's biodiversity guideline document and related supporting documents. Two phases were involved:

- Categorising the total area of land owned into distinct units based on the potential biodiversity value for each operation.
- Conducting a qualitative assessment of the perceived biodiversity value based on available information in the existing BAPs.

The Anglo American biodiversity guideline offers a qualitative method of valuing biodiversity for the purpose of assessing and measuring progress towards defined

targets. It employs a scoring matrix to determine the biodiversity value of a defined area. The guideline uses the conservation and functional status of a specific area to determine the biodiversity value of the land owned by the Company and also land not owned but affected by Company activities. The preliminary results of the assessment indicate that Mogalakwena Mine, the Der Brochen Project and Twickenham Platinum Mine have a moderate biodiversity risk, while the rest of the managed operations have low biodiversity risk. Future biodiversity management and related action plans will be aligned with the level of biodiversity risk associated with each operation. In practice, this means that detailed BAPs will be required only for those operations with moderate biodiversity risk.

In 2011, we supported a number of tree-planting projects, community cleanups, and biodiversity awareness-raising and training initiatives within local communities. During Arbour Week in 2011, all operations participated in a tree-planting programme on their sites and within the communities close to them. The focus was once again on the many benefits of tree-planting and on indigenous trees. As a result of these activities, 2,242 trees were planted at our managed operations during 2011.

In 2011, we supported a number of tree-planting projects, community clean-ups, and biodiversity awareness-raising and training initiatives within local communities

### **COMPLAINTS AND INCIDENTS**

Amplats has a systematic approach to capturing, recording, investigating and providing feedback on environmental complaints and incidents.

### Complaints

Altogether 20 formal environmental complaints were reported in 2011, against 16 in 2010.

Of these a total of 15 air-quality complaints occurred in the Rustenburg area. They were related to visual emissions from the Waterval Smelter complex, the RBMR plant and dust emissions from the TSFs. One complaint was received regarding the hazardous nature of historical tar material on the Rustenburg lease area. We removed the tar material to the hazardous landfill site at Holfontein in 2011 and are currently in the process of applying for the approval of the remediation of the sites in terms of National Environmental Management Act (NEMA).

Twickenham, Union and Unki Platinum
Mines each received one water-related
complaint in 2011. All formal complaints
received are investigated and
communicated to the relevant stakeholders.
In addition, communication with third parties
is conducted in consultation with our
Corporate Communications Department
and with the Community Engagement
Department at the operation involved.

# Incidents and substandard conditions

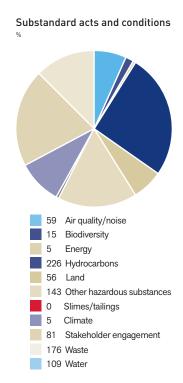
In 2011, we converted from a three-level incident classification system to a five-level system. In the new system, incidents are classified according to the actual severity of their impact. A Level 1 incident has a minor impact on the environment, while a Level 5 incident has a major impact on the environment.

Level 1 and 2 incidents are regarded as unplanned or unwanted events that result in low impacts requiring only on-site reporting, investigation and remediation. The updated Amplats procedure requires that an event should be treated as a potential Level 3, 4 or 5 incident the moment it is assessed as capable of resulting in a medium, high or major environmental impact. The decision is based on defined classification criteria and on the environmental coordinator's professional judgement. Confirmation of the event as a potential Level 3, 4 or 5 incident triggers reporting to the relevant authorities and to senior management. A full investigation confirms the final significance and classification of the incident.

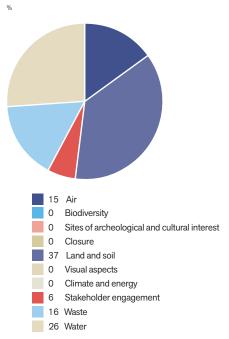
This process ensures a transparent approach and the review of existing controls, and ensures that the true significance of incidents is confirmed for public reporting.

# Level 1 and 2 incidents and substandard conditions

The number of Level 1 incidents reported in 2011 was 306 (an additional three incidents were reported as level 2), which represents a reduction of 36% on the number reported in 2010. However, the reporting of substandard acts and conditions increased by 12%, showing our increased focus on acts and conditions that can potentially lead to incidents. This in itself may have been a contributing factor in the reduction in incident numbers. Another reason for the decrease in incidents may be that a proper monthly review system was introduced during the year under review, to ensure that only environmentally related incidents and substandard acts were



#### Environmental incidents



#### **COMPLAINTS AND INCIDENTS**

reported. This process entailed a detailed interrogation and follow-up of all reported data in the IRM.net system.

As a result, the following new categories have been used:

- Air
- Biodiversity
- Sites of archaeological and cultural interest
- Closure
- Land and soil
- Visual aspects
- · Climate and energy
- Stakeholder engagement
- Waste
- Water

As in 2010, most Level 1 environmental incidents in 2011 were caused by the inadequate management of hydrocarbons such as diesel, oil, grease (37% in the land and soil category); leaks, discharges and contamination (26% in the water category); and improper waste management (16% in the waste management category). In addition, there were three Level 2 incidents relating to a low-impact event in the water category. The pie chart on page 69 provides a consolidated view of the various categories of Level 1 environmental incidents in 2011.

Substandard acts and conditions in 2011 followed a similar pattern, with the highest reporting relating to the inadequate management of hydrocarbons such as diesel, oil, grease (39% in the land and soil category); improper waste management

(25% in the waste management category); and leaks, discharges and contamination (18% in the water category). The pie chart on page 69 offers a consolidated view of the various categories of substandard acts and conditions in 2011.

It is clear that hydrocarbon-related incidents and substandard conditions contributed 37% and 39% respectively of all reported events in 2011. It is encouraging to see an increase in reported substandard acts and conditions, as reporting plays an important role in prevention. On the other hand, hydrocarbon-related incidents related to spillage as a result of the storage and use of fuel, oil, grease and lubricants increased, and will continue to receive attention.

The number of air-quality-related incidents as a percentage of all incidents reported decreased between 2010 and 2011, from 19% to 15%. Air-quality-related incidents are normally highly visible and also lead to community and employee complaints. They are regarded as a high priority at the TSFs, where dust fallout is the main cause of reported incidents and complaints. Incidents of gaseous emission are related mostly to emissions from the smelters.

All reported incidents and substandard conditions generate a response, and trends are tracked to ensure that their root causes are addressed to prevent a reoccurrence.

#### Level 3 incidents

Although 18 potential Level 3 (previously Level 2) incidents were investigated to confirm whether the impact met the significance criteria, no incidents were confirmed to have a final significance rating of Level 3 after the investigation. Of the 18 incidents, 14 were discharges and spillages experienced at our operations. The other four were related to tailings and the spillage of coolant. As stated, none of the incidents investigated were found to have had any significant impacts on the receiving environments of the catchments in which we operate. According to the incident investigation procedure, all incidents with the potential of a significant environmental impact are reported to the relevant authorities and are investigated in detail to ensure that a realistic and accurate indication of significance is allocated in the final ratings. All these incidents were found to have had a low impact on the environment, and were thus downgraded to Level 1 or 2 incidents and reported as such to the authorities.

# Level 4 and 5 incidents (previously Level 3)

No Level 4 or 5 incidents were recorded in 2011.

#### **COMPLIANCE**

Three main Acts, the Minerals and Petroleum Resources Development Act (MPRDA), the National Environmental Management Act (NEMA) and the National Water Act (NWA), and related regulations, regulate environmental impacts at our mining operations in South Africa. In Zimbabwe, the Mines and Minerals Act (MMA) performs a role similar to that of the MPRDA in South Africa. These acts also prescribe statutory duties in respect of environmental standards, the mitigation of environmental impacts and the rehabilitation of disturbed land.

In order to ensure that all environmental authorisations are granted on time, three Government departments (Mineral Resources, Environmental Affairs and Water Affairs) are engaged during the application process. All legal decisions are made in collaboration with our Legal Department to ensure compliance with all applicable legislation and by-laws.

We are compliant with all the relevant environmental legislation in terms of environmental authorisations, licences and permits, with the exception of three water-use licences for the Rustenburg, Union and Amandelbult operations.

Although applications for these licences were submitted as far back as 2004, resubmission had to be made at one operation owing to documents being misplaced by the DWA, changed DWA requirements and changed circumstances at the operations.

The ISO 14001 environmental management systems at our operations provide the management framework needed to track compliance with applicable legal and other requirements, and to support continual improvement in the prevention of pollution.

No fines or non-monetary sanctions were imposed at our South African operations in 2011 for non-compliance with

environmental regulations, licences or permits at our managed operations.

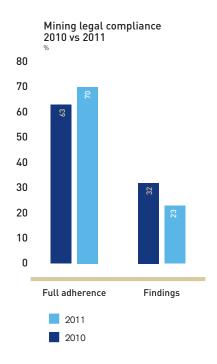
However, two spot fines were received at Unki Platinum Mine in Zimbabwe that related to overflow and discharge of effluent (see table below).

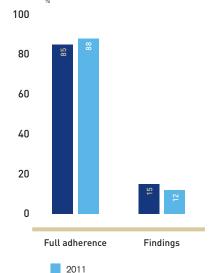
All operations have access to the relevant environmental legislation, and to an environmental legal register designed specifically to address issues of importance to them. All operations are also kept informed of changes in environmental legislation.

All managed operations were subjected to internal legal compliance reviews during 2011. The findings and action plans of all audits and internal reviews are managed through our EMS until close-out. Internal review findings are reported to management at each operation and key findings are elevated to the level of executive heads where applicable.

Date of spot fine	Amount (US\$)	Operational non-conformances	Legal context	Action taken to prevent recurrence
17 March 2011	\$1,000.00	An overflow and discharge of effluent water from the Unki TSF occurred during a storm of above-average severity (85 mm within 48 hours). At the time of the storm, the dam was already full of water. By design, the Unki TSF is a no-discharge dam with no provision for return-water dam to contain excess water. As a result, there was no foreseeable need to apply for a discharge licence.	MMA Act Cap 20:27 Effluent Regulations SI 6/2007 requires that all effluent discharge points be duly licensed. However, the same act does not make provision for licensing of emergency discharge situations of this type.	A discharge licence has been applied for to cater for such incidental discharges during freak storms.  Normal tailings deposition has commenced.  Barge pumps have been commissioned to return as much water as possible to the plant for reuse in process, hence preventing overaccumulation of water in the TSF.
15 June 2011	\$1,000.00	Effluent from cleaning-plant spillage at the floatation area flowed out of the plant into the environment owing to inadequate drainage controls.	MMA Act Cap 20:27 Effluent Regulations SI 6/2007 requires that all effluent discharge points be duly licensed.	Drainage civils have been constructed to ensure all incidental effluent discharges are channelled into the pollution-control dam.
Total	\$2,000.00			

#### **COMPLIANCE**





Process legal compliance

2010 vs 2011

2010

#### Compliance status based on legal reviews

The operations reviewed are identified as being fully legally compliant if all the actions required to address previously found conditions had been completed. They are identified as a "finding" if progress on actions to address previous situations are less than 100% complete. A "finding" does not imply that action plans to address the issues were not in place, only that such plans had not been fully effected at the time of the review.

#### Mining operations

At the mining operations, 490 conditions were identified during the legal compliance reviews. Of these, 345 were found to be 100% compliant, 112 were identified as needing attention, and 33 were declared not applicable.

Some 70% of conditions were fully adhered to in 2011, compared with 63% in 2010. Only 23% of the conditions were found to need attention in 2011, compared with 32% requiring attention in 2010.

Among the conditions needing attention, the following issues deserve special mention, owing to their potential to become significant challenges if action plans to address the findings are not executed in the required time:

- Full compliance with the GN704 requirement to separate clean- and dirty-water systems at the operations is still a challenge.
- Concurrent rehabilitation needs renewed attention.
- The monitoring of environmental noise and PM<sub>10</sub> levels can be improved.
- Reports to the authorities are not always submitted on time.

#### **Process operations**

Legal reviews were conducted at all process operations (smelters, refineries and concentrators) during 2011. In total, 565 conditions were identified, compared with a total of 545 in 2010. The number of conditions increased owing to record-of-decision documents that were added to the reviews at some operations. Of the 565 conditions, 495 were found to be 100% compliant and 70 to need attention. The following issues deserve special mention owing to their potential to become significant issues if action plans to address the findings are not executed in the required time:

- Groundwater remediation management plans need improvement.
- Improvement in fugitive emissions plans.

In 2011, 88% of the conditions were fully compliant (85% in 2010), pointing to a year-on-year improvement in overall compliance.

We view these as risk areas and continue to take corrective action. A follow-up review will be conducted during 2012, to verify the progress of corrective actions against the findings.

# ENVIRONMENTAL MANAGEMENT PROGRAMME (EMP) PERFORMANCE ASSESSMENTS

#### Mining operations

The MPRDA states that any organisation that has obtained a mining permit or a mining right must compile and submit an environmental performance assessment report to the Director: Mineral Development of the DMR for approval. The frequency of

performance-assessment reporting is every two years (or as specified in the EMP's record of decision).

Therefore, in addition to the legal compliance reviews described above, environmental performance assessments were completed for the Twickenham and Mogalakwena mines in 2011. While most mines have to conduct an environmental performance assessment once every two years, Mogalakwena Mine is required to conduct one annually.

Altogether 269 conditions were assessed at these mining operations. Of these, 204 were in full compliance and 17 were findings. General findings were similar to those reported in the mining operations in the sections on compliance above.

In 2011, some 70% of conditions where found to be 100% compliant, as compared with 2010, when 61% of the conditions were found to be 100% compliant.

Moreover, only 6% of the total conditions were found to be needing attention in 2011, compared with 10% in 2010.

#### **Process operations**

Statutory environmental performance assessments were completed at RBMR, PMR and Rustenburg Concentrators in 2011.

The total number of conditions assessed for the three operations was 1,419 in 2011 and 1,344 in 2010, with the inclusion of a new environmental management programme report (EMPR) for the PMR and Rustenburg concentrators in the assessment. The overall percentage compliance for each operation did not change from 2010, indicating a significant focus on legal compliance. Typical findings include the following:

- Biodiversity action plans have not been fully implemented.
- Groundwater-management plans need improvement.

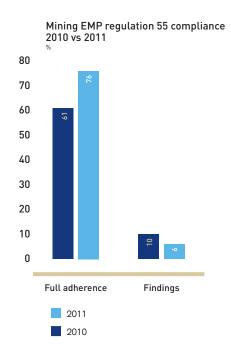
The percentage compliance remained high in 2011, at 98% for all three operations (99% in 2010).

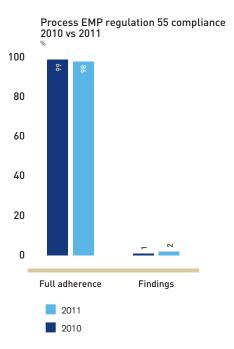
## Assessment of compliance through internal water audits

Internal water-use-compliance audits against approved water-use licences were conducted at Twickenham Platinum Mine, Polokwane Smelter and Mogalakwena Mine. The level of compliance was rated at 84%, 88% and 90% respectively. The findings were minor and were expected to be addressed by the integrated water-andwaste management plan (IWWMP) developed for each of the operations.

Audits of internal water-use licences will be conducted at other operations with approved water-use licences during 2012.

With the exception of the Mototolo Concentrator, the Der Brochen Project and Unki Platinum Mine, all other operations have developed and are implementing an IWWMP. The DWA defines an IWWMP as a simple, feasible, implementable plan for water use, based upon site-specific programmes, but also taking into account the National Water Resource Strategy, the Catchment Management Strategy and the Resource Quality Objectives. It has to consider the sensitivity of the receiving water resource, the upstream and downstream cumulative impacts of water-use activities, external water-use authorisation guidelines, and water-use-specific supplementary information requirements.





#### COMPLIANCE

Intensive rains in the summer of 2010 to 2011 resulted in an accumulation of water in the Zwartfontein and Sandsloot pits at Mogalakwena Mine. From July 2010 to April 2011, the mine obtained a temporary authorisation to discharge water into either the Mohlosane River or the Sandsloot River, to allow for the safe expansion of Zwartfontein pit. While the mine was discharging pit water into the rivers, the concentrator plants were simultaneously buying in treated sewage water from the Mokopane and Polokwane municipalities. To rationalise the water management circuit and to improve the water balance at Mogalakwena, water-management projects are being evaluated using GoldSim®, a water use optimisation software.

# ENVIRONMENTAL EXPENDITURE AND PROVISIONS

All the environmental cost centres for 2011 were analysed, with the focus on costs for waste disposal, emissions treatment, remediation, prevention and environmental management. The 2011 environmental expenditure for Amplats' managed operations is as follows:

- R100 million for waste disposal, emissions treatment and remediation (of which R49.4 million relates to closure liability costs contributed to the Environmental Trust Funds).
- R67.1 million for prevention of pollution and environmental management.

The total calculated estimate for the 2011 environmental expenditure is R167.1 million, which represents a year-on-year increase of 80%. This was mainly the result firstly of an improved system for calculating environmental expenditures and secondly

of a major waste clean-up exercise at the Rustenburg mining area, which contributed more than R20 million to the total. The total excludes the following categories as defined in the International Federation of Accountants' document, 'International Guidance Document on Environmental Management Accounting':

- The costs of non-product output.
- Fines for non-compliance with environmental regulation.

# PROVISION FOR REHABILITATION AT CLOSURE

Regulation 41(3) of the Mineral and Petroleum Resources Development Act (Act No 28 of 2002) requires that the closure liability of mining operations must be assessed on an annual basis. Regulation 54(2) indicates that the holder of a prospecting right, mining right or mining permit must annually update and review the quantum of the financial provision for closure liability in consultation with a competent person.

Amplats introduced the Standardised Reclamation Cost Estimator (SRCE) model to each of the managed operations to assist with the updating of the closure liability estimates at our operations. This model was introduced primarily to standardise our approach to closure costing, but also to make updating easier and less costly.

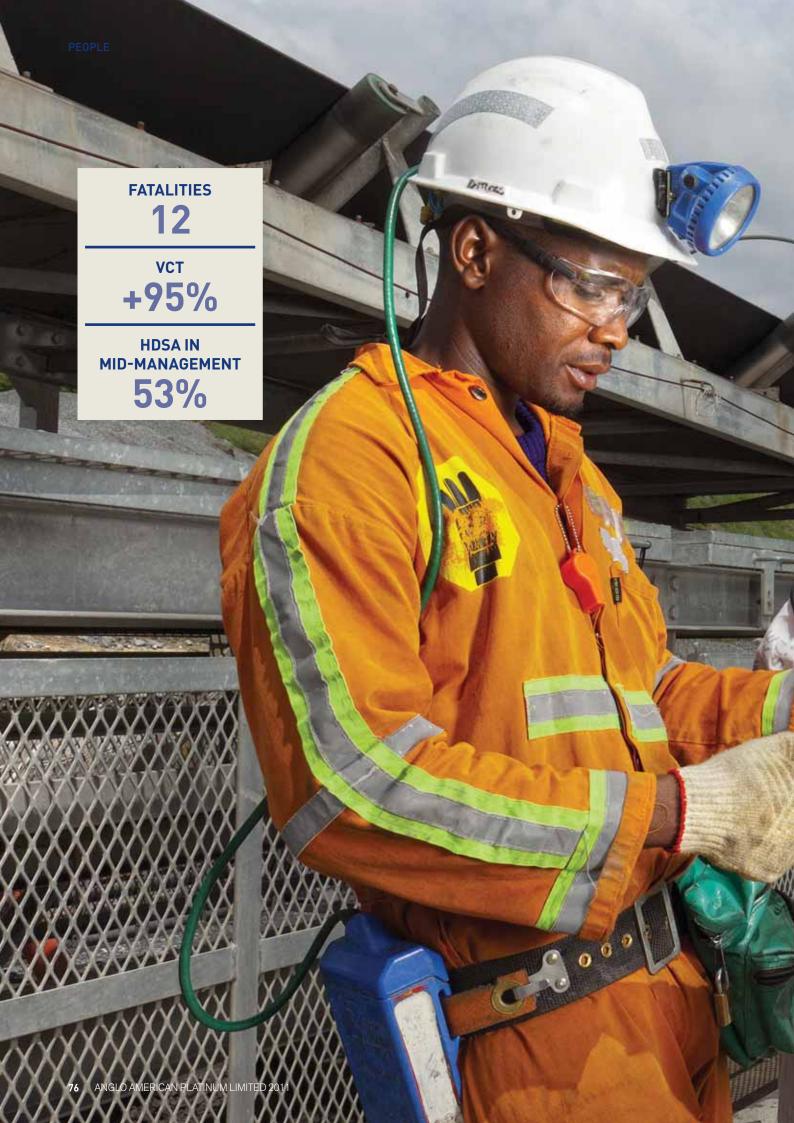
On an annual basis, in terms of the commitments of its approved EMP and closure objectives, each operation is assisted by an external consultant to utilise the SRCE model for estimates on the total expenditure for the final rehabilitation and

remediation of its operations. All the rehabilitation liabilities based on current assets and impacts were updated in 2011. The total undiscounted rehabilitation liability for all our operations at the end of 2011 was estimated to be R2,724 million.

In addition to estimating our closure liability, we place emphasis on turning rehabilitation into opportunities for community development and engagement. Although partial closure is not accepted by the DMR, the restoration costs for successful rehabilitation projects in line with the EMP commitments can be offset against the annual closure provision.

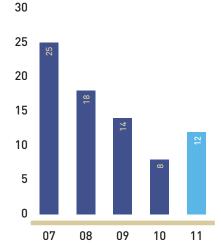
The Platinum Producers Environmental
Trust Fund was established for the managed operations, to fund their environmental closure liability. Different trust funds exist for the same purpose for our joint ventures.
Contributions are determined on the basis of the estimated environmental obligation over the life of a mine, to a maximum of 30 years. The total amount in all the environmental rehabilitation trusts at year end was R663 million. The shortfall between this total and the undiscounted environmental rehabilitation liability for premature mine closure is funded by way of bank guarantees in favour of the DMR.







## Fatality trends Number of fatalities



At Amplats we remain committed to our objective of "zero harm". Our first value continues to be "We put safety first". We believe that by remaining focused on it and "living" it on a daily basis we can achieve our goal of seeing every employee return home unharmed every day.

#### EMPLOYEE SAFETY – OUR JOURNEY TOWARDS ZERO HARM

#### Overview of performance

We observed a steady decline in the number of fatalities over the past few years: from 25 in 2007, to 18 in 2008, 14 in 2009, and eight in 2010. Sadly, this downward trend did not continue in 2011. Despite our attention and commitment to safety, 12 people lost their lives while working at Amplats in 2011. We are acutely aware of the immense impacts of these tragic fatalities at our operations, and extend our sincere condolences to the families and colleagues of the people who died.

Four of the 12 fatalities were caused by falls of ground, three were the result of moving machinery, two occurred because of explosions, and one was a transport-related incident. One person was fatally injured by a falling object, and another while handling material.

Two fatalities occurred in December, both of which have been declared non-mine-related by the DMR. The first involved a suspected criminal act and the second was caused by a tyre replacement accident on a contractor vehicle on a public road.

Our system of independent investigations by specialist teams provides detailed reports on the underlying cause(s) of every fatal incident and is used to identify any circumstance likely to result in a disaster. Comprehensive action plans, structured around a hierarchy of controls, are developed to eliminate these

underlying causes and pre-empt harmful situations. New technology is regularly investigated in order to find innovative solutions to any challenges identified. Despite our disappointment with our safety performance in 2011, we remain optimistic that our efforts to stop fatalities will yield the desired results in 2012.

The improvement observed in lost-time injury-frequency rate (LTIFR) in 2010 also did not continue. In 2011, it increased to 1.27 (from 1.17 the previous year). Even though there has been an improvement of 20% in injuries related to fall of ground, our major risk area, an increase in hand and slip-and-fall injuries resulted in the increase in LTIFR in 2011.

#### Strategy

In the past Amplats' safety, health and environment (SHE) strategy was not clearly defined, with significant changes introduced mostly in reaction to setbacks. As a result of these limitations, it was decided to develop a more proactive and comprehensive SHE strategy. Based on historical data and the lessons learnt from past incidents, this was introduced in 2008. It has since remained consistent, although subjected to regular review and updates as new information becomes available and more lessons are learnt.

The strategy is based on four components:

- Management systems
- Engineering and technological solutions
- · People and safety behaviour
- · Wellness in the workplace

#### No fatality is acceptable - in memoriam

It is with deep regret that we mourn the loss of 12 colleagues who died at our operations from work-related injuries in 2011. We are intensely aware of the impact each of these fatalities represents and extend our sincere and deepest sympathies to the families, friends and colleagues of those who died.

Each incident has been thoroughly investigated, to ensure that corrective action is taken and reoccurrence of the cause is prevented across the entire Group.

Name	Date of fatal incident	Operation and location	Direct cause of incident
Mr Bulelani Nongwejane	13 January	Dishaba Mine	Falling objects
Mr JD Drotsky	23 January	Thembelani Mine	Materials handling
Mr Tembalethu Sonney Ntampula	14 February	Bathopele Mine	Fall of ground
Mr Ramotlhware Justice Madikong	2 March	Union Mine	Transportation
Mr Ntobeko Jengese	1 April	Thembelani Mine	Fire/explosion
Mr Tainos Shumba	7 April	Unki Platinum Mine	Fall of ground
Mr Mbanja Ntlantla	1 June	Bathopele Mine	Other (loose clothing caught on machinery)
Mr Godfrey Itumeleng Vertein	30 June	Khomanani Mine	Moving machinery
Mr Mpoko Steven Lithakong	13 August	Union North Mine	Fall of ground
Mr Eduardo Calvino Chauque	10 September	Khomanani Mine	Fall of ground
Mr Petrus Kabelo Mokedi	6 October	RBMR	Fire/explosion
Mr Ramontsho Bernard Mfetane	18 October	Tumela Mine	Moving machinery

#### Management systems

Amplats' safety-management system creates a systematic framework for managing hazards and their associated risks, and complies with the requirements of the international OHSAS 18001:2007 standard.

The primary goal of the management systems remains to manage our major risks. Several software tools have been developed over time to make best use of the vast amounts of data and information available. In line with our realisation that line managers are ultimately responsible for the successful implementation of the strategy, these software tools have been used to generate information that assists line managers direct

their attention and resources towards the most significant risks. A key endeavour in 2012 will be to align the existing software tools in order to supply information that is both easier to deal with and more consistent.

Our drive to develop risk-management skills in the organisation was maintained in 2011. We remain committed to building capacity in this area and recognise fully the sustainable benefits to be gained from such skills. In 2011, the numbers of trainees were as follows:

Risk training A1	2,700
Risk training A2	901
Risk training A3	214



An unexpected increase in the number of incidents and fatalities in mechanised mining has necessitated a full review of the mechanised mining approach at Amplats. Three key components – equipment, mining methods and staff competency – were examined to ensure that our strategies are aligned with best practice in risk reduction in mechanised mining.

## Engineering and technological solutions

The second component of our safety strategy is engineering and technological solutions, which is intended to eliminate or reduce the risks associated with mining equipment. Because Amplats needs to ensure that all its systems are aligned with fast-moving enhancements in technology, and despite trying economic circumstances and the burden placed on the organisation's change management by the implementation of these technical solutions, large investments were made in innovation and technology during the year under review.

Where possible, we responded quickly with measures and enhancements to prevent the reoccurrence of fatal and other incidents. An example was the stoppage of drop-raising activities across all our managed operations while we found an acceptable solution to the charging-up process involving inverted drop raises.

Leading-edge technology has been developed to eliminate collisions between locomotives operating underground. This is done by placing, at all potentially high-risk areas, beacons that slow the vehicles down automatically when they begin to come close to each other. Should the drivers not respond to slow-down warnings, the system brings the locomotives to a complete standstill before they can collide.

## Elimination of low-energy incidents

A worrying trend in 2011 was an increase in hand and foot injuries caused primarily by the improper handling of materials. A range of tools has been developed to assist staff members handle materials safely.

#### Silencing of equipment

In line with the 2013 industry milestones, the elimination of noise-induced hearing loss remains a priority for the Company. During 2011, significant progress was made in silencing all equipment emitting noise levels greater than 110 dBA. This resulted in more than 2,063 pieces of equipment being fitted with appropriate silencing apparatus or being redesigned. Efforts in this area will continue into 2012.

#### People and safety behaviour

Although substantial progress was made last year in formalising safety systems and best practice across the organisation, it was realised that significant improvement was also needed in employees' safety-related behaviour. A Group-wide value and culture survey was completed towards the end of 2011. An encouraging message from the survey was that the majority of Amplats employees believe that the Company is truly putting safety first.

A Company Safety Day was held on 3 November, during which Amplats' top leadership addressed all employees. In order to emphasise the Company's message that any compromise on safety is unacceptable, the day's events included the presentation of stories of successful behaviour change leading to improved safety in companies in various parts of the world; and the discussion of leading practices that are being developed globally regarding successful changes in safety



Vehicles passing safely at Mogalakwena Mine

#### **Engineered solutions**

A significant danger at open-pit operations is the use of large haul trucks or heavy mining equipment (HME). The operators of these vehicles struggle to see the smaller vehicles sharing the roadways with them in the pit. Because of this, the latter face the constant threat of being run over by the large haul trucks, usually with disastrous results for the driver.

The human and financial consequences of such incidents are evident. In order to counteract both, Mogalakwena Mine has developed a safety technique that provides HME operators with a "seventh sense". Based on both visual and audible feedback, it uses a simple short-distance radar to activate a four-camera system that enables the operator to see around his or her vehicle for a distance of up to 60 metres. Operators are more aware of their surroundings while manoeuvring around blind spots and are also constantly reminded to maintain a safe following distance.

Verbal feedback is given to each operator in a language of his or her choice. This ensures that operators understand the system's verbal feedback and warnings regarding obstructions.

While drivers are still ultimately accountable for the safe operation of their vehicles, they now also have technological back-up to cater for any slips or lapses. This has resulted in enhanced safety and in reduced stress levels for everyone concerned!

Since the introduction of the "seventh-sense" system, there have been no collisions between HME and light vehicles at Mogalakwena. There has also been a significant decrease in the number of HME-to-HME

Anglo American Platinum Limited (Amplats) is proud of the Mogalakwena Mine team who took the initiative to develop a world-class system facilitating safe production. Part of the reason why the team succeeded so well is that it believes that safety systems should not be complicated, and that simple techniques are the best path to safety generally.

The approach is an example of the Company's third safety principle: non-negotiable but simple standards. Amplats continually seeks ways to make it easier for its employees to create and embrace a safer work environment. An achievement such as this takes us one step closer to "zero harm".

#### **SAFETY**

behaviour. These learning opportunities are currently being formulated into a "Zero harm in action" intervention, aimed at encouraging every single employee to take ownership of the issue of safety at Amplats.

#### Wellness in the workplace

A key undertaking in 2011 was to make all employees aware of injuries and how to avoid them, including the prevention of harm before any work starts. Should any team or individual feel unable to deal with a potentially dangerous situation, they must move away from it and escalate the situation to the appropriate level. This was best

demonstrated through the application of the A-B-S-P risk-response plan, in which teams are trained in different environments and taken through situations when it is mandatory to ask for help from managers and/or technical advisers. Our employees need to know that we do not expect them to work in unsafe conditions; and that they have the right to withdraw their labour if they believe they are being placed at risk.

#### Safety focus in 2012

The SHE strategy will remain consistent to ensure maintained focus and a holistic approach. It is important, however, that every

employee should understand his or her role in effectively implementing the strategy. To this end, its main aspects will be reviewed to ensure that it is both practical and easy to understand at all levels in the organisation. Recommendations from the review on mechanised mining will be acted on to ensure that we conform to best practice. "Zero harm in action" will be a key focus area of safety in 2012, so as to encourage compliance and foster employees' sense of ownership regarding safety issues.





Cynthia Carroll launching the "zero harm in action" programme at the Amplats Safety Day

#### Fifty thousand people gather to hear safety message

Amplats showed a dramatic improvement in safety performance between 2008 and 2010, with the latter year experiencing the best safety performance ever in the history of the Company. Sadly this trend failed to continue in 2011, when deterioration in safety performance was evident in both the number of fatalities and the injury-frequency rates for the year.

A tragic increase in fatalities among workers was experienced by most mining companies in South Africa during 2011. In a bold step aimed at uniting all stakeholders on the journey to its aim of "zero harm" in mining, Amplats took an active role in the health and safety protest march organised by the National Union of Mineworkers on 4 October 2011. This was the first time in South African history that unions and mining-house management had joined forces in a public march to show their commitment to improving safety performance at mining operations. All participants agreed that fatalities and injuries in mining had to be prevented at all costs; and that the safety and wellbeing of workers had to be foremost on everyone's agenda.

Amplats recognises that significant change in an organisation's safety culture can take several years to achieve, and remains focused on its commitment to its goal of zero harm. We believe that we will achieve this goal by adhering to our key policies and procedures, and showing our commitment at all levels of the organisation. It is essential though to continuously reassess programmes and systems to evaluate the effectiveness of these, and to continuously improve programmes in place.

A comprehensive review of the safety strategy and systems was undertaken in 2011. The results of the review showed, according to chairman Cynthia Carroll, that "our problem is not a lack of the right safety programmes, systems or standards. Our issue is that we do not implement these effectively and consistently. As a result, we continue to see too many deaths and injuries."

The objective of the Amplats Safety Day on 3 November 2011 was to address all Company employees about concerns regarding safety performance. Production was halted for the day, and staff members were transported to central venues where they were addressed by Cynthia Carroll, CEO Neville Nicolau, and high-level delegates from workers' unions and the Government. Every one of Anglo American's operations observed a minute of silence to show solidarity with Amplats, and dedicated the day to safety programmes at the sites.

The CEO Safety Day also saw the launch of the "zero harm in action" programme. The focus of the programme will be compliance, and taking personal ownership of safety. Best practices globally have been identified and will be used as the basis for the new initiative.

While it is essential to continually evaluate and reassess the effectiveness of our programmes and systems, the progress we have made in respect of perfecting our formal controls is proven. Where we need to step up, therefore, is in making employees aware of the role each person plays in enhancing safe behaviour at work.

The importance of being part of a team is highlighted during difficult times; and it is only by working together as one team that we will achieve our goal of zero harm in Amplats and across Anglo American. Employees, contractors, unions, regulatory authorities and associates make up this team, and each of them has a role to play in achieving our goal of zero harm.

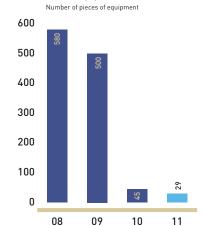
#### **HEALTH**



Amplat's health programmes focus on occupational, public and environmental health. The high burden of communicable and non-communicable diseases compels the Company to respond to the health challenges that confront its workforce. In addition, the interplay between workplace-, lifestyle- and community-related health risks requires a comprehensive approach that recognises the interconnectedness between diseases, fatigue, fitness to work, injuries, community outbreaks and workplace exposures and their impact on the health status, morale and productivity of the workforce. The main challenges in the health discipline are HIV/AIDS, tuberculosis (TB), chronic diseases, non-occupational and occupational injuries, and noise-induced hearing loss.

Consequently, the health strategy of the Company is broad and covers the full spectrum of health-related intervention. Taking cognisance of the policies that relate to the funding and provision of healthcare, developments in occupational health and the multidisciplinary nature of health-related interventions, the team continues to focus on existing and new interventions that can deliver tangible improvements in health performance. To this end, the Company provides resources earmarked for health promotion, occupational health, emergency medical care, disease management, infection control and medical services.

## Pieces of equipment emitting >110 dB(A)



#### **OCCUPATIONAL HEALTH**

Occupational health remains the cornerstone of our health-risk-management strategy. In 2011, a revised health strategy was completed and captured in our amended Safety, Health and Environment Strategy Handbook.

## Noise-induced hearing loss (NIHL)

Both the risk assessment data for occupational hygiene exposures and the medical surveillance data clearly indicate that noise remains the number one occupational health risk at Amplats. As a result, it has been identified as a material issue by the Company, which pursues innovative interventions aimed at mitigating the risk associated with noise exposure. These initiatives are being pursued at a company level, but also at the Anglo American level (ie working in close collaboration with other business units) and at an industry level.

Our main risk mitigation strategy remains controlling the noise at source – ie reducing the sound-pressure levels of noise-emitting equipment. Over the years we have concentrated on silencing pieces of equipment emitting noise levels above 110 dB(A), and great strides have been made in this regard. Over 98% of the equipment identified at the start of 2007 has been silenced over the past 5 years. Of the 2,063 pieces that required silencing

in 2007, only 29 pieces remain untouched. The remaining pieces are either fans that are located in remote areas where no one is exposed to the noise, or specialised drills that are in the process of being replaced.

The Company has conducted an inventory of equipment emitting over 100 dB(A) that needs to be silenced, and has identified approximately 8,200 pieces of equipment fitting the description. The intent is to focus on mitigating the risk posed by exposure to noise emitted by this equipment.

Using the criteria for reporting NIHL based on an average threshold decibel (dB) loss, Amplats reported 53 new cases of NIHL in 2011, compared with 19 cases in 2010, 42 cases in 2009 and 28 cases in 2008. The number of reported cases continues to fluctuate, which can be explained by individual variability in hearing deterioration and the length of service of different cohorts. In 2011, 94 employee dossiers were submitted to the Rand Mutual Assurance for compensation for NIHL, compared with 32 in 2010, 79 in 2009 and 68 in 2008.

Despite this mixed picture, the Company is confident that its interventions will ultimately be reflected in future data on hearing deterioration. Given the long latency period of this occupational disease, it is too early to evaluate the impact of the recent risk-management strategies on hearing deterioration.

#### Interventions in respect of noise

With respect to initiatives aimed at mitigating the impact of noise exposure, a number of interventions have either been implemented or are currently under investigation. These include:

## Interventions initiated at the Company level

The Company has revised its group procedure on the selection of hearing-protection devices (HPD). Key features that have been added include the use of the octave-band method for estimating the effectiveness of HPDs; the adoption of an HPD matrix in line with Mining Industry Occupational Safety and Health (MIOSH) recommendations; and the procurement of HPDs that meet the accepted standards, ie ANSI, ISO, BS and SANS.

Our team has also been investigating the use of an 'in-ear dosimeter' that measures the noise inside the ear when HPDs are in place or inserted. This technology is used to determine the actual protection provided by HPDs and to assess the use of HPDs among employees exposed to noise.

The Company is also looking at a recording system that would make it possible to monitor the real-time doses of noise an individual is exposed to; and at the possibility of incorporating into it warning signals for overexposure. This intervention would involve the use of a dosimeter and a cap lamp with additional functionalities.

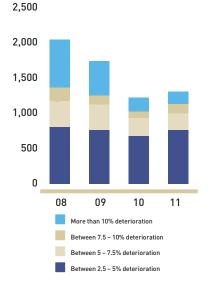
## Interventions initiated at the broader Anglo American level

Amplats actively participates in all Anglo American initiatives aimed at improving the health and safety of employees. Work is currently under way to introduce training and communications material on dust and noise. The material highlights the practical steps that managers can take to improve health-risk management at the workplace.

To ensure that health-risk management practices percolate to all levels of the workforce, the Tripartite Health and Safety

## Deterioration of hearing from baseline

Number of employees



#### **HEALTH**



Initiative is also working on a risk-management approach that will be targeted at employees exposed to noise or any other health hazard. The tripartite team intends to adopt an approach that is similar to the SLAM (stop, look, assess and manage) approach that is currently being implemented as part of broader safety-risk management.

## Interventions initiated at an industry level

The tripartite structures under the MHSA are currently reviewing the Guideline on Hearing Conservation. Our team is actively participating in its formulation and we are confident that the amended document will incorporate the full spectrum of interventions recommended for hearing conservation.

As a member of the Chamber of Mines and a contributor to the MOSH Learning Hub, the Company continues to support a number of initiatives aimed at improving health and safety. With regard to noise, MOSH has focused on two leading practices – the HPD selection tool, training and awareness; and the noise abatement strategies (with a focus on rock drills).

#### **Platinosis**

The production of chroroplatinates during the refining of precious metals continues to pose a potential health risk to employees working at PMR. Over the years, the site has recorded a significant decline in the number of cases of platinum-salt sensitivity. In 2011, no such cases were submitted for compensation.

## Exposure to nickel, aerosols and acid mist

No cases associated with exposure to acid mist were reported in 2011. Exposure to nickel in the metallurgical processes at RBMR has been greatly reduced, to a level of 0.058 mg/m³ (legal limit of 0.1 mg/m³). This was achieved through the introduction of a tank house equipped with leading-edge enclosure and extraction technology. The tank houses are engineered with forced-extraction cell hoods which improves aerosol capture, which further limits exposure to the metal and acid mist.

#### Exposure to airborne dust

Ongoing occupational-hygiene measurements reflect that occupational exposures to airborne dust in our mining operations are at levels below set occupational-exposure limits. Furthermore, detailed analysis has indicated that alpha-quartz forms only a trace constituent of Merensky and UG2 rock.

Occupational exposure to airborne dust is thus deemed not to be a significant health hazard at our mining operations. A number of factors and control measures contribute to the low dust levels, including:

- the high humidity of underground environments;
- sound ventilation principles, designs, standards and practices;
- comprehensive watering-down procedures;
- wet-drilling methods;
- dust suppression on operations and equipment (eg water sprays, dust filters, cyclones);
- low-velocity ventilation over conveyor belts (< 3.0 m/s);</li>
- re-entering periods (calculated on the basis that no exposure to any significant airborne pollutant associated with blasting will occur); and
- the nature of the ore deposits.

The risk posed by occupational exposure to airborne dust is low or insignificant in the Company's underground operations.

Control initiatives are thus limited to specific

areas and generally focus on engineering controls, respiratory protection, ongoing occupational-exposure measurements and medical surveillance.

## Exposure to diesel particulate matter

Occupational exposure to diesel particulate matter (DPM) in mechanised underground sections has been identified as a potential risk, and as a result a comprehensive baseline occupational hygiene assessment was completed in 2009. In 2010, the focus was on the assessment of personal exposure to DPM. Results indicated moderate exposure above international occupational exposure limits, with concentrations in work areas situated at the back-end of return airways being the highest.

During 2011, DPM formed part of our mines' occupational hygiene sampling programme as set out in the mandatory code of practice for airborne pollutants. A baseline review of DPM revealed measurement between 0.1 mg/³ to 0.19 mg/m³. The international benchmark is set at 0.15 mg/m³. Research work is continuing into various aspects of DPM exposures.

## Other occupational diseases Dermatitis

Two cases of occupational dermatitis were reported. In addition, 44 people were diagnosed with other occupational diseases. Of these cases, 43 were not attributable to conditions at Amplats and were instead linked to previous employment history.

## Medical surveillance and monitoring programmes

In 2011, the information system used for occupational healthcare services was enhanced to allow for the risk-based scheduling of each employee's fitness assessment and medical surveillance.

In addition, significant progress was made in the integration of the various health modules. This development will streamline occupational healthcare visits, enhance chronic-disease management and minimise the risk of expired fitness-towork certificates.

Medical surveillance and monitoring programmes for occupational exposure to known risks are undertaken at all operations, where comprehensive medical care facilities are available to employees and contractors. In 2011, the focus was on enhancing the implementation of risk-based medical surveillance.

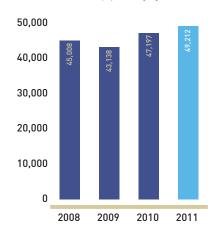
#### **HIV AND AIDS**

Amplats acknowledges the seriousness of HIV/AIDS as a medical, social and economic reality, and fully recognises the implications associated with this pandemic, among them the potential impact it may have on the organisation. Therefore it treats HIV/AIDS as a material issue.

It is estimated that approximately 20% of Company employees are infected with HIV. In line with one of the core values of the Company – 'We value and care about each other' – we offer comprehensive health services for AIDS care and HIV prevention to all employees. Universal access to comprehensive health services is needed in order to substantially reduce HIV-related morbidity and mortality.

HIV/AIDS has therefore been managed as an integrated response along a continuum of care (from prevention through to care and support). Our approach is founded on the larger socio-economic circumstances that are a co-factor in this pandemic and a key substrategy in successful prevention.

### VCT statistics Number of employees undergoing VCT



Material issue.

#### **HEALTH**



Our approach to HIV/AIDS encompasses the following:

- A targeted, culturally appropriate information, education and communications strategy (primarily through peer education and support media).
- Increased access to and uptake of all workplace prevention interventions, especially CVT, VCT, PMTCT and PEP, and STI and TB screening and treatment (see below).
- Strengthening the capacity of the health system, non-governmental organisations (NGOs) and organisational structures, to maximise the effectiveness of programme implementation.
- Improving the care and support of infected employees, including access to good nutrition, psycho-social support and treatment to promote better quality of life and limit the need for hospital care.
- Implementing programmes to reduce stigma and discrimination by providing information that builds confidence in our ability to protect ourselves against infection and the impact of AIDS.
- Developing a monitoring and evaluation framework that outlines process, outcomes and impact indicators as well as mechanisms to measure and report on these.
- Ensuring the provision of adequate, sustainable and predictable financial resources to maximise efficiencies for better outcomes.
- Continued stakeholder engagement, both internal (unions and associations, management and employees) and external (the Government, NGOs, traditional leaders).
- Continued support for community projects (eg home-based care NGOs and traditional health practitioners).

#### Preventive care

#### Testing for HIV

HIV testing is the basis of HIV prevention, as knowing one's status can prevent infection.

A positive result ensures early access to HIV treatment, care and support, all of which may result in a better prognosis.

HIV testing is available at all Company medical facilities and consists of the following:

- Mandatory counselling and voluntary testing (CVT). All employees undergo an annual medical examination based on a statutory requirement. As part of this process, they are counselled regarding HIV and then offered voluntary HIV testing.
- Voluntary counselling and testing (VCT).
   HIV testing is available on demand at all primary healthcare facilities, at the request of employees.
- Outreach programmes. Throughout the year, outreach events are held, with a mobile unit going to all workplace areas and offering the employees VCT.
- Health-provider-initiated VCT. All employees presenting with symptoms and signs suggestive of immunosuppression are encouraged to undergo VCT. This includes, but is not limited to, sexually transmitted infections, TB and other opportunistic infections. All pregnant mothers are offered HIV testing as part of the antenatal care package offered.

Through these initiatives 49,212 employees were tested for HIV in 2011, representing 94% of the total workforce in South Africa and 93% of workforce in southern Africa. In addition, 27,573 contractors were tested for HIV. If a contractor is diagnosed as HIV-positive, immunological staging through a CD4 count is performed at our medical facilities, at no extra cost to the contractor. Only contractors eligible for highly active antiretroviral therapy (HAART) are referred

to the local public health facilities, in order to minimise the patient burden at state-run facilities.

## Prevention of mother-to-child transmission

In line with best clinical practice, all HIV-positive mothers receive HAART to reduce the risk of transmission of HIV to their unborn babies. In 2011, 66 HIV-positive mothers were enrolled on the programme. Babies born to these mothers were followed up at six weeks and were all found to be HIV-negative.

#### Post-exposure prophylaxis (PEP)

PEP is available to rape survivors, and to healthcare workers in cases of needle-stick injuries and other accidental exposure to possibly contaminated bodily fluids.

#### Promotive care

#### Training and education

Over 1,900 peer educators were trained to sector education and training authority standards in the last few years, allowing us to implement a system of reporting, supervision, mentoring and coaching. These peer educators are also key to spreading the message about the efficacy and effectiveness of antiretroviral therapy, and in educating employees about the benefits of living a healthy lifestyle. Teaching material is provided to the peer educators and the counselling is done by the staff of Platinum Health Medical Aid.

#### **Curative care**

#### Antiretroviral therapy (ART)

At the end of December 2011 there were 5,781 employees enrolled on the HIV disease management programme, of whom 3,545 were on ART. Non-adherence to treatment remains a challenge for the programme, but in 2011 there was an improvement in ART retention rates. Those

on treatment experience a noticeable health improvement based on their increasing CD4 counts and reduced viral loads. The Company continues to investigate creative ways of supporting and increasing employee adherence to treatment through ART.

## Rehabilitative and palliative care

Committees for medically affected employees are in place at all operations and resulted in a significant number of medically affected employees being placed in alternative jobs. The number of job terminations related to HIV infection is continuing to decline, owing to access to ART.

## INFECTIOUS TUBERCULOSIS TB screening

Tuberculosis remains the commonest opportunistic infection in people living with HIV/AIDS in sub-Saharan Africa, and is the leading cause of morbidity and mortality in HIV-positive employees. Active TB screening forms part of our annual medical examination. In 2011, TB education and awareness campaigns were held throughout the Company, in the form of mini theatre plays followed by a quiz during which employees won prizes for providing correct answers.

#### TB performance

Amplats screens employees for tuberculosis and provides comprehensive treatment to those who are infected. During 2011, 671 employees with new TB infection were treated, in contrast with 654 in 2010, 725 in 2009 and 734 in 2008. The incidence of TB in 2011 was 1,308 cases per 100,000 employees, compared with a TB incidence rate of 1,340 in 2010. There were 60 deaths from TB, 56 of them HIV-related, compared with 77 deaths in 2010, of which 74 were HIV-related;113 deaths in 2009, of which

# Wellness and ART Number of employees 6,000 5,000 4,000 3,000 2,000 1,000 2008 2009 2010 2011 Employees on wellness

programme

Employees on ART



#### **HEALTH**



A nurse at Ga-Madiba Clinic, Mokopane, discussing HIV and family planning with members of the local community

#### Focus on tuberculosis

#### Introduction

While the combating of HIV/AIDS has received a great deal of attention in public discourse in South Africa, tuberculosis (TB) has tended to come under far less scrutiny. And yet the two illnesses have become closely intertwined, with TB the commonest opportunistic infection of people living with HIV/AIDS and the chief cause of death in the country. (People who are HIV-positive have a 10% annual risk of developing TB, as opposed to people who are HIV-negative and have a 10% lifetime risk of developing the disease.) In recognition of this development, Anglo American Platinum Limited (Amplats) has for some time been placing equal emphasis on TB and HIV/AIDS.

Checking for TB infection is a relatively quick process – the results are available within 48 hours. Early identification of the disease allows for early access to treatment, which helps to curb the spread of TB.

#### **TB** statistics

South Africa has the fifth highest number of TB cases in the world and is classified by the World Health Organisation as a country with a high TB burden. HIV prevalence among Amplats employees stands at 19%; while TB prevalence is 1.38%, which equates to approximately 700 employees.

Over the past three years the Company has invested considerable effort in tackling the disease, and this has resulted in a reduction in the number of TB cases and TB deaths. These heartening trends have been attributed to a combination of approaches in managing the disease.

For a detailed look at the relevant data and trends, see the graph on page 91. It covers straight TB cases; TB cases related to HIV; and TB deaths at Amplats between 2008 to 2011.

#### **TB** prevention

Because Amplats has found the use of peer educators to be effective in its efforts to raise awareness around HIV/AIDS, it has used a similar approach in its attempts to improve employees' consciousness of TB. The entire month of March is dedicated to education on the disease, with a theatre-group performance as part of the awareness-building process.

#### The joint management of TB and HIV

The earlier diagnosis of both HIV and TB has been made possible through the improved reach of the Group's voluntary counselling and testing programme (VCT), which encourages infected employees to enrol in the Company's disease-management programme. Those infected with TB are provided with isonicotinylhydrazine (INH), the frontline drug in the treatment of the disease. In 2011, 42,212 employees received VCT and 5,781 people were enrolled in the disease-management programme.

Also facilitating early detection of the disease is the routine TB screening – by means of a symptom-screening questionnaire – that is carried out when employees attend our primary and occupational healthcare facilities. Employees who report a cough that has lasted more than two weeks are examined and tested for TB.

All cases of infectious TB are admitted to our health facilities, and employees remain there until they are no longer infectious. Infection control inside Company health facilities is created through natural ventilation and the installation of ultraviolet lights.

#### Rehabilitation and treatment beyond employment

All employees infected with TB undergo physical and vocational rehabilitation. If their medical condition makes it impossible for them to return to work, a medical boarding process is initiated. Employees who are medically incapacitated as a result of TB receive free post-employment treatment at the Amplats facility closest to their home. The senior disability coordinator is responsible for following up on these ex-employees, to ensure that they receive the necessary care and support.

100 were HIV-related; and 91 deaths in 2008, of which 81 were HIV-related. Although there was a decline in the TB incidence rate and the number of TB deaths recorded in 2011, these figures are highly concerning. We have advanced environmental control measures in place in all areas where there is a high density of people, especially TB wards. This greatly reduces the risk to healthcare and other workers.

In 2011, the Chamber of Mines initiated an industry-wide review of TB prevention and treatment programmes in the mining industry. The process began in November 2011. We have been participating in it to find ways of improving the performance outcomes of our TB programme and enhancing the quality of TB management at all our operations.

In 2011, one case of extensively drugresistant (XDR) TB was diagnosed at our operations, compared with three cases in 2010 and one case in 2009. In addition, 18 cases of multidrug-resistant (MDR) TB were diagnosed in 2011. Initial data for the Company's antiretroviral therapy (ART) programme show a decrease in the risk of TB among employees on ART, reflecting the efficacy of the therapy.

#### **PUBLIC HEALTH**

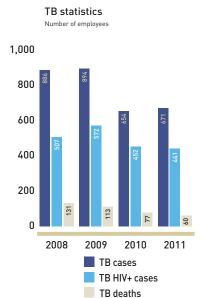
Our primary public health focus remains the provision of hygienic sanitary and ablution facilities, safe drinking water, and safe and nutritious food for all employees. A major achievement was the introduction of new flushable chemical toilets at some of the underground operations. These units replaced the old bucket system and greatly reduced the risk of exposure to biological waste among sanitation workers.

Furthermore, collective efforts take place between the Department of Health and the

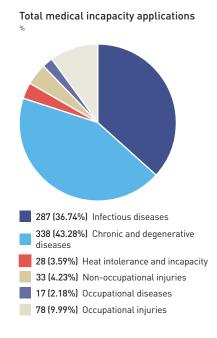
mines to ensure that essential primary healthcare services are made available to nearby villages and informal settlements through the aid of mobile clinics. Community stakeholder relationships exist – partnerships between the mines' community engagement departments, Public Health and the local municipal health structures – which provide the necessary care and support through comprehensive primary healthcare services. In 2011, the mobile clinic treated 11,835 patients from the informal settlements, 2,419 of them children under the age of five years.

To reduce the effects of chronic debilitating diseases such as hypertension, diabetes and obesity, nutritional support and counselling are required during illness and recovery. With the burden of non-communicable disease (NCD) increasing rapidly among the wider workforce within the Company, the challenge is to find ways of influencing current trends in diet and nutrition for the effective prevention of NCD. Modifications to dietary intake are carried out frequently at all single accommodation villages, with the goal of reversing or reducing the impact of NCD on the workforce.

Our 2011 nutritional-standards-compliance monitoring programme, which aims to ensure that food served in single accommodation villages meets all the nutritional requirements as to enable optimum performance of all workers consuming meals, reflected compliance in respect of average energy and macronutrient intake. The crucial micro-nutrient intake (calcium and vitamin C) reflected an improvement on the previous year's results. The standard for vitamin C intake is 250 mg per person per day for underground workers. Although intake was above the recommended dietary allowance (RDA) of 90 mg per person per day, the current average intake monitored was 180 mg per



#### **HEALTH**



person per day. The RDA for calcium is 1,000 mg per person per day and the current average intake recorded increased to 980 mg per person per day. This was mainly as a result of our drive to improve workers' presence at the dinner meal, based on research to ensure that the food we serve is acceptable to them.

# The rehabilitation and functional assessment (RFA) battery of tests

Physical work capacity (PWC) and functional work capacity (FWC) remain important adjunct assessment tools designed to rate work potential within the overall context of "fitness for work". The PWC ratings are more predictive of physical limitations, whereas the FWC ratings are designed to assess "self-pacing" capabilities. In 2011, the Company's RFA centres conducted 15,264 assessments. Almost 80% of all referrals to RFA were from occupational health centres.

The PWC and FWC data provide invaluable information on individuals' fitness profiles. Such data can be used for goal-setting during the rehabilitation of injured employees. It is also possible to use the data at a collective level, to profile the physical capacity of a workforce. The two main areas targeted for improvement in 2011 were the active management of risk factors affecting workers' fitness and the improved integration of the RFA system into the broader health-management programme. The management of risk factors included aspects of health promotion and prevention.

#### Medical incapacity

During the medical boarding process, the alternative placement of employees who have been declared unfit for a specific job is prioritised. Where necessary, physical and functional work capacity assessments are

conducted to determine which tasks an employee will be able to perform. In 2011, 675 employees were referred for medical incapacity reviews. A classification of the applications by disease type shows that the majority of applications were associated with chronic and degenerative diseases (429 or 63.6%), followed by infectious diseases (106 or 15.7%).

Of the 675 employees, 522 (77.3%) were successfully placed in alternative positions. An important subset of the overall medical incapacity data is that associated with occupational injuries and diseases. Altogether 71 applications were ascribed to this subset - which is equivalent to 10.5% of total applications. Of these, 58 were the result of injuries on duty and 13 were related to occupational disease. A total of 82 (82%) of the candidates under this subset were successfully placed in alternative positions. This high rate of successful placement can be attributed to the availability of a rehabilitation programme and to a successful set of tools for physical and functional assessment. The remaining 15 employees were medically boarded.

## PARTICIPATION IN POLICYMAKING

Amplats advocates a participatory approach to policymaking. Our team is an active roleplayer in various consultative and participatory processes currently in place to drive policy formulation and implementation. Two key areas of activity are discussed below.

## Discussions on the proposed system of national health insurance

The Government is in the process of introducing healthcare reforms aimed at improving access to appropriate and efficient health services to all citizens. These are by far

the most significant healthcare reforms since the advent of democracy. Following the publication of the Green Paper on National Health Insurance in South Africa, the Company has actively participated in stakeholder engagements held at various forums, for example the Chamber of Mines, Business Unity South Africa and the National Economic Development and Labour Council.

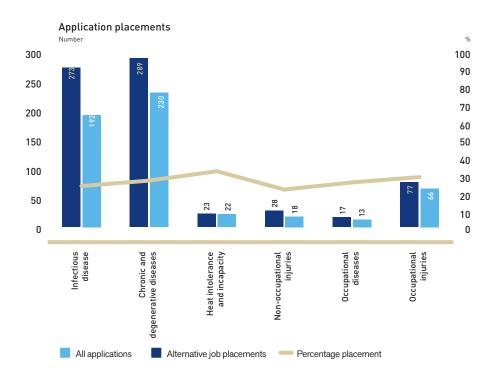
#### Work-related compensation

The predominantly dual (public and private) system of compensation for employees who sustain occupational injuries or develop occupational diseases has been in existence for several decades and there is consensus among stakeholders that it needs to be reviewed, with the aim of establishing a more equitable and efficient dispensation. Through various initiatives, such as the Tripartite Health and Safety Initiative, the

Company continues to advocate the need for the establishment of a formal and inclusive policy-review process.

## Occupational Health and Safety Regulatory Framework

The key regulatory provisions that govern health and safety in the mining industry are covered under the Mine Health and Safety Act. The policy formulation process embraces tripartism and, consequently, the make-up of statutory bodies under the Act is constituency based. With respect to occupational health, the team has engaged in a number of important topics that remain in the pipeline of future regulatory requirements. These include topics such as emergency medical care, hearing conservation, sampling strategies in occupational hygiene, minimum fitness standards and TB management.



#### PEOPLE DEVELOPMENT

To conduct its business safely, cost-effectively and competitively, Amplats needs to be a progressive company that delivers exceptional performance through optimally developed people. For our Human Resources Department, the point of departure in working towards this vision is workforce planning. Managing attrition and preparing the Company for growth are therefore key focus areas. The average attrition rate for critical and scarce roles in the Company was 10.58% excluding voluntarily separation (VS). The average turnover in all other roles was 5.73% excluding VS and 7.03% including VS.

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In order to meet current and future employee requirements resulting from employee growth, attrition and transformation, various labour-supply strategies were mobilised, as follows:

#### Recruitment

The strategy for recruitment was twopronged. Proactive recruitment was used for critical and scarce roles, which are reviewed annually in the course of our strategic workforce-planning cycle. This was done in several ways:

- The Company's talent-referral programme.
- Talent recall to attract high-performing exemployees.
- The coaching of line managers to help them develop talent-scouting skills.
- Press campaigns within local mining environments.
- The utilisation of key job-boards.
- Employer branding linked to the new Anglo American brand.
- Recruiting via short message service (SMS).
- Professional social networking sites.
- The maintenance and management of capacity pools and succession plans.

The average lead-time for filling such positions was nine weeks, from the date when we received the recruitment request to the date when we made an offer of work.

For positions not regarded as critical or scarce, a reactive recruitment strategy was followed. Since attrition tends to be more prevalent at the technical, professional and managerial levels, the focus was on shortening the time it took us to fill vacancies.

## Integrated human-resource development

The Company has developed an integrated and holistic human-resource-development strategy that enables the Company to identify individual potential at all levels. All employees now have the opportunity to obtain skills and competencies allowing them to advance along a predetermined career path, based on opportunity and suitability. The following enabling measures were developed and implemented to ensure the strategy's sustainability:

 Clear career paths for each discipline and job category.

- Learning continuums that are clearly defined and obviously linked to the career path for each discipline and job family.
- Appropriate assessment methodologies for developmental purposes.
- Suitable documents and templates to record information regarding employees' assessment, performance and development.

Progress has been achieved by putting in place systems and processes that:

- apply the appropriate assessment methodology to determine employee potential;
- translate assessment results into an Individual Development Charter (IDC) for each employee;
- prioritise the developmental and training needs of employees according to career-path requirements;
- ensure that there is a training plan for employees in line with their respective development needs; and
- action the training plan for employees in the lower-level categories.

During 2011, a total of 4,344 employees were assessed for potential and 3,007 new IDCs were developed. To date, 10,291 A-D1 employees have an IDC in place based on developmental needs identified. A further 3,163 employees were promoted as part of our skills development plan in 2011.

## Young professional development

The objectives of the Company's young professional scheme are to support the pipeline of future leadership, and also to meet employment-equity objectives and targets by providing bursaries and graduate in-training programmes in identified fields. The scheme continues to provide an appropriate number of bursaries to ensure

the long-term supply of professional employees into the Company. It thus ensures that we are able to attract and develop young professionals who will be able to deliver exceptional performance and create value.

The table below indicates the number of young professionals on the scheme who received bursaries between 2006 and 2011. The percentage of historically disadvantaged South African (HDSA) bursars on the scheme in 2011 was 76%.

	Number of bursars
2011	384
2010	418
2009	614
2008	657
2007	486
2006	414

#### Fast-tracking programmes

Fast-tracking programmes address the shortage of business-critical skills and in the process help the Company comply with legislative requirements. In total, five engineering development programmes are in place. They are the foreman development programme; measurement control and instrumentation; the planned maintenance officer programme; training towards the Government Certificate of Competence (GCC); and project manager training.

Since the inception of these programmes, significant results have been achieved. In 2011, 107 employees participated in the engineering fast-tracking programmes. Of the 36 who completed the training, 31 were substantively appointed, with 39% of the appointments going to African women. The

#### PEOPLE DEVELOPMENT

programme also delivered five African woman project managers – a first for the Company. Moreover, five women are participating in training towards the GCC, which is a requirement for legal appointment as a section engineer.

The mining fast-tracking programme trained 164 section supervisors, 24 mine overseers and seven section managers, a number of whom have already been absorbed into permanent positions.

## Critical skills development in engineering

A total of 503 artisans were in training during 2011. Of the 138 trainees who qualified as engineering artisans in the course of the year, 79% consisted of HDSAs. Of those, 26% were female. Moreover, female participation in the programme doubled in 2011.

Altogether 34 stope servicemen have been trained to date, 11.8% of whom are female.

The medium-voltage training drive continued (380 people have been trained since the inception of the programme). In 2011, 148 trainees passed additional selection criteria as defined by the different operations and achieved the medium-voltage certificate. It has been decided to repeat this programme on a two-year cycle.

#### Mining-related training

The Operational Skills Department was restructured in 2011, in order to align it with the Company's journey towards "zero harm". We reviewed all our reports of major incidents by means of a "learning from incidents" process, and incorporated critical improvements into our training methodology and learning materials. At the moment we are concentrating on the inclusion of energy-related issues, such as fall-of-ground and electrocution, in the training materials.

The Anglo American Platinum School of Mines has been designed and approved, and preliminary implementation of the project began in the last quarter of 2011. This follows a strategic decision, in support of safe profitable platinum, to centralise the Rustenburg mining operations' training in respect of all mining competencies and of learnership levels 2 and 3 of the Mining Qualifications Authority (MQA). A comprehensive change-management action-plan has been completed, to guide the developments required during 2012.

## The continuous evaluation project

The continuous evaluation project will provide refresher training in the legal aspects of conventional mining at each operation, resulting in significant safety improvements and the better utilisation of our skilled workforce. The project milestones to date have all been met and the project will be rolled out to other operations in 2012.



Caption to follow

In cooperation with the management of Unki Platinum Mine in Zimbabwe, the human resource development function has finalised an operational skills-development strategy to enable the mine to meet the Company objective of "safe profitable platinum" in 2012. The plan was put into effect in the course of 2011 and progress has been good.

#### Conventional mining

A total of 162 learner miners obtained the National Qualifications Framework (NQF) Level 3 Rockbreaker Qualification. Of these, 59 also completed all the experiential training and have subsequently been appointed as miners.

A total of 10 learner shift supervisors completed the three-year programme successfully.

Compliance in terms of the fall-of-ground regulations (the competent A&B skills programme) and also the newly promulgated explosives regulations (the blasting assistant skills programme) is successfully being controlled and managed to ensure that Amplats achieves zero harm.

The industry falls-of-ground management (FOGM) initiative was successfully launched in October 2010 and continued into 2011. This initiative includes the rollout of strata-control training and also training in the hazard identification and treatment system (HITS/ABSP).

Training was introduced on the Taylor-May'd Jack canopy programme, with 57% of the target population receiving instruction. This initiative was nominated for the Anglo American Applaud Awards. The device is designed to prevent dangerous exposure to unsupported hanging wall and to ensure that no employee enters an unsupported area. It is able to withstand a weight of

2 tonnes. The canopy has been recognised by industry players as a major step in improving and managing falls of ground, and has been introduced into various South African mining operations.

In total, 568 employees completed the "back-to-basics" technical and supervisory courses. Designed to fill knowledge and skills gaps within the mining technical supervisory levels from miner to section manager, these courses have been attended by 83% of their target audience.

In 2011, our Mechanised Mining Training Centre achieved accreditation by the MQA. The centre is already recognised in the industry and several mining houses conducted benchmarking exercises there during the year.

Preparation for the implementation of the newly registered Mechanised Mining
Learnership was completed during 2011 and the course will be introduced in 2012.
Mechanised mining cadetships were introduced in the last quarter of 2011.
Altogether 40 cadets completed the training, half of them women.

Training in machine appreciation, conversions, new mining technology in TM3 and supervisory management continued during 2011.

The Mining Training Centre (MTC), Eastern Limb will continue to deliver technical and non-technical training and psychometric assessment to Twickenham Platinum Mine at its surface facilities at Twickenham Shaft and temporary underground facilities at Hackney Shaft, until the underground training facility has been completed at Twickenham Shaft. The facility and the expertise it embodies are being earmarked as a strategic training asset capable of

providing training to the expanding Eastern Limb mines.

The focus at MTC remains on conventional and mechanised skills training, legal refresher training, and short courses covering safety, leadership and track-bound equipment. ISO 9002:2008 certification was maintained and full MQA accreditation was obtained during 2011.

#### Safety officer training

During 2011, four safety trainees were appointed as safety officers. A new safety on-boarding programme was designed and implemented. The intention is to support Anglo American's crucial "Zero Harm" campaign by ensuring that all newly appointed employees on band 6 and above are informed about our safety, health and environment policies, strategies and key performance areas.

Training continued on safety-risk management and on commitment to zero harm during 2011. Overall, 4,000 employees have been trained on the latter programme since its inception. In addition, 278 health and safety representatives were trained during the year.

The senior safety on-boarding programme, which is a newly designed initiative intended to boost Anglo American's capacity-building efforts, was completed and began operating during the latter part of 2011.

#### **Process training**

Both the Mogalakwena and the Mototolo concentrators obtained their ISO 9002:2008 listing. In addition, Precious Metals Refiners (including the laboratory) and the concentrator at Union Mine achieved full MOA accreditation.

#### PEOPLE DEVELOPMENT

Preparation for the implementation of the national skills programmes was completed in 2011; the first group of learners is due to join it in 2012. In total, 40 employees began the shift-leader development programme, while 85 started the process-supervisor development programme. These candidates are expected to graduate in 2012.

#### Management and leadership

To enhance their performance at the managerial supervisory level, employees attended various internal and external development programmes in 2011. In total, 49 first-line managers attended the junior management programme and 45 senior managers graduated from the programme for management excellence, thereby boosting the supply of leadership from within the Company. Altogether 26 employees on band 6 and above attended the personal and professional leadership course and 250 managers attended mentoring workshops. A total of 25 senior managers developed their people skills by attending the senior leadership programme presented by the University of Cape Town. In addition to this, five senior managers attended the Anglo Management Programme and four senior managers began the Leaders in Anglo programme, which will end in 2012.

Various development programmes have been initiated to enhance performance at the supervisory level. They focus on areas such as personal and professional mastery; introduction to supervision and generic supervision skills; change management; performance management; and employee relations and communication. In 2011, the programmes were attended by 2,041 supervisors.

To date, more than 1,163 employees on band 6 and above have attended training in the People Development Way, to ensure that all leaders within Anglo American are developed towards a common framework of behavioural competency.

## Adult basic education and training

The Company continued to invest significant resources in adult education and training (ABET) in 2011.

Access to RPL (recognition of prior learning) has been provided and every learner writes placement assessments prior to enrolment. Learners were able to continue through five levels of education, beginning with mother-tongue courses and culminating in the introduction to mining and minerals qualification registered at Level 1 on the National Qualifications Framework.

More than 366 people (consisting of 283 employees, 66 community members and seven contractors) registered for full-time ABET in 2011, with 108 people completing a level. Several successful ABET learners have been offered further development opportunities in line with their career development plans and are progressing well.

Voluntary own-time programmes are offered across the Company. Classes are offered on a three-shift basis, enabling shift workers to attend. We recorded 122 own-time completions (representing 75 employees, 19 contractors and 28 community members).

#### Talent management

Talent management is a strategic imperative at Amplats and forms an integral part of the business. Having the right people in the right place at the right time, now and in the future, is a key reason for our competitive advantage. Through talent management, the Company continues to focus on building and sustaining a strong leadership pipeline.

The Company views all employees as having talent. Within this broad talent pool, it identifies individuals who demonstrate the capability and motivation to progress to more senior positions.

The management of talent makes a significant contribution in areas such as employee attraction, career growth, career advancement and the retention of talent. Besides other mechanisms described in other parts of this section, career development panels provide yet another means of assisting individuals to align their aspirations with the requirements of the business. A total of 60 senior-level employees attended career-development panels with executive heads in 2011.

During 2011, our Global Capability
Framework (People Development Way) was
further embedded at Amplats, contributing
to high levels of performance and
appropriate behaviour.

#### Performance management

The Company defines performance management as the continuing management, measurement, monitoring and development of employees, to ensure that the organisation meets its objectives and aspiration to be the leading global mining company of choice.

The objectives of the Company's performance processes are to achieve Company growth and competitiveness through an organisational culture of high performance; apply common principles for all employees consistently and accurately; and measure and assess performance fairly. The processes allow for clear communicated expectations for each employee; build and enhance the relationship between manager and employee; and encourage overall employee development.

#### TRANSFORMATION Employment equity

On its journey of transformation, the Company is required to take into consideration the legislative requirements as set out in the Mining Charter and the Employment Equity Act (No 55 of 1998). Both acts expect employers to demonstrate the progress they are making towards ensuring that their workforce profile ultimately mirrors that of the economically active population of the country.

The report submitted to the Department of Labour (on 31 May 2011) showed improved representation of designated employees when compared with the previous year's report, as follows: from 34% to 37% in senior management; 50% to 53% in the professionally qualified, experienced specialist and mid-management levels; and 66% to 69% among skilled technical and academically qualified workers; junior management; supervisors; foremen; and superintendents.

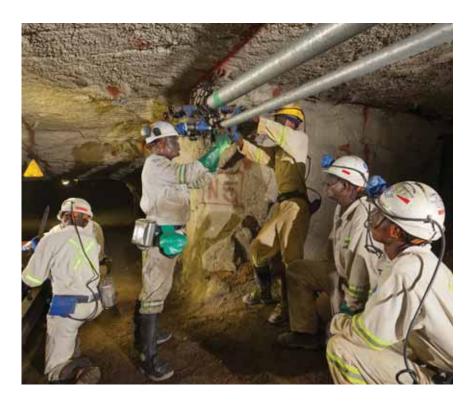
The table on page 158 shows our employment-equity figures between 1 June 2010 and 31 May 2011, as submitted to the Department of Labour.

Using Mining Charter measures, which differ from those of employment equity in the reporting period (December 2011), the representation of historically disadvantaged South Africans at Amplats reached 44% in top management, 41% in senior management, 56% in middle management and 63% in junior management.

The total participation of women at the four management levels reached 20%.

#### Personal change programme

The personal change programme (PCP) began in 2009. At its core are surveys and workshops on the manifestation of racism, sexism and other unfair discrimination in the workplace. The programme, which covered



30% of current employees by 2011, is set to continue until every employee has had a chance to participate in it.

A sexual harassment hotline, which is an outcome of the PCP, has been introduced to provide an avenue for victims who find it difficult to report incidences directly to their managers. It also offers support via external counselling.

#### Values and culture journey

A values and culture survey was conducted in order to measure progress against the findings of a similar survey conducted in 2008. The results showed that employees at all levels were very aware of Company values; and that there had been an improvement in living these values. The value concerning safety received the highest score. The results also showed an increase in valuing and caring for one another and a move towards team work. The Company will continue to implement interventions in order to encourage employees to behave with integrity and take responsibility for their behaviour; and to build on the positive developments seen thus far.

#### PEOPLE DEVELOPMENT

#### THE VALUES AND CULTURE **JOURNEY**

The Executive Committee requested a repeat in 2011 of the culture and values survey held in 2008, in order to gauge employees' attitudes to the current Group culture. The project mandate was threefold: to measure the extent to which the values were being "lived"; to determine the impact of leadership academy and other programmes implemented in support of the values; and to strengthen employee engagement with this important initiative.

The methodology for the survey included the following: a quantitative survey on an electronic platform; one-on-one interviews with the working-group members and senior leadership; and focus groups for other employees, organised-labour representatives and supervisors as well as focus groups conducted in a variety of languages. The survey achieved an overall response rate of just over 43%.

The responses showed a high awareness of Company values among employees of all levels, and a shift towards actively living the values. Of interest was that safety, which is a challenge in the mining sector, scored highest among all the values. The responses also showed an increase in valuing and caring for one another, and increased appreciation of the benefits of team work. In summary, the results of the survey were the following:

• On the positive side, the high visibility and the pronounced awareness of the values throughout the organisation. There has been a clear increase in employees' confidence and willingness to speak up when the values are not being lived. Moreover, the leadership was noticeably intent on living the values.

· On the negative side, the overall feeling that more could be done to reinforce the values and the new culture. It emerged that sometimes, for example when people are under pressure, the values are sacrificed. Living the values is not practised consistently throughout the organisation. Some of the practices of leaders are not congruent with living the values, but there are no consequences for this sort of behaviour.

The feedback per value was as follows:

- · Safety: Safety is the highest-scoring value and both "employee safety" and "zero harm" appears to be in the top ten values. However, there is an overall feeling that safety is being compromised.
- Delivery on promises: Though "blame" was said to have increased at all levels of the organisation, "accountability" moved up the value scale, from seventeenth to eighth position.
- Valuing and caring: Caring for one another has moved into the top ten values, and overall caring has been witnessed in the organisation. There has, however, been a negative shift in relation to the values of dignity and respect, and racism has increased.
- Honesty and integrity: Honesty has decreased and distrust has increased.
- One team: Although teamwork remains in the top ten values and there has been a major shift towards collaboration, concerns were raised regarding team dynamics.
- Passion and pride: Although this received the second-highest score, it is negatively impacted by not being lived.

The Company will continue to implement interventions in order to encourage employees to behave with integrity and take responsibility for their behaviour; and to build on the positive developments seen thus far.

#### LEADERSHIP ACADEMY -FRONTLINE SUPERVISOR **PROGRAMME**

The vision of the Leadership Academy is to provide customised leadership development to four tiers of management in the Company. Since its inception in 2008, the Leadership Academy has rolled out and continues to maintain two culture-change programmes, namely the frontline supervisor programme (C1-D1) and the personal change programme (all employees). In addition, safety commitment workshops were implemented in 2009. A new programme for senior and executive management, focusing on intercultural intelligence, was meant to have been implemented in the fourth quarter of 2011. However, all Leadership Academy programmes were cancelled for the remainder of the year in October 2011, owing to safety and production challenges.

The objectives of the frontline supervisor programme are as follows:

- To instil the values of Anglo American Platinum Limited.
- · To provide a toolkit for applying the values in everyday work tasks.
- To bring about cultural change on a group basis.

Between 2008 and 2011, a total of 5,373 employees within the C1-D1 band have been trained on the programme. This amounts to 70% of the target population, excluding staff turnover figures. A total of 1,715 employees have committed themselves to attending the training in 2012. If the current training rate continues, the Leadership Academy will embark on maintenance training (for new employees only) from 2013 onwards. The figure below provides an overview of the progress made to date.



#### PEOPLE'S RIGHTS



We recognise the right of our employees to freedom of association and to collective bargaining. Our remuneration practices will be determined according to local market conditions and we will strive to ensure that we pay wages that are, as a minimum, adequate to satisfy the basic needs of our employees and their families. We will promote diversity and will not tolerate unfair discrimination or the inhumane treatment of employees including through any form of forced labour, physical punishment or other abuse. Our workforce has the right to work in an environment free from harassment or intimidation.

Between 2005 and the end of 2011 the number of women in core disciplines at Amplats has increased from 405 to 3,872, while the total number of women employed by the organisation has increased from 5.1% (2,256) in 2005 to 12.4% (6,352) in 2011

#### **WOMEN IN MINING**

In terms of the original Mining Charter, which came into effect in 2005, women across all occupational levels were to make up 10% of the staff complement of mining companies by 2009. In the revised (2010) charter the target (to be achieved by 2014) was instead stipulated based on a minimum demographic representation of 40% of historically disadvantaged South Africans (HDSAs) at the top, senior, middle and junior management levels; and on the figures for economically active women in the country.

In the third quarter of 2011 the economically active population (EAP) profile for women was as follows: African women: 33.7%; coloured women: 5.1%; Indian women: 1.1%; and white women: 5.4%. When calculated on 40%, the targets for women in all four levels of management become 14.2% for African women, 2.2% for coloured women, 0.6% for Indian women and 2.3% for white women.

For several years already Anglo American Platinum Limited (Amplats) has been seeking to increase its complement of skilled female employees. Between 2005 and the end of 2011 the number of women in core disciplines at Amplats has increased from 405 to 3,872, while the total number of women employed by the organisation has increased from 5.1% (2,256) in 2005 to 12.4% (6,352) in 2011.

The percentage of women in management positions within the Company was as follows at the end of 2011: 22% in top management; 11% in senior management; 21% in middle management; and 20% in junior management. Overall, then, the representation of women at all management levels except senior management has already surpassed the minimum 2014 target of 19.3%, calculated as a percentage of the overall Mining Charter target of 40%.

Another milestone has been the appointment of five women project managers who went through the fast-tracking programme and three women who are being prepared to become section managers.

These strides forward have been made possible by the introduction of fast-tracking programmes, targeted recruitment and improvements in the working environment. This last-mentioned aspect has entailed the supply of sufficient and suitable change houses, the provision of appropriate personal protective equipment, and the formation of women's forums at all operations. A women-in-mining portfolio was created in 2006, and charged with attracting, developing and retaining female employees.

These interventions contributed to our winning the award for the top genderempowered company in the resources



Nontobeko Masondo

#### **Empowering women in mining**

Nontobeko Masondo, our human resources (talent) manager, had this to say about women in mining:

#### What is the prevailing attitude towards women within the Company?

The Company values and promotes equal treatment and respect for women. The launch of our women-inmining forums has contributed to an increasing awareness of women in mining. I think that we are moving in the right direction because there is generally greater appreciation of the contribution made by women in the Company. Also, much progress has been made in improving conditions underground and making it possible for women to work there.

#### What it is like being a woman in mining?

There is greater acceptance of women in mining, especially in my area of work. A lot of progress has been made although some challenges remain. For example, mining is still dominated by males and the representation of women in the sector continues to be minimal. As women we often find that we have to continually prove ourselves. Also, we women miners still experience teething problems when trying to fit in and get the respect we deserve. One of our Company values is to care about each other; we need to accept this as a workplace practice, treat each other with respect and develop positive attitudes.

#### What barriers does the Company still need to remove?

There is a shortage of skilled women in South Africa. As a Company we can do more as far as attracting and retaining women is concerned. We need to focus on creating more opportunities for women and on raising awareness about available job opportunities. We need to institute and promote initiatives in high schools so that young women are aware of these opportunities and their associated requirements. We also need to continue supporting women in our employ.

#### Do you think that the career prospects for women in mining are good?

The future for women in mining is very good within the Company. Our career development practices promote a culture of learning, growth and empowerment. If women take advantage of the opportunities that are available, and with the right set of skills, commitment and attitude, we will have our first female general mine manager in the near future!

#### HOUSING

The Company's plan is to deliver 20,000 housing units to its employees by 2017. The first phase of this ambitious programme is the delivery of 5,000 housing units by 2014.

To date, 1,300 units have been built. Besides houses, the business model has involved the provision of water supplies, sewerage, electrical reticulation, roads and stormwater systems.

One thousand of the units form part of the Seraleng project in Rustenburg in North West province; while the balance of 300 is located in Northam in Limpopo province. The Northam project was the second housing project to be delivered under this business model. It was launched by the Minister of Human Settlements in November 2011.

The launch was significant given the integrated approach the Company adopted in implementing the project. The development featured the construction of a five-megalitre waste-water treatment works to cater for current and future growth. In addition, Anglo American Platinum Limited

funded the construction of the main access road into the township, a development that is benefiting all the inhabitants, not just Company employees.

Several enhancements were brought to the floor layout used in Seraleng. They were introduced by way of show houses at Northam, namely:

- 50 m<sup>2</sup> stand-alone units: 2 bedrooms/1 bathroom
- 58 m<sup>2</sup> stand-alone units: 3 bedrooms/2 bathrooms
- 66 m<sup>2</sup> stand-alone units: 3 bedrooms/2 bathrooms (1 en-suite)
- 76 m<sup>2</sup> stand-alone units: 4 bedrooms/2 bathrooms (1 en-suite)

The four-bedroom unit was introduced to cater for employees with larger families.

All the houses are planned to be environmentally friendly, firstly through optimum floor positioning. This ensures that they are automatically warmer in winter and cooler in summer. Good positioning and design of the house also allow for easy extension in future. Furthermore, the units are fitted with solar geysers.





Portia Monedi at her new home

#### Housing our employees

Portia Monedi, who works underground at Khomanani 2, is a beneficiary of the Seraleng housing project and resides on erf 3129. She was asked a few questions about her home ownership:

#### How did you get the house?

For many years I made several attempts to own a home through the banks, but was unsuccessful. I was told that I did not qualify to own a home and when the opportunity to own a house in Seraleng arose I was one of the first people who jumped at the opportunity.

I then made an application on a house, but it was not approved. I was encouraged to try to reapply a month later and, to my surprise, on the second attempt it was approved.

#### Whom do you live with?

I live with my 11-year-old son.

#### How long have you been living in your new home?

It has been over one and a half years now. We have spent two Christmas holidays at our new home.

#### Is your workplace accessible from home?

Even though transport to work can be a challenge now and again, the benefits of owning my own home far surpass any transportation challenges we may experience. Besides, there are taxis that operate at reasonable times within our area.

#### How many bedrooms does your house have?

It is a two-bedroom house.

#### How has your life changed since moving into your new home?

My life has changed for the better. I was living with my siblings before for so many years, sharing a tiny house. Now my son and I have so much space all to ourselves. It's very gratifying. I can also see the improvement in my son's development. Things are different now as we are even able to comfortably host our family when they visit.

I would like to thank Amplats for giving me the opportunity to finally own my own house and provide a home for my son. If I was not working for this Company I doubt I would have attained this great achievement. I have been working a very long time and I can finally see the fruits of my hard work.



#### **RESPECTING PEOPLE'S RIGHTS Employee relations**

The Employee Relations Recognition Agreement (ERRA), ratified by both management and Amplats' recognised labour unions in February 2009, was further entrenched during 2011. Following the split in the operations of each of the Rustenburg, Amandelbult and Union mines, the Company has made certain that employee participation structures such as the operational partnership forums are established at every operation. The establishment of new mining operations also required some of the unions - for example the National Union of Mineworkers - to align their structures to suit our business model (as in the case of the establishment of branch structures). This alignment has fostered positive relations between management and employee representatives.

As a collective agreement, the ERRA regulates the relationship between the recognised unions and the Company. Both management and the union leadership accept that the rights contemplated in the ERRA entail certain responsibilities, and therefore they undertake not to act unfairly or commit unlawful acts. The parties to the ERRA further commit themselves to working together in gaining employee understanding of and support for the Company's vision, values and strategies. The ERRA establishes fully functional partnership structures for dialogue and consultation, as follows:

- The Central Partnership Forum.
- The National Steering Committee.
- The Strategic Leadership Forum.
- The Central Collective Bargaining Forum.
- The Operational Unit Participative Forum.

There are four trade unions currently recognised within Anglo American Platinum Limited, namely:

- · The National Union of Metalworkers of South Africa.
- · The National Union of Mineworkers.
- The United Association of South Africa.
- The Togetherness Amalgamated Workers Union of South Africa.

#### Employee relations values charter

In 2011, Amplats concluded its employee relations values charter with the recognised unions. The charter embraces the current Company values and is used as a guide when the Company and the unions engage each other on any employee-related issue. The application of the behavioural and grievance procedures in relation to affected employees has a fundamental influence on the determination of case outcomes.

The parties also committed themselves to live and lead the implementation of the Company values throughout the organisation and in their own structures.

#### Communication policy and structures

The Company has implemented an employee communication policy, with the following objectives:

- To promote the empowerment of line management, the emphasis being on line managers' responsibility as the Company's primary communicators with employees.
- To provide a common approach to communication within the Company.
- To ensure an understanding of the communication roles and responsibilities of all parties in the Company.

- · To provide a framework of support resources for line managers, making it easier for them to achieve sustainable success in their communication with employees.
- · To monitor and audit the effectiveness of employee communication, thereby ensuring an understanding of how to improve on its weaknesses.

The policy also details the structures of communication at various levels of the organisation (an example being supervisors having face-to-face meetings with their teams to discuss production and safety issues).

On various matters of mutual interest to the Company and its employees, management regularly consults and communicates with employees belonging to trade unions. This is done through the transparent partnership and communication structures enabled by the formation of the Central Partnership Forum at senior leadership level and the Operational Unit Partnership Forum at operational unit level. The convenors of these communication and consultation sessions are required to publish minutes of their meetings. This ensures that all relevant employees are kept informed on issues currently on the union and management agendas.

## **Human rights**

South Africa is a signatory to the Universal Declaration of Human Rights, which is in turn reflected in South Africa's Constitution. The Company has incorporated human rights principles into its code of ethics and business principles. These apply to all our operations, including our operations in 7imbabwe.

#### Non-discrimination

The Company's code of ethics and business principles declares that "we promote workplace equality and seek to eliminate all

forms of unfair discrimination". This principle is consistent with the Employment Equity Act, No 55 of 1998.

All forms of unfair discrimination and harassment are dealt with in terms of the Company's behavioural and/or grievance procedures. Furthermore, the Company has subscribed to all Government and industry agreements and also subscribes to Government agreements to ensure non-discrimination against foreign labour. The Company has amended its policies and procedures to ensure non-discrimination against foreign migrant labour.

## Freedom of association and collective bargaining

All Company employees have the right to freedom of association under the South African Constitution and the Labour Relations Act, 1995. This right is also entrenched in the Company's code of ethics, business principles and employee relations policy.

The Company recognises trade unions with significant representation among its employees, and these in turn participate in collective bargaining forums with management. Some 79% of the Group's employees are represented by trade unions and associations.

### Disciplinary procedures

The Company's disciplinary procedures are intended to induce behaviour modification in instances where an employee has committed a misconduct. All disciplinary cases are judged based on their substantive and procedural merits. The disciplinary sanctions (outcomes) range from counselling to termination of the employment contract (for serious transgressions that are detrimental to sound running of the Company and thus render continued employment intolerable).

### PEOPLE'S RIGHTS



An employee has a right to appeal against the sanction that was imposed by the chairperson of the disciplinary hearing. As in the disciplinary hearing, the appellant has a right to be represented by a fellow employee or a trade union representative during the appeal hearing.

Any appeal process is confined to the merits on which the request for relief is based, as being one of:

- wrongful verdict of guilt;
- unfair penalty/sanction in light of the circumstances of the offences; or
- · substantive impropriety in that the appellant has been disciplined without reason.

Should the employee wish to take the matter further, he or she is entitled to process it in terms of the Labour Relations Act or any other applicable legal avenue.

#### **Grievance procedure**

The Company's grievance procedure is intended to create an environment that is conducive to good employee relations, by making it possible for the Company to take prompt and fair action when employees raise legitimate complaints. The two recognised types of grievance are:

- the individual grievance, in which one person has a grievance; and
- the group grievance, in which more than one person has a grievance. In this instance, the aggrieved group may select up to five representatives to raise the grievance with its immediate supervisor. Union members must select shop stewards as representatives. Employees who are not members of a union must select a representative from the group that has the grievance.

Individual and group grievances are treated in the same way, and the same procedure must be followed. Should a grievance

remain unresolved, the final management authority within the hierarchy at the operating unit involved is allowed an opportunity to resolve and take a decision on the matter. Further to that, aggrieved parties may employ external disputeresolution mechanisms regulated by legislation.

## Sexual harassment

The Company has established an anonymous tip-off line for sexualharassment-related allegations and reporting by affected employees. The line is managed off-site. Assessment reports are submitted to the senior human resources manager at our corporate office, who is responsible for dealing with such issues. Several cases have already been dealt with, and resulted in some employees being dismissed in 2011.

#### Labour disputes

Some 574 employees at Bathopele Mine went on an unprotected industrial action for five days in 2011. The reason for the illegal strike was that employees wanted to be paid their incentive bonuses regardless of the fact that the production target had not been met. Following the intervention of union leaders, the illegally striking employees were not dismissed but instead were given final warnings, to last for a period of 12 months in respect of the same action. The Company lost 96 man-hours as a result of the illegal strike.

# Child labour, and forced and compulsory labour

The Company does not make use of child labour and does not tolerate the inhumane treatment of employees, including any form of forced labour, physical punishment or other abuse. The South African legislation (Basic Conditions of Employment Act of 1997) prohibits child or forced labour.

## Security practices

The Company has implemented a set of voluntary principles on security and human rights. The principles are relevant to many aspects of the Group's security management, including risk assessment and interactions with public and private security providers. The principles represent international best practice in the management of security and community risks. Security personnel have to attend training in the 83 requirements related to the voluntary principles on security and human rights management. As regards this training, the Company has met its commitments regarding permanent employees. However, owing to contract labour that changes all the time, there will always be a 10% gap in training coverage; therefore, training is ongoing.

There were no clashes between mine security and community members in 2011.

### **CORRUPTION RISK**

The Company does not tolerate any form of corruption. The risk posed by corruption is considered – along with many other forms of risk - as part of the risk assessments conducted for all Anglo American business units. Internal audit procedures also consider the risk of corruption within any process that is reviewed, and assess the controls in place to mitigate the risk. If these controls are not deemed sufficient, this is reported along with injunctions to management action. The procedures for both the risk-management and the internal audits are aimed at identifying broad risks facing the business. Management remains responsible for the operation of controls intended to minimise the risk of corruption.

Approximately 60% of our grade 5 and above employees attended anti-corruption training.

### Code of ethics

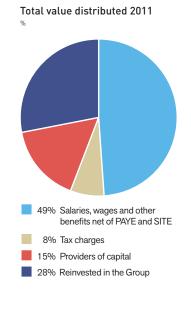
Business principle (January to December 2011 incidents)	Number of employees dismissed	Vendors flagged as high-risk suppliers (and not reinstated)
Fraud	19	9
Corruption	5	1
Theft	19	0
Acting against best interest of Company (bringing Company name into disrepute, conflict of interest, vendor irregularities)	17	55
Violence (assault, robbery, hijacking and murder)	36	0
Intimidation	1	0
Discrimination (racial and sexual)	2	0
Dishonesty (sick notes, overtime, MVA accounts, etc)	51	0
Total	150	65

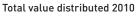
183 contractors were terminated in 2011. The breakdown of contractor dismissals will be tracked from 2012 onwards.

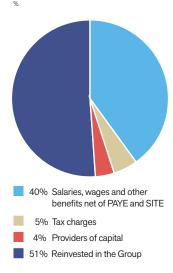




### **ECONOMIC CONTRIBUTION**







We believe that the overall economic contribution generated as a result of our operations should fairly reflect the balance of the risks and rewards of responsible investment and development.

# **OUR ECONOMIC** CONTRIBUTION

The disclosure of our strategic approach on economic performance indicators is detailed on the front cover of the Integrated Annual Report.

### Payments to Government

The Company has a Board-approved tax strategy, which is discharged by a team of professionals acting in accordance with the Company's business principles.

It is important to look at the total tax revenue which we generate in the countries in which we operate. It is an oversimplification to consider this merely in terms of the amount of corporate income tax and royalties which we pay in each country. It is necessary to also consider all the other taxes borne by the Group, including import and export duties, withholding taxes and other taxes. These taxes, which are a cost to the Group, amounted to R2,054 million (2010: R1,300 million) in 2011. In addition, there are taxes which arise as a result of our operations which, although not a cost to the Group, are collected by us and remitted to government. These include payroll taxes and VAT. In 2011, this amounted to

R1,496 million (2010: R1,404 million). In South Africa in 2011, Amplats paid cash of R1,916 million (2010: R1,322 million) to the governments in the form of corporate income taxes, royalties and other taxes.

Taxes paid to Government generate the revenues which can then be spent on social infrastructure, schools, roads, public services, conservation and enforcement of laws. This forms part of our socio-economic impact. Our influence in many local economies spreads significantly wider than our operations and employees, with direct and indirect benefits extending, for example, to businesses supporting the Group's operations. Government recognises the significant benefits that can accrue to an economy through the responsible extraction of natural resources. Tax revenues form an important part of those benefits, together with diversification of the local economy, job creation, infrastructure build, social programmes (such as health) and increases in the country's gross domestic product.

No financial assistance is received from governments in the jurisdiction we operate in.

# Value added statement

	0011		0010		0000	
	2011 Rm	%	2010 Rm	%	2009 Rm	%
Value added						
Net sales revenue	51,117		46,025		36,687	
Less: Purchase of goods and services needed to operate the mines and produce refined metal including market development and promotional expenditure	(24,757)		(22,801)		(17,708)	
Other net (expenditure)/income	(1,223)		4,308		1,859	
Value added by operations	25,137	101	27,532	101	20,838	99
Income from investments and interest received	(263)	(1)	(164)	(1)	139	1
	24,874	100	27,368	100	20,977	100
Value distributed						
Salaries, wages and other benefits net of PAYE and SITE	12,147	49	11,054	40	10,372	49
Salaries, wages and other benefits	10,651		9,650		8,712	
PAYE and SITE	1,496		1,404		1,660	
Tax charges	2,054	8	1,300	5	1,027	5
South African taxation	1,436		442		169	
Foreign and withholding taxation	_		_		1	
Payment to Anglo American Group companies for utilisation of tax losses	127		431		188	
South African indirect taxes	491		427		669	
Providers of capital	3,821	15	966	4	1,998	10
Interest paid	530		966		1,992	
Dividends	3,291		_		6	
Total value distributed	18,022		13,320		13,397	
Reinvested in the Group	6,852	28	14,048	51	7,580	36
Amortisation and depreciation	4,761		4,444		4,214	
Accumulated profits	2,091		9,604		3,366	
		100	27,368	100	20,977	100

# **ECONOMIC CONTRIBUTION**

## Direct value added to South Africa

Total turnover in 2011 was R51,484 million, distributed as follows:

Employees			
Total payroll and benefits paid in South Africa, R millions	2011	2010	2009
Gauteng	1,283	1,039	836
Limpopo	4,463	4,799	4,581
North West	5,968	5,107	4,819
Mpumalanga	190	156	137
Total	11,904	11,101	10,373
Wages <sup>1</sup>	10,241	9,404	8,685
Pension	839	789	767
Other benefits	272	172	151
Share-based payments	498	455	487
Redundancy payments	54	280	282
Total	11,904	11,100	10,372
Public sector	· · · · · · · · · · · · · · · · · · ·		
Taxes paid and other payments to Government in South Africa, R millions			
South African normal taxation	573	751	91
Secondary tax on companies	186	13	16
Royalties	419	131	56
Other	738	427	667
Total	1,916	1,322	830
Apart from reimbursement of its payment to the skills development levy, the Company received no grants, tax relief or other types of benefits that did not represent a transaction of goods and services.			
Donations in South Africa, R millions			
Health	2.5	6.7	6.0
Education and youth projects	37.5	50.4	34.7
Environment	_	1.6	_
General community development (including infrastructural projects)	99.1	11.0	69.4
Arts, culture and heritage	1.0	_	40.7
Housing	_	_	_
Other	22.6	34.0	_
Chairman's Fund contribution	23.8	15.0	25.0
Total	186.5	118.7	175.8
Non-core infrastructure development², R millions			
<sup>1</sup> Anglo American Platinum Limited is an equal-opportunity employer and to this end remunerates its employees com	petitively irrespective of rac	ce and gender.	
$^{2}$ This is infrastructure built outside main business activities, such as schools, hospitals and roads.			
Private sector			
Suppliers	2011	2010	2009
Cost of goods, materials and services purchased, R millions			
Total	28,135	25,788	28,318
Of which sourced from South Africa	26,767	24,716	27,132

Note: 100% of contracts was paid in accordance with agreed terms.

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Anglo American Platinum Limited is primarily a platinum producer operating in South Africa. All other metals produced are by-products of the platinum process. The following analyses of the Company's revenue are based on the end-use of metals sold, rather than on the location of primary customers:

Gross sales revenue analysis, R millions	2011	2010	2009
Platinum	32,171	29,481	25,528
Palladium	7,520	5,063	2,954
Rhodium	4,882	5,715	4,345
Nickel	3,180	2,919	2,269
Other	3,731	3,174	1,851
Total	51,484	46,352	36,947
North America	4,189	3,438	2,692
Asia	18,322	15,068	10,470
Europe	18,884	19,564	18,025
Africa	8,624	7,783	5,645
Other	1,465	499	115
Total	51,484	46,352	36,947

The following data represent the Company's output as a proportion of supply. This is defined as 'sales of new metal':

Market share of global mined production, %	2011	2010	2009
Platinum	40	42	41
Palladium	19	20	19
Rhodium	44	44	45
Providers of capital			
Distributions to providers of capital, R millions			
Interest on short-term debt	530	965	2,065
Dividends	3,291	_	6
Total	3,821	965	2,071
Increase in accumulated profit	2,091	9,604	3,366



Underground workers at Unki Platinum Mine

#### Our economic contribution

### Black economic empowerment (BEE) ownership

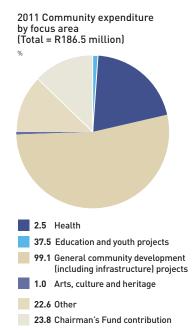
In 2011, South Africa's mining sector was again challenged for not adhering to the Mining Charter's requirement that 26% of ownership be transferred to previously disadvantaged South Africans by 2014. (Although revised, the charter has not changed this target.) However, because Anglo American Platinum Limited (Amplats) had completed a number of BEE transactions over the previous decade, it complied fully with this requirement of the charter.

The Company's empowerment transactions have resulted in the significant and meaningful empowerment of historically disadvantaged South Africans (HDSAs) in various operations and projects. Since 2000, Amplats has completed the following wide range of BEE transactions:

- The August 2000 purchase of 22.4% of Northam Platinum Limited (Northam) by Mvelaphanda Resources (Mvela) for R440 million.
- The formation in August 2001 of the 50:50 unincorporated Modikwa Joint Venture with ARM Mining Consortium Limited.
- The establishment in July 2002 of a 50:50 unincorporated BRPM Joint Venture with the Royal Bafokeng Nation (RBN) over the Bafokeng-Rasimone Platinum Mine (including the Styldrift project area).
- The formation in August 2002, with Lonmin plc, of the Pandora Joint Venture, which includes the participation of the Bapo-Ba-Mogale Mining Company and Mvelaphanda Resources (on behalf of Northam) as empowerment partners, each having a 7.5% interest in the joint venture.
- The disposal in October 2005 of the rights on the property Elandsfontein 440 JQ to Eland Platinum Mines (EPM), with the Ngazana Consortium holding a 26% interest in EPM.
- The development of a chromite recovery plant at the Group's Union Mine in July 2006, with Siyanda Chrome Investments.
- The transaction, in December 2006, with the Bakgatla-Ba-Kgafela (Bakgatla), who are the traditional community at Union Mine, giving the Bakgatla a 15% stake in Union Mine as well as a 26% stake in the Magazynskraal project and a 55% stake in the Rooderand project.
- Amplats' establishment of an employee share-ownership plan (ESOP) that effectively owns 1.5% of the Company, to benefit all permanent employees not benefiting from any other Company share scheme.
- The Group's sale to Anooraq, on 30 June 2009, of an effective 51% of Bokoni Platinum Mine (Bokoni) and an additional 1% of the Ga-Phasha, Boikgantsho and Kwanda joint-venture projects.
- The disposal of the Group's 50% interest in the Booysendal project and of its 22.4% interest in Northam to Mvela, for a total consideration of R3.7 billion.
- In 2008, the swapping of the Group's 37% interest in the Western Bushveld Joint Venture for a 26.6% equity interest in Wesizwe Platinum Limited (Wesizwe), an HDSA company.
- On 23 November 2011, Amplats' announcement of its implementation of a 10% community empowerment transaction at its Unki Platinum Mine (Unki). The transaction was an integral part of Unki's indigenisation plan (which has been conducted in accordance with the country's Indigenisation and Economic Empowerment Act).

Over and above the transactions conducted in South Africa, our Unki mine, which is based in Zimbabwe, will establish a trust - the Shurugwi Development Trust - for the purpose of subscribing for, and holding, 10% of Unki's ordinary shares in issue. In addition, Unki will donate US\$10 million to the trust, intended as seed capital to assist the community in the establishment of identified and approved development projects. The success of this transaction is dependent on further engagement and consultation with affected stakeholders, and consequently forms part of an ongoing engagement programme with the Government of Zimbabwe and the Company's host communities.





It is through the goodwill of the host communities close to our operations that we are able to gain and maintain our social licence to operate. It is therefore essential that in our approach to doing business we take into account their concerns and their needs. Amplats' values and business principles drive our social strategy, and inform the development of our social performance standards, as detailed in the Anglo Social Way. Our social strategy focuses on using Amplats' core business to support long-term community development, and encompasses the use of local procurement opportunities and the development of the local workforce.

Our business-principles policy states the following:

- · We aim to create and maintain strong and respectful relationships with the communities of which we are a part.
- · We will seek regular engagement about issues that may affect them.
- · We aim to contribute to the creation of more prosperous and empowered communities.
- · We will regularly assess our operations' impact upon local social and economic development and report upon it.
- We will provide local mechanisms for the consideration and resolution of complaints and grievances, and do this in a fair, timely and accessible manner.

Most of our operations are located near communities with low levels of socioeconomic development. Our presence there means that we have a special responsibility to uplift and bring prosperity to host communities. We also believe that the most positive way in which Amplats can contribute to the communities is by doing business: it is through our core business activities that we employ people, pay taxes to the governments and make payments to suppliers. The value directly distributed by the Company in 2011 can be broken down as follows:

- R3,821 million to providers of capital.
- R12,147 million to employees for wages and related costs.

- R3,291 million to outside shareholders.
- R2,054 million in taxes and royalties to governments.
- R24,757 million to suppliers. Furthermore, because of the multiplier effect, the economic contributions of our operations extend significantly further than these direct forms of value distribution.

### Ensuring that communities benefit

One of the key objectives of the Mining Charter is to promote the social and economic welfare of communities living close to mines or in labour-sending areas. The latter represent areas within South Africa and neighbouring countries from which migrant labour for the mines was traditionally sourced. Of particular relevance to Amplats' community engagement and development function is the formulation, through cooperation, of integrated development plans for these communities. This includes support in the provision of infrastructure, training and skills development, enterprise development and preferential procurement. Funding for development is committed to in the social and labour plans (SLPs) of the various operations and is augmented through additional funding for projects not specified in the SLPs. In its approach to development, and specifically in what it supports, the



Ladies from the Tsakane Crafts Cooperative showing their glass beads to Joyce Mabe of Amplats

## Income generation at Boitekong

Two youngsters roll up their sleeves, and each takes up a seat next to a fiercely burning flame coming out of a methane gas burner. The process of melting ground glass to create beads for jewellery is about to begin. In half an hour, between 20 and 70 beads of all shapes, colours and textures will have been made. By the end of the day, a variety of products will emerge, including spectacular jewellery and teaspoons with artfully adorned handles.

The Tsakane Crafts Cooperative was founded in October 2010 to generate income for seven orphans from Boitekong, just outside Rustenburg. The start-up capital was provided by community development funds made available by the Rustenburg mines. The project was facilitated by the Lebone Women's Empowerment Group, a non-governmental organisation that offers home-based care to sickly community members and also looks after orphans and vulnerable children.

The team works like a well coordinated orchestra. Members rotate the various duties every week, so that each of them experiences all sections of the production line, from collecting and crushing glass bottles, through drying beads in the kilns, to making the products and showing the finished wares to potential buyers.

Anglo American Platinum Limited (Amplats) funded the cooperative to the amount of R360,000 which paid for the members' initial training course in Pretoria and production tools consisting of a bottle crusher, three methane gas burners and two kilns. It was also from these funds that initial raw materials were purchased, such as mend rods which add colour to the melted glass, and wire strings, bronze and silver chains to finish off the jewellery. The initial start-up capital is also being utilised to replenish the raw material. As part of initial support, Amplats has lent the group a work room and provided free electricity. The Company also arranged to pay members a stipend, until they found their feet.

The members of the Tsakane Craft Cooperative have come a long way since their training. They have grown in confidence and are still delighted at the artistic and other resources they have discovered within themselves. One of the members, Innocentia Zibi, said that unemployed people do not always realise what talents they have. "I did not know that I could recycle a beer bottle and recreate out of it, something this useful," she added. They are also relieved to be making a financial contribution to the households that look after them.

The cooperative started collecting revenue in April 2011, two months after it had started production. It occasionally participates in exhibitions to promote itself and otherwise plies its wares in the members' home village of Boitekong. Staff at the mine also order their products from time to time, while other sales are realised from individuals who drop in at their production house. By the end of 2011, the group was supplying at least two stores in Rustenburg.

As at mid-December 2011, the cooperative had accumulated a bank balance of R22,000 from sales, which is encouraging but not sustainable. Follow-up research by an independent consultant into the project found that the members had tremendous faith in the future of their enterprise and had big ideas for its development. However, two critical issues will have to be addressed by the cooperative and by Amplats if the project is to continue operating successfully. Firstly, the members need to gain clarity on the advantages that make cooperatives a preferred small-business model in South Africa. Secondly, they need to become more proactive in growing the cooperative into a business that can run independently of Amplats. For this they require training in basic business skills and entrepreneurship, and also a business coach and mentor.

With these interventions, the Tsakane Crafts Cooperative should be able to live up to its glowing promise.

Company is guided by the SLPs, but also by complementary stakeholder engagement that helps it to target specific projects for its assistance in the community.

#### **Benefits**

Local communities benefit from the Company's activities in a number of ways, which have been categorised as follows:

- Employment: This generates income for employees and their families, and creates economic multipliers in the local economies where these households spend their money.
- Employment benefits: In poor communities, employment benefits such as healthcare and housing support are often as sought after as the jobs themselves.
- Royalties and rent: Amplats pays royalties and rent to the owners of surface and mineral rights. Where these rights are vested in local communities, the benefits flow is direct.
- Taxes: Amplats and its employees contribute to national and local tax revenue in a variety of ways (company tax, employee income tax, local rates and taxes, and value-added tax). Here the benefit to communities is indirect.
- Black economic empowerment (BEE).
- Asset ownership: Amplats has undertaken a number of empowerment deals based on equity ownership. These equity ownership models involve one or several assets, including mines and processing facilities. Benefits are delivered through share value and dividends.
- Business-process ownership: Here businesses in communities are given the right to own or co-own mine-related business processes, such as transport.
- · Preferential procurement: Amplats practises preferential procurement in local communities, in compliance with broad-based black economic empowerment requirements.

- Local economic development: Local economic development (LED) projects are undertaken under the umbrella of the mines' SLPs, which require LED in host and labour-sending communities. Local infrastructural development is a strong focus of these programmes, and its impacts are often direct.
- Community social investment (CSI): Amplats has CSI programmes at all its sites focusing on community upliftment.

Amplats is currently working towards an integrated-benefits model which entails a single planning process that would manage all social initiatives in a manner designed to maximise their benefits. This model enables:

- the early identification of bottlenecks;
- · the effective allocation of both monetary and human resources; and
- an effective feedback mechanism allowing performance to be tracked.

Amplats currently follows an inclusive zone (radius) approach of 50 km from its operations for the identification of beneficiaries of community development. The implementation of the approach varies from operation to operation, for the following reasons: to aid in the practical implementation of projects and benefits; because of differing socio-economic community environments; or simply because of varying interpretations between operations. The approach is an aggregation of other methods and aims to cover, within a single measure, the following:

- The majority of communities who supply inputs to the mine.
- · Communities in possession of legal rights.
- · Communities suffering negative impacts from a mine

However, the approach may not always be the correct one and its rigid application may limit the value gained from the Company's developmental programmes. Amplats will

be re-examining the benefits derived from this definition in terms of its host communities and its associated developmental interventions.

## Community share ownership scheme - Project Alchemy

An innovative multibillion rand economic empowerment transaction has been designed to promote long-term sustainable development in host communities and key labour-sending areas that are not currently benefiting from the Company's extensive BEE programmes. This groundbreaking initiative heralds a new approach that emphasises broad-based black economic empowerment and engagement with communities. Since the Company has been exploring innovative ways of enhancing and optimising the benefits that accrue to host communities, this transaction is an important element of this work and a catalyst to its full realisation.

Alchemy is a R3.5 billion transaction aimed at ensuring the long-term sustainable development of four of our host communities and major labour-sending areas. The transaction is notionally vendor-funded over 10 years at a fixed 9.5% notional interest rate and includes an upfront discount of 5%. Amplats has issued a total of 6,290,365 ordinary shares of 10 cents each to the Lefa La Rona (Our Inheritance) trust. The market value of such shares (inclusive of the 5% discount) was R528.59 per share, determined with reference to the share price immediately prior to the announcement date for the transaction. The Alchemy shares issued represent 2.33% of Amplats ordinary shares in issue prior to the issue of the former.

The Lefa La Rona Trust has been established to act as a conduit between the Company and four development trusts (Development Trusts), to be set up for the benefit of host

communities within an approximate radius of 15 km from the Amandelbult, Rustenburg, Twickenham and Mogalakwena mines (collectively "the Mines") and a non-profit company (Non-profit Company) incorporated for the benefit of the laboursending areas. The Development Trusts and the Non-profit Company will benefit from the following cash flows, which will be used by the entities for public-benefit activities within the benefit areas:

- Annual dividend receipts.
- · A guaranteed minimum dividend flow of R20 million per annum to provide an annual cash amount to the Development Trusts and the Non-profit Company, after taking into consideration the annual dividends received.
- Rechannelled CSI spend of R30 million to the extent that the Development Trusts secure approval for development projects within the host communities.
- · Health and safety cash-flow benefits for the Development Trusts if key performance indicators relating to on-and-off-mine health and safety targets are achieved.
- Proceeds from the potential increase in the Amplats share price after settling of the notional vendor funded loan, to the extent that the shares are disposed of by the Development Trusts and the Non-profit Company at the expiry of the term of the transaction.

The Company's ultimate ambition in this transaction is to make a meaningful and sustainable contribution to the ability of those communities to thrive well beyond the life of our mining operations. Additional details about Project Alchemy are included in a case study on page 124.

# Unki Platinum Mine - the Shurugwi Development Trust

Amplats announced the implementation of a 10% community empowerment transaction (Community Transaction) at its Unki Platinum Mine (Unki) in Zimbabwe. The Community Transaction is an integral part of Unki's indigenisation plan in accordance with the Indigenisation and Economic Empowerment Act. Unki will establish a trust called the Shurugwi Development Trust for the purpose of subscribing for, and holding, 10% of Unki's ordinary shares in issue. In addition, Unki will donate US\$10 million to the Shurugwi Development Trust, which donation is intended as seed capital to assist the Shurugwi community in the establishment of identified and approved social and economic development projects.

### Social investment

Our support for local communities through direct social investment continued to grow in 2011. Total social investment spend reached R187 million, up from R118 million in 2010. A breakdown of this spend on community development projects is shown in a table on page 123. The following noteworthy projects were in operation in 2011:

- Thlabani West Primary School, which was constructed by Amplats at a cost of R15 million, was officially opened and handed over to the Department of Education.
- The Paardekraal community hall was handed over to the Rustenburg Local Municipality. It was constructed by the Company using local contractors at a cost of R14 million.
- The Jalamba Clinic in the Eastern Cape was completed in partnership with the Anglo American Chairman's Fund.
- The Abalimi Phambili food security and micro-enterprise development project was conducted with Teba in the Eastern Cape.







Children learning at Tlhabane West Primary School

# New school brings quality education and peace of mind to Tlhabane West and **Geelhout Park**

Some years ago it became clear that a primary school was sorely needed close to Tlhabane West and Geelhout Park, two adjacent communities whose younger children had to take a dangerous route to schools in Tlhabane or else travel a long way to schools on the outskirts of Rustenburg. Anglo American Platinum Limited (Amplats) came to the party after being asked to build the school by the provincial department of education.

Tlhabane West Primary opened its doors in January 2011, to an intake of 460 children enrolled in Grades R to 5. The event was accompanied by enormous relief and jubilation, as previously many children had to walk across Swartruggens Road to attend schools in Tlhabane, often with tragic consequences. According to members of the new school's governing body, no less than 20 pupils had been knocked down by cars on the road during the five years leading up to 2011. Moreover, many of the families living close to the school are now being spared the cost of transport to school.

Transforming what was a dumping site, the school, which cost R16 million to build, boasts 25 classrooms, an administration block, a library that also serves as a media centre, a computer lab and a multipurpose room since converted into a science laboratory. As it is a Government institution, the children now have access to quality education at affordable rates.

The principal, David Ditshego Tlhowe, explained that the school would take another 370 pupils in 2012, while also introducing Grade 6 and hiring additional educators. The school's first Grade 7 intake would be realised in 2013.

Because Tlhabane West Primary is an English-medium school, it accommodates the cosmopolitan community of Geelhout Park, whose residents include migrant mine workers from other southern African countries and the Eastern Cape. Many parents who had enrolled their children in English-medium schools in town have since brought them closer to home.

Tlhabane West Primary remains a work in progress. On the first school day of January 2011, furniture had yet to be delivered. However, the most critical fittings were delivered within days of the school starting. As at December 2011, Amplats had obtained quotations towards fully equipping the computer and science laboratories, and also the library. It plans to have these facilities fully resourced by March 2012.

Follow-up research by an independent consultant with teaching staff and learners showed that the school has made a substantial difference to the people in it. Petroba Mmatsie, newly promoted Head of Department (HoD) for the Foundation Phase, who had previously taught at a school built in 1986, said: "For me, this facility is like a university." She cherished the bigger classrooms and air conditioning in the staff room. Her peer, Amelia Memela, who is the HoD for the Intermediate Phase, appreciates the storerooms provided at both ends of each classroom block and is delighted at having her own office, especially since she no longer has to go through the awkward business of conducting teacher assessments in classrooms. Ratile Rammala, a Grade 4 learner, says he has enjoyed learning about mixed and common fractions and that he likes Tlhabane West better than his old school because "the facilities here are newer, and the toilets flush very well."

Lauding the security features of the school's architecture, Principal Tlhowe singled out the higher-than-average balconies and strong security doors. Members of the school-governing body also praised the school's security performance. They said school gates were locked throughout the day, keeping children safe and inaccessible to drug dealers. According to the body's deputy chair, "Anglo American Platinum has given the community a sanctuary for our learners."

Meanwhile, Principal Tlhowe is amassing more staff to bring out the best in the children. In order to build formidable mathematics and science capability, he has appointed mathematics specialists for both the intermediate and the higher primary phases.

There are three drawbacks at the school: the lack of sporting facilities, the absence of a school hall, and the fact that the Grade R facilities were not designed separately from the rest of the building. It is in these areas that future interventions will have to be made. Nevertheless, this is not deterring new applicants; parents coming to enrol their children at the school often have to place them on the

Tlhabane West Primary is one of six schools either built or renovated by Amplats within the municipality of Rustenburg during the 2010/2011 financial year. School infrastructural development signifies that Amplats is intent on contributing to meaningful educational support among the communities close to its mines. In addition to such development, the Company actively supports quality learning, especially in mathematics and science, in the schools neighbouring its operations in North West and Limpopo.

- · Road improvements and a major trafficintersection upgrade was completed in Northam town extension 6.
- A R40 million bursary fund was launched for individuals from the communities close to Twickenham Platinum Mine.
- Upgrades were made to Riuchanyo Secondary School, Lundi Primary and Damvudzo Secondary School, which are adjacent to Unki in Zimbabwe.
- Training in home maintenance and portable skills was provided for over 1,000 Twickenham and Mogalakwena community members at a cost of R5 million.
- There was ongoing development of the glass bead and craft project in Rustenburg.
- Second-chance programmes were run through Edumap to help matriculants from communities near our operations to improve their matriculation results in order to gain entrance to university.
- Extra maths and science lessons were organised during the winter and spring school holidays in both the North West and Limpopo provinces. Altogether 2,034 learners attended these classes.

The beneficiaries of many of the projects and programmes listed above were interviewed by an external service provider in order to ascertain the ways in which their lives had been affected by the projects. A selection of these stories are captured in case studies in this report and a full set of stories is available on the internet at www.angloplatinum.com.

Several noteworthy projects began in 2011, including:

- the construction of Ethridge Combined School in Bizana in the Eastern Cape, which is a labour-sending area;
- · viability assessments for, and piloting of, an organic-farming project across four of our operations;
- planning for Manthe School in Taung in the province of North West, which is also a labour-sending area; and
- the construction of, and upgrades to, parts of the waste-water treatment works at Northam.



## Corporate social investment, R million

	CED programmes				Percentage	
	2011	2010	2009	2011	2010	2009
Health	2.5	6.7	6.0	1.3	5.6	3.4
Education and youth projects	37.5	50.4	34.7	20.1	42.5	19.7
Environment	_	1.6	_	_	1.3	_
General community development (including infrastructural projects)	99.1	11.0	69.4	53.1	9.3	39.5
Arts, culture and heritage	1.0	_	40.7	0.5	_	23.2
Housing	_	_	_	_	_	_
Other	22.6	34.0	_	12.1	28.6	_
Chairman's Fund contribution	23.8	15.0	25.0	12.8	12.6	14.2
Total	186.5	118.7	175.8	100	100	100



The principal of Phaladingo Technical High School, HP Chauke, talks to Nkhensani Baloyi, the CED Co-ordinator at Mogalakwena Mine

# **Project Alchemy**

#### **Overview**

Anglo American Platinum Limited (Amplats) has made significant progress with Project Alchemy, its community-empowerment transaction.

The project is designed to promote sustainable development within those host communities and key labour-sending areas that are not benefiting from the Company's existing black economic empowerment (BEE) programmes. More specifically, Project Alchemy is aimed at improving the wellbeing and ensuring the long-term development of communities situated close to the Mogalakwena, Rustenburg, Twickenham and Amandelbult mines, and will also channel resources towards key labour-sending areas.

Amplats initiated this project in order to strengthen its relationship with local stakeholders and to ensure that its host communities benefit from the mines' presence.

### **Guiding principles**

Project Alchemy is guided by the following principles:

- Designing a sustainable transaction structure that will result in real benefits for the target communities from the outset of the transaction.
- Providing funding for the transaction through a "cashless" funding structure for 10 years.
- Ensuring transparency through the meaningful engagement and education of
- Ensuring that the communities benefit from the structure, through both dividends and capital appreciation, for a period of at least 30 years.
- Promoting the viability of communities beyond the life of the mines.

#### Ownership via the Umbrella Trust

An umbrella trust will be created to hold the Amplats shares for the benefit of the beneficiaries. Independent development trusts will be formed for the benefit of each of the communities, and a non-profit company for the benefit of the labour-sending areas. Each development trust (including the non-profit company) will be entitled to appoint a trustee to and receive a pro-rata participation interest in the Umbrella Trust.

### **Funding**

No equity contribution will be required from the beneficiaries. A notional loan will be used by the Umbrella Trust to purchase shares in Amplats. Notional

interest will be fixed at a rate of 9.5% for a period of 10 years. The funding structure provides communities with exposure to capital appreciation, a portion of dividends in cash and voting rights. Amplats will repurchase a portion of the shares held by the Umbrella Trust to settle the outstanding notional loan at the end of 10 years.

#### Restrictions

The shares allocated to the Umbrella Trust may not be sold or encumbered for the 10 years. Thereafter, 40% of the beneficiaries' entitlement at the end of the term may be sold or encumbered, with the remaining 60% saleable only after 20 years. This equates to the current 30-year life-of-mine period.

#### **Benefits**

The primary benefits of the structure are as follows:

- · Local communities receive cash benefits from the start of the transaction.
- They are able to influence the amount of cash they receive each year.
- The minimum guaranteed dividend means that the local communities involved will always receive a minimum guaranteed dividend even if Amplats does not make a profit or declare a dividend to other shareholders.
- The early settlement of the notional loan as the result of the outperformance of the Amplats share price will ensure significant equity-value transfers to the community, thereby reducing the risk of the structure. (However, like all other shareholders in Amplats, local communities will be exposed to equity risk, which might mean that the share price underperforms even though the Company is making profits.)

## Governance

During the first two years of the project (the mobilisation phase), and in order to ensure that benefits begin to flow immediately, Amplats will establish the development trusts and appoint five initial trustees per development trust, three of whom will be independent. The democratic process of electing trustees nominated by local people will be implemented during this period. A needsassessment will be conducted with the participation of the residents, and the results will inform the project-development framework.

Project Alchemy is intended to progress through a consolidation and then an operational phase, reaching full autonomy when elected trustees are in the majority. At that stage Amplats will no longer be entitled to appoint trustees, and the development trusts will be able to sell and/or encumber up to 100% of the remaining Amplats equity holdings.

## **KEY COMMUNITY ISSUES**

In 2011, we recorded 30 community incidents across our operations through our complaints and grievance mechanisms, three of which were formal grievances. These are in the process of being resolved through our mechanisms designed to track and monitor progress. Complaints about our activities or impacts, community protests and memorandums of demand handed to us by the community. Issues raised as part of these incidents typically included access to employment and business opportunities; concerns about noise, water and air quality; lack of community development by operations in the communities; and access to land. Details of the main incidents and issues are provided below.

# Twickenham Platinum Mine - Magobading relocated community

The residents of Magobading have raised the following concerns:

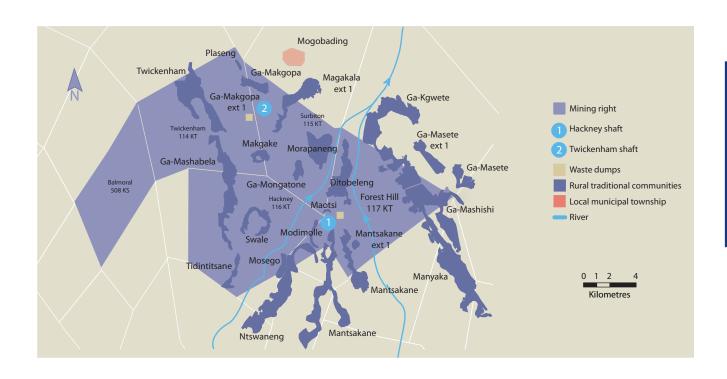
- · House-roof structures affected by termites.
- · Lack of business and employment opportunities.

· Enviro loo toilets that are full and now pose a health risk.

These issues are on the radar of the international media through the pressure of NGOs such as the Benchmarks Foundation. Mine management maintains that the houses are privately owned, with full title deeds in the possession of the occupants, and that the correct process was adhered to before, during and after relocation. Basic homemaintenance training was conducted in the community in 2011. In addition, a service provider has been appointed to assist the communities in cleaning ablution facilities.

## Twickenham Platinum Mine the Maropaneng community

There were several protests relating to Twickenham Platinum Mine (Twickenham) in 2011. On 25 May, a community group from Maropaneng village, downstream of the mine, protested against the Company and attempted to stone a police vehicle. The police opened fire on the protesters and 33 community members were arrested and released a couple of days later.

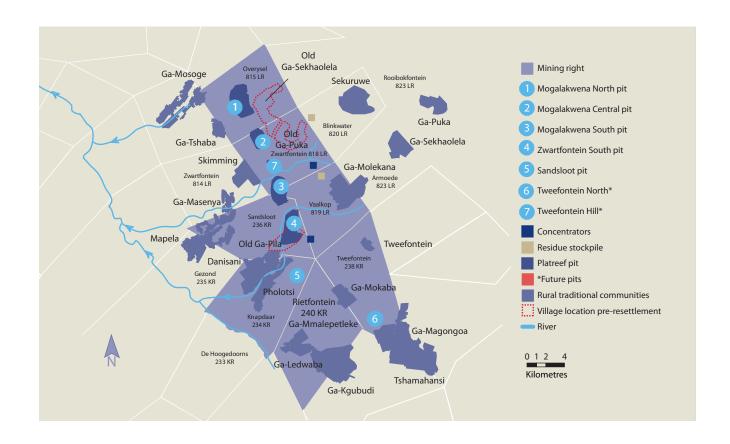


The protest hinged on allegations regarding loss of water and access to land. The mine is working with the community and the local authorities to ensure that the communities around Twickenham Platinum Mine have access to water. Twickenham's facilities at Mopetsi Camp are being used to accommodate approximately 50 additional police officers deployed to the area by the South Africa Police Service.

# Mogalakwena Mine -Sekuruwe grave relocation

The Sekuruwe grave relocation has been an issue in Mogalakwena since 2009. It was alleged that the funeral services company subcontracted to relocate the graves had dug up remains that were more than 600 years old. Amplats commissioned an extensive review of the process and remedial work on all the graves has been completed. The Company would like to close out the process with a cleansing ceremony and reburial, but

members of the Sekuruwe Committee are preventing this on the basis that not all bones were recovered. The bigger issue appears to be their problem with the surface lease over the farm Blinkwater, which is being used for the disposal of tailings. At a meeting with the Minister of Mineral Resources on 7 April 2011, Amplats was asked to place on hold all depositing on the Blinkwater tailings dam until such time as the grave issue had been resolved. Tailings deposition was stopped for a period of two months and recommenced on 15 June following community consultation. A proposal was tabled by Amplats via the community's lawyer, Richard Spoor, in the same month and was accepted following a community meeting on 19 September. A community pre-resolution meeting, which took place on 26 November, was witnessed by the Department of Rural Development and Land Reform. The final resolution meeting will be held in the first guarter of 2012.





Community members who remain to be resettled at Mogalakwena Platinum Mine

## Mothoto relocation process

The long-standing process of seeking finality to the resettlement of the Ga-Puka and Ga-Sekhoalelo communities adjacent to the Mogalakwena Mine has been advanced through a process of detailed negotiation initiated in 2010. The process, involving the community and Anglo American Platinum (Amplats), has provided a basis to finalise the resettlement of the community, which has remained incomplete after a small portion of the community refused to move following the agreement by the broader community to move following a resettlement agreement.

#### Initial resettlement agreement

In the mid-1990s, Amplats identified the need to resettle the two villages, jointly known as Motlhotlo, comprising 957 households. The area was identified as the only viable location for the dumping of waste rock by the mine. Parts of it also fell within the 500 m safety zone around the open-pit mine.

In 2005, following study and negotiation, the community and all household heads signed off on the resettlement agreement, which provided detail on the villages to which the community would move, the nature of compensation for houses. improvements and inconvenience experienced. In addition, two additional farms were donated to the community, compensation provided for grave relocations, two trust funds of R25 million each established, and provision made for secondary and vocational education and training as well as the creation of preferential employment opportunities.

Implementation of the resettlement got under way in 2007. By 2008, the village construction was completed and 897 houses were relocated.

### Resistance

There were, however, a small proportion of households who resisted relocation. Initially numbering about 60, the households in this category have subsequently grown to about 160 with the growth in numbers attributed both to the coming of age of young people in the existing families, as well as a number of new arrivals.

In 2006, a committee representing a group of discontented stakeholders was formed, namely the Motlhotlo Development Committee (MDC). This group formed because of a perceived failing of the existing community committees to be sufficiently accountable and representative. Furthermore, there was unhappiness among the youth about how their interests and concerns were catered for through the resettlement process and in the new village. This resulted in several violent protests at the time of resettlement. Police arrests were made and there were claims of police brutality during these marches.

In response to these incidents, the Office of the Premier intervened and formed a task team to navigate a way forward. The resettlement process continued after the task team showed some early progress. However, there remained a group of MDC members who were discontented and who broke away to form the Motlhotlo Relocation Resistance Committee (MRRC).

Those who did not move were aggrieved with the way in which the resettlement process was managed and with the support provided in the new villages.

#### Negotiation

Amplats had limited engagement with the resistant community, their leadership and their elected legal council until 2010 following the completion of a post-resettlement review by ERM.

The Company experienced increasing pressure to gain access to the land on which the resistant households live. In turn, there was a realisation among the remaining community that they needed to relocate due to the difficult conditions of life they experienced at Motlhotlo.

In mid-2010, Amplats together with the community's legal adviser, appointed ERM to facilitate a process of dialogue to define a set of mutually acceptable terms for the resettlement of the resistant households.

Both the Company and community representatives received mandates to engage in these discussions, on the understanding that they were undertaken without prejudice.

The facilitated dialogue has been undertaken since July 2010 and is approaching conclusion with several iterations of discussion being undertaken with a view to agreeing on a framework for an agreement. Issues were identified and options were generated and assessed through discussion. The community was kept apprised of the progress of the discussion.

In August 2011, a framework agreement was agreed and presented to the community for its consideration. The framework agreement provided options for community members to move to the existing resettlement villages of Rooibokfontein and Armoede. Alternatively, an option was presented that, should sufficient numbers choose to do so, a new farm could be identified and appropriately developed for community members to move to. A further option gave households the option to move elsewhere. In addition, the draft agreement identifies the basis of compensation for houses and improvements, as well as compensation for inconvenience experienced. Furthermore, provisions are made to support the move and transition to new homes, as well as livelihood support after resettlement.

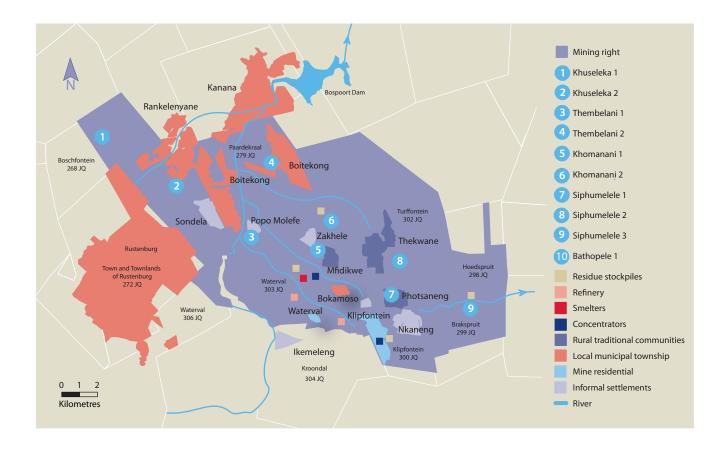
Subsequently, there have been several rounds of engagement with the community directly to discuss and refine the details of a mutually acceptable agreement.

At the time of writing the community was examining the detail of the agreement, as well as the possible farms to which a move could be made. It is anticipated that in 2012 an agreement will be reached between Amplats and the community, which will be formalised through a community resolution as well as through a legally binding agreement to be signed with the households indicating exactly what each qualifies

## Rustenburg mines - key community incidents

Two community marches took place in 2011 by local community youth members to Khuseleka and Khomanani mines. Memorandums of demand were handed over to Company officials detailing the communities' expectations in terms of skills development, employment and local procurement opportunities. The Company continues to engage with these communities' and through its CED initiatives will ensure community upliftment.

On 27 September 2011, a service delivery protest at Nkoreng informal settlement took place as the community was dissatisfied with basic service delivery from the municipality. Access roads to the mine were blocked for a few hours and the Company was asked to intervene at the municipality. The executive mayor addressed the situation.

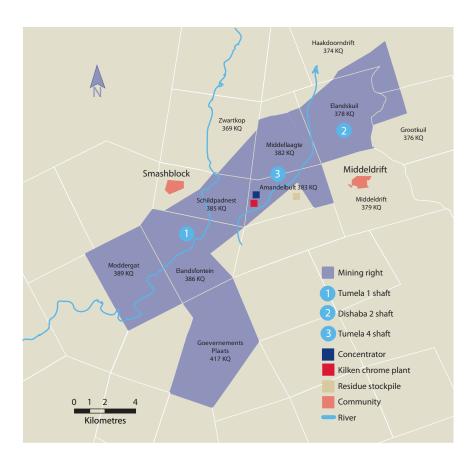


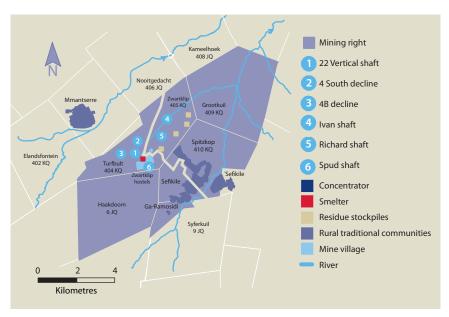
# Amandelbult mining right area - Baphalane-Ba-Mantserre

There is currently a dispute between the Baphalane-Ba-Mantserre and Ramokokastad community as to which community group has traditional authority rights to the chieftainship. The Baphalane-Ba-Mantserre have title to the farm, Schilpadsnest, after a successful land claim and the mine is leasing this property from the community. The Director of Traditional Affairs in the office of the Premier of the North West province confirmed that Chief Joy Ramokoka is indeed a legitimate chief of the Ramokokastad community and the rightful heir of the chieftaincy under question. Amplats continues to engage with both community groups on issues pertaining to mining issues in the area.

# Union Mine - Sefikile Village

In 2011, Amplats conducted a seismic survey in and around Sefikile Village. Community engagement took place prior to the survey being conducted and permission was granted by community leadership to proceed. During the initial stages of the survey a faction within the community vandalised equipment and threatened the safety of the crew conducting the seismic survey. The survey was delayed for a period to allow further engagement with the faction. On 21 May 2011, a public meeting was held and the faction threatened both community leadership and mine personnel. The meeting was subsequently abandoned and the police had to get involved. Further engagement followed and the seismic survey was finally completed in June 2011.







The new Sefikile road

# A three-way joint venture brings relief to mining communities in North West

During the decade leading up to 2009, every time it rained some 3,000 late workers reduced the workforce by close to a third at Union Platinum Mine in Swartklip in the province of North West. This was caused by two stretches of unmaintained dirt roads between the mine and various villages where miners lived. Carved on loamy gravel soil, the roads became skid pads for vehicles in rainy weather, with detrimental consequences for the mine, its staff and other members of nearby communities.

Isaac Serole, a member of the Sefikile Headman's Committee, remembers a day in early 2010 when three busloads of employees were stuck in mud on the road past Sefikile village. He says the workers - who had to clock in from 05:00, had to walk the rest of the way and arrived some two hours late. Sarel Gaonathebe, a Bojanala Bus Service driver for the past several years, recalls a time when up to eight buses became grounded after the one travelling in front sank its wheels in mud. Another Bojanala veteran driver (with 15 years' experience on the Kraalhoek-Swartklip stretch), relives an incident in October 2002 when the steering rod of his bus snapped. Many of his passengers sustained significant injuries when his vehicle veered off the road and overturned.

Owing to the bumpy road, buses broke their wheel springs on a regular basis, resulting in high maintenance costs. Punctured wheels, loose engines and collapsed exhausts were the order of the day. "At one time, there were more buses in the repair plant of the Bojanala Bus Service in Rustenburg than there were on the road," says Union Mine's community engagement and development manager, Benjamin Mokoka, who was assigned to investigate the impacts of the road's situation on mine employees and production. Moreover, trips to the affected villages became less than popular among taxi drivers whose vehicles were hardly ever fully roadworthy and incurred the wrath of the traffic authorities. They either dropped out of the routes or dedicated their older vehicles to them. Inevitably, the communities of Kraalhoek, Mantserre, Mopyane and Sefikile were condemned to decrepit vehicles for transport out to Swartklip and beyond.

There were other problems too. According to community leaders from both Sefikile and Kraalhoek, communities suffered from inhaling dust when the buses transported workers to and from their shifts. Some pregnant women got shaken so hard on the rough roads that they delivered in the vehicles en route to Moruleng Clinic or Saulspoort Hospital.

In 2007, Anglo American Platinum Limited (Amplats), through its leadership at Union Mine, initiated the process of negotiating for a joint venture with the Bakgatla-Ba-Kgafela Tribal Authority, the Moses Kotane Local Municipality and the provincial department responsible for roads. The venture involved tarring 35,3 km

of road, to be carried out in three phases. The responsibility for Phase One, which covered 12,5 km, and Phase Two, which entailed 16, 8 km, were allocated to the provincial department and Amplats respectively. In building the new road, Amplats bypassed several portions of the old route. Phases One and Two were completed in March and June 2011 respectively, at a cumulative cost of R112 million.

The final phase is due to be realised through a partnership between the Moses Kotane Local Municipality and the Bakgatla-Ba-Kgafela.

An independent consultant assessing the impact of the project found that by and large the communities have responded very positively to the new road, with community leaders citing the following:

- Villages are now linked to major provincial road networks, and the city of Rustenburg is easier to access.
- Since transport owners no longer feel that they will be sacrificing their buses and taxis on the road, they are using newer vehicles and providing betterquality transport.
- Residents have been spared the discomfort of severe dust inhalation.
- Communication between Sefikile and Kraalhoek has improved, as private motorists need not go via Swartklip to reach either destination.
- In the community of Sefikile, the tarred road that now bypasses the village has reduced the traffic hazards to which members – including primary pupils on their way to and from school - were previously exposed.
- For the communities around Kraalhoek, the project benefits were multiplied when some of the inhabitants got signed up for the various jobs that accompany road construction (eg sweeping, vehicle refuelling).

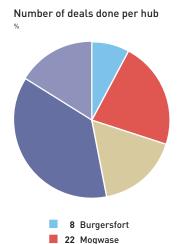
Incomplete as the project may be, "it has had a very positive spin-off for social development," commented Lebogang Mataboge from the Bakgatla-Ba-Kgafela Tribal Authority. He said the new road had opened up possibilities for agents of development such as non-governmental organisations to take up interests in the Kraalhoek-Sefikile portions of Bakgatla land. He added: "Now that those people can be reached, and can also reach the world outside, we can only say the sky is

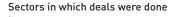
The only negative sentiments expressed related to the closure of the two previous access points at the north and south ends of Union Mine. Some people who could walk to work before now have to pay for transport, while for others the trip by road takes longer than it used to. Community members felt that Union Mine had not informed them of its plan to close the two entrances, thereby depriving them of the opportunity to at least prepare for these changes.

Amplats has taken these findings on board, as part of its campaign, which received special emphasis in 2011, to improve its relationships with the communities near its mines by making sure they are given all the information they need regarding issues that affect them directly.



## **SUPPLY CHAIN AND PROCUREMENT**

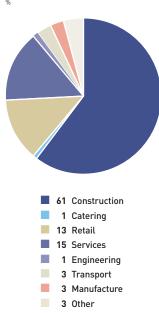




17 Mokopane

37 Rustenburg

16 Thahazimhi



### SUSTAINABLE DEVELOPMENT IN SUPPLY CHAIN

The Supply Chain Department which procures all of Amplats' goods, services and utilities, has been working on various safety initiatives in order to play its part in the Group's drive to zero harm. The aim of these endeavours is to ensure that suppliers and contractors adhere to the Company's safety principles and standards at all times.

# Sustainable development supplier audits

In previous years the department has concentrated on auditing high-risk suppliers operating off-site. In 2011, it began to roll out its safety strategy for on-site suppliers, and to conduct SD audits of such suppliers. The chief purpose of these efforts has been to check the compliance of on-site suppliers against the relevant Amplats standards; and to uncover and resolve any issues that might threaten safety performance at Company mines.

The on-site supplier audit process was first tested at Mogalakwena Mine on Dust-a-Side. This supplier has now adopted the audit protocol for the internal auditing at all its operations within the Group. Following on from the pilot and in light of the wider context of the Company's SD vision, the audit protocol has now been updated to include questions that relate to health and the environment. The department will continue to roll out and refine its on-site supplier audits during 2012 and beyond.

Based on the findings of the audits conducted to date, the following three risk areas were identified: misalignment between Group safety requirements and suppliers' policies and procedures; limited understanding of the objectives of Group safety initiatives such as the visible felt leadership programme; and the failure of suppliers' head-office personnel, on-site staff and subcontractors to communicate consistently and effectively

among themselves on the subject of the Group's safety requirements.

Altogether 20 audits were conducted in 2011. The evaluation criteria used for these audits covered safety and occupational health; HIV/AIDS; business integrity ethics (including human rights); corporate citizenship; environmental management; and staffing. Areas of concern discerned in the audits already conducted are safety risks (especially the danger of fire), environmental degradation and labour issues. Any problems identified were raised as findings at the end of each audit process. Suppliers who displayed major or serious failings were requested to provide improvement plans detailing how they would address the findings raised.

### Transport safety session

On 28 November 2011, Amplats supply chain managers took part in a safety workshop together with transport suppliers. This was to address concerns affecting the movement of Company products and transport employees. In total, 21 companies were invited. The aim of the workshop was to identify and establish ways of improving road-transport safety within the framework of the Group's zero harm policy.

# Procuring goods and services from historically disadvantaged South Africans

By supporting HDSA vendors and with increasing focus on vendors situated close to its operations, Amplats has continually

met its commitment to procuring goods and services from HDSAs. (See the table below.) This approach is sometimes referred to as "HDSA procurement in the shadow of the headgear". While local communities are often able to provide services similar to those purchased elsewhere, the tenders they submit are in many instances not competitive as they are up against much larger companies capable of benefiting from economies of scale. To counteract this disadvantage, Amplats has included an HDSA component in its tender process, including a weighting system favouring local HDSA companies.

As part of its commitment to local procurement, the Company places strong emphasis on the sustainability of enterprise development. Although its overall HDSA targets are at the desired level, much greater effort needs to be expended on local

economic development and community empowerment, which are of particular concern to host communities. To this end, Amplats has created a methodology that will help it to identify and prioritise ring-fencing opportunities for SME suppliers situated within communities.

The HDSA procurement numbers are subject to regular audits. In 2011, the DMR also audited systems and processes. A report from the DMR has not been issued to date.

### Anglo Zimele

Anglo Zimele began BEE transactions from as early as 1989. To start with, it operated a single fund, the Supply Chain Fund. Over the years its involvement has grown to five funds, the latest addition being the Green Fund. The characteristics of the different funds are described in the table on page 135.

# HDSA spend (ZAR million)

Summary	2011	%	2010	%	2009	%
Consumables	3,789	50.0	2,440	34.3	2,132	40.0
Services	4,029	51.0	3,181	44.0	3,187	33.2
Capital	2,467	46.2	2,559	47.7	3,243	38.6
HE	7,789	35.6	6,407	31.3	6,424	26.6
НО	2,598	11.9	1,838	9.0	2,165	9.0
HDSA regional	3,340	15.3	2,714	13.3	2,755	11.4
HDSA local	2,499	11.4	1,874	9.2	1,867	7.7
HDSA total	10,387		8,246		8,589	
Total discretionary						
procurement	21,854		20,451		24,176	
Total HDSA %	47.5	47.5			35.5	
Internal target %	43.0		37.0		35.0	

Hub performance	2011	2010	2009
Number of transactions	168	199	162
Jobs created	1,292	1,316	1,120
Loans advanced	R38,4m	R40m	R33,2m
Turnover created (estimate)	R105m	R164m	R166m



Left to right: Madimetja Samuel Modiba (LA Fancy Kay), Kholofelo Florence Mabilo (La Fancy Kay) and Gary Ditchfield (Supply Chain)

### Local procurement case study

Amplats continues to support historically disadvantaged South African (HDSA) suppliers situated close to its operations. The Company is committed to the sustainability of these enterprises and accordingly pursues an aggressive HDSA-supplier recruitment and development programme.

Our current tender adjudication process focuses largely on competitive pricing, but also makes use of a weighting process designed to enhance opportunities for locally based HDSA companies. This weighting model assists with the identification and prioritisation of opportunities that can be ring-fenced for local suppliers located within host communities

The weighting is essentially a scoring system that uses stage gates during the tender process. The stage gates consider safety compliance, technical compliance and proximity to the relevant operation, pricing, HDSA status and women representation in the Company.

An example of such a supplier is La Fancy Kay, a local company that supplies hygiene and sanitation services to Amplats and is funded by Anglo Zimele, Anglo American's enterprise development arm. La Fancy Kay, which offers experience, expertise and dependability in manufacturing portable chemical toilets and hygiene consumables for underground mining, started providing services at Twickenham Platinum Mine after it became clear that there was a dire need to upgrade the underground sanitation units utilised there. The portable flushing toilet designed and supplied by the company is a state-of-the-art, purpose-designed unit that is well suited to mining both above and below ground. Its use underground is made possible by its unique flushing and hand-washing systems, which do not require an external water supply.

La Fancy Kay's support-services personnel is recruited locally and given comprehensive training, resulting in a more cost-effective solution for both company and client. At the same time, this arrangement helps to address the issue of skills development and job creation in the local community.

Another example in 2011 of skills development at a local services provider was the two-day course held as a joint effort between Amplats and concrete supplier 3Q Concrete. The course covered the basic principles of concrete use and included a practical session held at the premises of 3Q Concrete.

Concrete was again the topic at a recent workshop held for a group of 14 individuals from eight Rustenburgbased SMME (small, medium and micro enterprise) Amplats vendors. Most of the companies attending had previously completed concrete-related work on the mines.

Supply Chain Fund (1989)	Anglo American Khula Mining Fund (2003)	Community Fund (2007)	Olwazini Fund (2010)	Green Fund (2011)
Minority equity position R5 million equity limit per transaction, leveraged with debt  The loan interest rate is set at prime + 1% per annum  Fund leverages off the Anglo American name  Business development managers, also directors of investee companies  Zimele supply shareholder and loan agreements  Continually reviews exit strategies	Has R200 million in assets  Consists of a joint venture with Khula Enterprise Finance  Its financing model is similar to that of the Supply Chain Fund  Backs viable black-owned SMEs involved in 'high-risk' prospecting (exploration and drilling), to completion of bankable feasibility study  Complies with acceptable corporate governance and SHE requirements  Funds up to R40 million per project. The loan interest rate is set at prime	Applies to mining industry and beyond  Supports entrepreneurs who are local residents  Loans carry an interest rate of 6% per annum  Fund's working capital and asset purchases  Provides business-skills transfer as well as loan funding  Runs business hubs that offer help with business plans and tender processes. The hubs also provide access to much-needed infrastructure and services (eg printing and photocopying facilities, meeting areas and the use of the internet)  Introduces enterprises to local mining operations  Offers mentoring and support  Helps with security issues such as personal surety and asset cession	Olwazini means "Be independent through knowledge." The fund's main target groups are disadvantaged people in mining and poor communities, including unemployed youth, women and physically disabled individuals  Specialises in new venture creation  Has partnerships with: - NGOs - Government - training providers - other service providers  The main aims are job creation and poverty alleviation  The approach to social and economic upliftment is through skills training and development at the grass roots  Promotes entrepreneurship by funding the businesses of individuals who qualify  Its training programme leads to a qualification accredited at Level 2 of the national qualifications framework  Its financing model is similar to that of the Community Fund  It funds working capital and asset purchases  Loans carry an interest rate of 6% per annum	Anglo American has committed R100 million to the Green Fund  The fund targets investment opportunities that mitigate carbon use, reduce energy and water consumption, and improve waste and emissions management  Empowers entrepreneurs and SMEs to operate inside the green economy  Invests in viable SMEs that satisfy the Green Fund's criteria  Energy, carbon and water savings must be monitored, reported on and verified  Prefers businesses that are related to Anglo American's core business and that can make a real difference to mining sustainability  Favourably considers projects with a strong technological base  Qualifying businesses need to demonstrate suitable prospects for job creation, community involvement and innovation  To qualify, companies should be commercially viable. They should show long-term sustainability, and return on their investment objectives  Of primary importance is the creation of sustainable jobs with entrepreneurs as full-time, value-adding managers in the business

#### SUPPLY CHAIN AND PROCUREMENT



The Local Procurement and Enterprise Dvelopment Trade Fair organised by Anglo American

## **Procurement policies**

## Trade fair brings together partners big and small

The first Anglo American Local Procurement and Enterprise Development Trade Fair was held at the Sandton Convention Centre in Johannesburg on 23 June 2011. The 1,000 or so people who gathered there to network and to discuss their services and products represented a wide range of groups and interests: from large domestic and multinational suppliers, through medium-sized South African companies, to small local enterprises. The close to 80 exhibitors at the event also varied greatly, from multinationals to local entrepreneurs whose businesses Anglo American had helped to fund through Anglo Zimele (Zimele), its enterprise development arm. (See the rest of this section for more information on Zimele.)

Cynthia Carroll, Anglo American's chief executive, opened the fair by emphasising the key role of partnerships in the Group's business. Referring to the participating companies, she said:

"They are our partners in business - partners who have shared their growth and development with us, and which we now want to share with you. We are here today because enterprise development and entrepreneurial support is not something you do for a community. It is something you do with it. Today we are showcasing just how this partnership model works, and how much can be achieved when it works well."

Many of the businesses at the trade fair would not have existed without the help of Zimele, which trains, mentors and funds emerging black entrepreneurs in mining communities and impoverished labour-sending areas. Zimele is integral to Anglo American's approach of building the capacity and sustainable prosperity of the communities in which it operates.

One such business is run by Luyanda Ngwenya of ICU Eyecare, who exhibited at the fair. Her enterprise offers affordable and high-quality optometry services to employees in companies and to people in rural communities, especially children and senior citizens. It differs from standard optometry practices by allowing customers with limited financial resources to pay their account over a period of six months. Funding from Zimele has enabled Ms Ngwenya to purchase the expensive equipment needed to carry out eye tests.

The fair was also attended by South Africa's Deputy Minister of Mineral Resources, Godfrey Oliphant, who praised the Group for its efforts to promote the participation of historically disadvantaged South Africans in the economy. He commended Anglo American for investing in local procurement and for building prosperous communities through job creation, skills development and local infrastructural development.



## MARKET DEVELOPMENT AND BENEFICIATION

The Company launched its market development and beneficiation strategy in 2009 which is now in implementation. Market development and beneficiation are interdependent and therefore form part of the same strategic framework. The strategy focuses on identifying new sustainable applications for our metals and, to be successful, requires collaboration and alignment with a large number of different stakeholders.

In South Africa, beneficiation opportunities arise across the spectrum of the marketdevelopment scope. As a result, Amplats has played a variety of roles in beneficiation The primary intended outcome of our market development and beneficiation approach is to increase Company value by boosting the use of PGMs. This is achieved by establishing a balanced pipeline of product-development portfolios; facilitating the commercialisation of products; enhancing our relationships with the Government; and enabling greater acceptance of our activities by communities through our involvement in their development.

In South Africa, beneficiation opportunities arise across the spectrum of the marketdevelopment scope. As a result, Amplats has played a variety of roles in beneficiation. For example, we have:

- invested in the development of human capital at local universities by funding research and providing financial and other assistance for students;
- facilitated local technology transfer by engagement with key fabricators;
- · facilitated commercialisation of the sector by providing funding through a development fund and a metal financing scheme, thereby creating an enabling environment for product and business development;
- participated in downstream activities involving by-product, upstream and/or downstream product lines; and
- profiled beneficiation through demonstration projects for new products and/or technology.

# INDUSTRIAL DEVELOPMENT Research and development

In finding new applications and uses for PGMs, the Company funds research and development (R&D) programmes at various institutions and fabricators across a wide spectrum of research areas. We track these projects carefully and are cautiously optimistic that they will bear positive results. As many of the programmes are undertaken in collaboration with international organisations, research competence in mineral value-addition processes in South Africa is being enhanced. This is fundamental to building a value-addition economy in the PGM industry in South Africa.

In 2011, Amplats participated in the Fourth South African Innovation Summit. The objectives were to gain a better understanding of the innovator and inventor community of South Africa; uncover potential PGM business opportunities that could be considered for commercialisation; and market the PGM Innovation Competition.

## Commercialisation of R&D

Bringing new products to market from their initial conceptualisation can take anything from five to 10 years. Several projects are at a sensitive phase, with patents pending.

### Ethylene scavenger (E+™)

Most fruit and vegetables are affected by ethylene, which accelerates the ripening of fresh produce. Controlling the concentration of ethylene around fresh foods and flowers has a large impact on controlling their spoilage, quality and shelf-life, which in turn helps to reduce wastage. Johnson Matthey, funded by Amplats, has developed a novel "ethylene scavenger" technology based on palladium as a key active ingredient. The technology is licensed to It's Fresh Incorporated, which is developing a range of products suitable for fresh produce packaging. A new manufacturing line at JM Royston has been completed to current demand. We expect a significant uptake in volumes in 2012, as product penetrates the retail consumer market.

#### Fuel cells

The climate change agenda, a commitment to a reduction in global emissions and the price of oil are driving the need for cleaner, more fuel efficient vehicles, and are expanding the likely mix of alternatives to batteries, hybrids and fuel cells. The drive to improve energy efficiency extends from private homes to industrial spaces. Since most fuel cell systems use PGMs as catalysts, the emerging fuel cell industry presents a major opportunity for the global platinum mining industry, with significant additional demand widely predicted by 2020. Fuel cell technology is also able to generate clean distributed energy in an almost limitless variety of contexts.

In the long term, fuel cell vehicles are likely to be the dominant driver of platinum demand: while short to medium term demand will result from the introduction of stationary and niche applications. Fuel cells are well suited to the provision of distributed power in Africa. One of their attractions is that their most efficient fuel source, hydrogen, is an energy "carrier" and can be stored. Hydrogen is the most abundant element in the universe and any hydrogenrich liquid or gaseous fuel can be used to provide the hydrogen for a fuel cell. Fossil fuels such as diesel, LPG or biofuels, for example, can be "re-formed" on site into hydrogen for a fuel cell. Even water, via electrolysis, can yield hydrogen for fuel cells. Consequently, fuel cells can be deployed where they are needed, and use locally available fuels.

The numerous and diverse applications of fuel cells include: rural electrification; back-up power for telecommunications; combined heat and power applications for residential, commercial and industrial buildings; portable power; and battery charging.

Fuel cells are relatively new in Africa, with the complete value chain still under development and presenting significant opportunities for manufacture, assembly, installation, support, maintenance and fuel supply. The development of this new industry will support job creation, knowledge transfer and export opportunities. Amplats is committed to supporting the development of a fuel cell technology industry in South Africa. One of the ways it is doing this is through the demonstration and application of fuel-cell technologies within our own mining environment. Some examples of current activities are described below.

## Fuel cell power plant at Lephalale

A stationary fuel cell power plant was installed near Lephalale in Limpopo, on a coal-bed methane (CBM) gas exploration site of Anglo American's Thermal Coal Business Unit in 2009. The 200 kilowatt fuel cell based power plant, supplied by UTC Power, a United Technologies company from the USA, uses CBM gas as fuel. UTC Power has installed about 270 of these containerised PureCell 200 units all over the world.



Fuel cell charging a cellular phone

## MARKET DEVELOPMENT AND BENEFICIATION



Demonstration fuel cell at COP17

#### Presence at COP17

A 150-kilowatt platinum based hydrogen fuel cell was installed within the Greyville Racecourse, in Durban, during the 17th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP17). The zero-emission generator demonstrated clean energy efficiency by generating electricity that was then fed into the local electricity grid. The generator was based on Dantherm Power's DBX5000 fuel-cell system, which utilises Ballard fuel-cell stacks, and was powered by hydrogen from Air Products South Africa Proprietary Limited.

The technology uses platinum-based polymer-electrode-membrane (PEM) fuel cells. These cells offer high efficiency, versatility and scalability, and have the potential to assist the global move to a low carbon economy by enabling the provision of clean, reliable and cost-effective power. This potential has guided the extensive engagement of Amplats with key local stakeholders and with global fuel cell companies in developing opportunities for the commercialisation of fuelcell technology in South Africa. Amplats continues to have an equity interest in Johnson Matthey Fuel Cells. It also has equity interests together with Department of Science and Technology (DST) and Altergy in Clean Energy, who will market and distribute the fuel cells, with a view to setting up a manufacturing facility in South Africa if the market proves viable.

At the function for the launch of the generator, the CEO of Amplats, Neville Nicolau, expressed his hopes regarding the development of a new industry in South Africa and the impact this could have on job creation. In response the Minister of Mining Resources, Susan Shabangu, elaborated on the importance of beneficiation and the role the resources industry can and should play in enabling the industrialisation of South Africa. She commended Amplats for being "a company that contributes to the evolution of the mining industry"; noting, further, that "a precedent has now been set for all other mining companies".

### Clean Energy

Clean Energy Investments Proprietary Limited, trading as Clean Energy, is a collaboration between the PGM Development Fund (an Amplats initiative), the Technology Innovation Agency (a Department of Science and Technology initiative), and USA-based Altergy Systems. Clean Energy is well supported by its founding shareholders, and is looking to contribute significantly to the rollout of fuel-cell technology throughout the sub-Saharan market, focusing initially on telecoms and later branching out into other installation-critical applications. It commenced trading at the beginning of 2011.

### Jewellery development

The Company continues to support the local jewellery industry with interventions aimed at developing competence in platinum design and manufacture. Platinum volumes for jewellery remained constant between 2010 and 2011. We continued to consolidate and manage relationships with customers who understand and implement the opportunities presented by the metal and who should be well placed for growth when the economy improves. The number of manufacturers on the financing scheme dropped from 18 in 2010 to 16 in 2011. The table below outlines platinum sales in the local jewellery industry since 2007.

	Platinum (ounces)	Consignment customers
2011	1,518	16
2010	1,500	18
2009	1,988	20
2008	2,842	13
2007	1,120	8

The theme of the 13th PlatAfrica design and manufacture competition in 2011 was "Platinum Romance", with the designers delivering work of exceptional quality in

response. The standard of workmanship continues to improve year on year and there were over 100 entrants in both the student and the professional categories. The PlatAfrica event is a culmination of the Company's involvement in building capacity at various institutions related to the jewellery industry in South Africa. Amplats sponsors institutions, provides learner sponsorships at international institutions, and makes metal available to facilitate learning and development.

In 2011, the Company sponsored advanced platinum technical training. The objective of this training was to provide them with an opportunity to learn about new skills, equipment and techniques in platinumjewellery manufacturing. The Company is aware of the constraints on the growth of the platinum jewellery industry in the country. In order to counteract these and facilitate ongoing development and long-term sustainability, it continues to enable engagement with and support from both the industry and the Government.

#### REACH

Anglo American Platinum Limited (Amplats) had no REACH obligations in 2011. It met its 2010 REACH obligations by successfully submitting the REACH dossiers to the European Chemicals Agency for four of its products, namely nickel metal, copper metal, cobalt sulphate and secondary leach concentrates. The target date for submission for the next group of products, being products within the tonnage band of 100 to 1,000 tonnes, is December 2013. (The submission date for products within the tonnage band of 10 to 100 tonnes is December 2018.)

In 2011, Amplats was actively involved in the different REACH consortiums to which it is a signatory.



PlatAfrica Design Competition 2011 - Hairpiece designed by Dorothea Annandale and neckpiece designed by Absalom Khumalo





Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement
Investor community	Provide financial capital to sustain and grow the business	Sound return on their investment	Anglo American plc	Listed in London	Owns 79.66% of Anglo American Platinum Limited	Meetings	Weekly
			Minority shareholders	Predominantly South African, European and North American	Own the balance of Amplats shares	Results presentations, media	Bi-annual, continual
			Potential investors and analysts	Represented by investor groups, such as pension funds	An interest in the potential of becoming shareholders	Results presentations, media	Bi-annual, continual
			JSE Limited	Regulator of listed companies	Primary listing exchange and market	Various	Continual
			JSE SRI Index	Independent assessment of triple bottom-line reporting	Inclusion of Anglo Platinum Limited in the Index	Index questionnaire	Annual
Employees	Investment in career growth, mentors and skills	Provide a safe environment conducive to growth that is free from harassment or intimidation	Permanent employees	90.71% South Africa; 8.67% Botswana, Lesotho, Mozambique, Zimbabwe	Direct contractual relationship	Various	Continuous
			Contractors	75.81% South Africa	Indirect contractual relationship	Various	Continuous
Trade unions and associations	Provide guidance on topical issues, shared expertise and experience	Work together to ensure productive partnerships and agreements	National Union of Mineworkers	28,173 predominantly mining employees	Signatory to employee relations recognition agreement	Partnership structures and task teams	Once every two months
			United Association of SA	4,806 predominantly supervisory employees	Signatory to employee relations recognition agreement	Partnership structures and task teams	Once every two months
			National Union of Metalworkers of SA	1,172 plant employees	Signatory to employee relations recognition agreement	Partnership structures and task team	Once every two months
Customers	Partnership to seek opportunities for continued growth	Platinum at competitive prices. Work together to develop new markets	Johnson Matthey	Listed in London; PGMs fabricated into industrial products	Direct supply and long-term agency contracts for PGMs	Meetings and written correspondence	A minimum of once a month
			BASF	Listed in New York; PGMs fabricated into industrial products	Direct long-term contract to buy PGMs	Meetings and written correspondence	A minimum of once a month
			Tanaka Kikinzoku Kogyo KK	Private Japanese company, fabricating PGM industrial products	Direct long-term contract to buy PGMs	Meetings and written correspondence	A minimum of once a month

Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement
			Umicore SA	Listed in Brussels, fabricating PGM industrial products	Direct long-term contract to buy PGMs	Meetings and written correspondence	A minimum of once a month
			Heraeus	Private German company, fabricating PGM industrial products	Direct long-term contract to buy PGMs	Meetings and written correspondence	A minimum of once a month
			Toyota Motor Corporation	Tokyo-listed motor manufacturer; PGMs used in autocatalysts	Direct long-term contract to buy PGMS	Meetings and written correspondence	A minimum of once a month
			Honda Motor Corporation	Tokyo-listed motor manufacturer; PGMs used in autocatalysts	Direct long-term contract to buy PGMs	Meetings and written correspondence	A minimum of once a month
Business partners		ARM Mining Consortium	HDSA mining company comprising ARM Platinum and the Mampudima and Matimatjatji communities	Joint-venture partner at Modikwa Platinum Mine	Joint-venture executive committee and steering committee meetings	Monthly	
			Aquarius Platinum (South Africa)	A subsidiary of Aquarius Platinum Limited, the Sydney-, London- and Johannesburg- listed mining company	Partner at Kroondal Platinum Mine, Marikana Platinum Mine, Platinum Mile tailings retreatment facility and Sheba's Ridge project	Pooling-and- sharing meetings	Quarterly
			Lonmin plc	London-listed mining company in partnership with Bapo-Ba- Mogale community	Joint-venture partner at Pandora project	Joint-venture meetings	Monthly
			Bapo-Ba-Mogale	Traditional community	Joint-venture partner at Pandora project	Joint-venture meetings	As required
			Mvelaphanda Resources	Johannesburg- listed HDSA mining company	Shareholder of Northam Platinum, BEE partner at Pandora project, 50% shareholder in Platinum Mile tailings retreatment facility	Joint-venture meetings	Quarterly
			Royal Bafokeng Resources	A traditional authority in North West province	Joint-venture partner at Bafokeng- Rasimone Platinum Mine	Joint-venture executive committee and steering committee meetings	Monthly

Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement
			Bakgatla-Ba- Kgafela community	Traditional community	Joint-venture partner at Union Mine, Rooderand and Magazynskraal	Joint-venture meetings	Monthly
			PTM	Exploration company	Joint-venture partner at Western Bushveld Joint Venture	Joint-venture meetings	Quarterly
			Pacific North West Capital Limited	Exploration company	Joint-venture exploration partners in Canada	Meetings	As required
			Anooraq Resources	HDSA-controlled mining company, controlled by Pelawan Investments	Partner at Bokoni Platinum Mine and the Ga-Phasha, Boikgantsho and Kwanda projects	Meetings	As required
			Eurasia	Exploration company	Joint-venture partner in Russia	Meetings	As required
			Solitario	Exploration company	Joint-venture partner in Brazil	Meetings	As required
			Xstrata South Africa Pty Ltd	Mining company	Joint-venture partner at Mototolo Platinum Mine	Joint-venture meetings	Monthly
			Kagiso Trust	A broad-based charitable organisation established by the SA Council of Churches in the mid-1980s to provide assistance to underprivileged communities	Joint-venture partner at Mototolo Platinum Mine	Joint-venture meetings	Monthly
			Siyanda Chrome Investments Pty Ltd	HDSA chrome company	Joint-venture partner in chrome retreatment plant	Joint-venture meetings	Monthly
Major contractors and suppliers	Provide safe and quality products and services that support our current operations and potential growth	Provide joint developmental and growth opportunities	Shell SA Marketing Pty Ltd	South African EPCM company	Service to the value of R679 million in 2011	Contract meetings and correspondence	Monthly
			Scaw SA Pty Ltd	South African EPCM company	Service to the value of R342 million in 2011	Contract meetings and correspondence	Monthly
			Senmin SA Pty Ltd	South African EPCM company	Service to the value of R389,5 million in 2011	Contract meetings and correspondence	
			SAN Pty Ltd	South African contracting mining company	Service to the value of R273 million in 2011	Contract meetings and correspondence	Monthly

Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement	
Municipalities	governmental initiatives and topical issues to drive agendas. Shared the collection industry volume topical issues to the uplifting regions where the collection industry volume industry volume to the collection industry.	Contributing to the collective industry voice. Contribute to the uplifting of regions where we operate	Bojanala District Municipality	District municipal area in North West province	Labour-sending area; part of mine communities at Rustenburg Mine, Amandelbult Mine, Union Mine and BRPM	Formal and informal meetings	As required	
			Rustenburg Local Municipality	Municipal area in North West province	Labour-sending area; part of Rustenburg Mine's and BRPM's mine communities	Formal and informal meetings	Monthly and as needs arise	
			Moses Kotane Local Municipality	Municipal area in North West province	Labour-sending area; part of mine communities at Rustenburg Mine, Amandelbult Mine, Union Mine and BRPM	Formal and informal meetings	Bi-monthly and as needs arise	
		Waterberg District Municipality	District municipal area in Limpopo province	Labour-sending area and part of Amandelbult Mine's and Mogalakwena Mine's community	Formal and informal meetings	As required		
				Thabazimbi Local Municipality	Municipal area in Limpopo province	Labour-sending area and part of Amandelbult Mine's communities	Formal and informal meetings	Quarterly and as required
			Mogalakwena Local Municipality	Municipal area in Limpopo province	Labour-sending area; part of Mogalakwena Mine's community	Formal and informal meetings	Quarterly and as required	
			Greater Sekhukhune District Municipality	District municipal area in Limpopo province	Labour-sending area; part of Lebowa Mine's community	Formal and informal meetings	As required	
			Greater Tubatse Local Municipality	Municipal area in Limpopo and Mpumalanga provinces	Labour-sending area; part of Lebowa Mine's community	Formal and informal meetings	Monthly	
			Fetakgomo Local Municipality	Municipal area in Limpopo province	Labour-sending area; part of Lebowa Mine's community	Formal and informal meetings; joint planning sessions	Monthly	
		Capricorn District Municipality	District municipal area in Limpopo province	Labour-sending area; part of Mogalakwena's, Lebowa's and Polokwane Smelter's communities	Formal and informal meetings	As required		
			Polokwane Local Municipality	Municipal area in Limpopo province	Labour-sending area; part of Mogalakwena's, Lebowa's and Polokwane Smelter's communities	Formal and informal meetings	As required	

Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement
			Lepele Nkumpi Local Municipality	Municipal area in Limpopo province	Labour-sending area	Formal and informal meetings	As required
			OR Tambo District Municipality	District municipal area in Eastern Cape province, covering King Sabata; Nyandeni	Labour-sending area	Formal and informal meetings	As required
			Traditional authorities, administrations and liaison committees	Traditional leadership around operational areas	Surface lease; social and economic impacts of mining on the community	Meetings, workshops and presentations	As required
Governmental bodies	9	Central government	Various administrative departments, including DME	Some departments may only be visited on specific issues, such as Home Affairs (for work permits). Other relationships are more permanent and relate to specific issues (eg legislation on mining rights, environmental management, environmental permits and licences)	Formal and informal meetings/ presentations	Various structures meet at various times	
			Parliament	Various administrative departments	Policy discussion and lobbying (both ways) take place at this level; also debate on overarching issues of mutual interest	Formal and informal meetings/ presentations	Various
			Regional offices	Various regional offices of DME and DWAF	Provides administrative governance function at provincial level	Formal and informal meetings/ presentations	Various
			Limpopo provincial government	Various administrative departments	Provides administrative governance function at provincial level	Formal and informal meetings/ presentations	Various
			Mpumalanga provincial government	Various administrative departments	Provides administrative governance function at provincial level	Formal and informal meetings/ presentations	Various
			North West provincial government	Various administrative departments	Provides administrative governance function at provincial level	Formal and informal meetings/ presentations	Various

Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement
			Independent Government structures	Commission for Conciliation, Mediation and Arbitration; Commission on Restitution of Land Rights; Magalies Water Board; Mintek; National African Federated Chamber of Commerce; the South African Reserve Bank	Focused working groups may work together for up to 18 months on specific issues (eg land restitution)	Formal and informal meetings/ presentations	As required
			SAPS	Various branches of SAPS around Group operations	Addressing security risks and issues in partnership	Meetings and consultations	Monthly and as required
			SARS	Revenue services	Authority	Meetings and correspondence	As required
Non- governmental organisations (NGOs)		Association of Black Professionals in Mining	A network of black professionals in mining, supporting the entry and development of blacks in the industry	Community development, mentorship and support	Meetings, seminars and workshops	As required	
			African Pathways for Youth Development	Polokwane- based youth development and training organisation	Social impacts and community development	Meetings	As required
			Kroondal Environmental Forum	Rustenburg area environmental watchdog	Environmental impacts	Meetings	As required
			LimDev	Limpopo business development agency	Business development, training and funding	Workshops	As required
			Limpopo Education Development Trust	A public-private partnership to develop education in Limpopo province	Educational developments in Limpopo	Meetings and workshops	Monthly and as required
			Limpopo SMME Agency	A business development agency funded through Government	SMME development and support	Meetings and workshops	As required
			Vision of the Nation and Tshupe Hospice	A home-based care centre for HIV/AIDS patients in local communities	Provider of home-based care services funded by the Group	Meetings	Quarterly

Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement
			Mpumalanga Education Development Trust	A public-private partnership to develop education in Mpumalanga	Educational developments in Burgersfort	Meetings and workshops	Monthly and as required
			North West Eco Forum	Rustenburg area environmental watchdog	Environmental impacts	Meetings, consultations and presentations	As required
			North West Education Development Trust	A public-private partnership to develop education in North West province	Educational developments in North West province	Meetings and workshops	Monthly and as required
			Royal Bafokeng Economic Board	Economic board of the Royal Bafokeng Nation, looking at development of SMMEs within the Royal Bafokeng Nation	An important partner in the development of SMMEs in and around RPM operations and communities	Meetings, workshops and presentations	Monthly and as required
			Sivukile Home-Based Care	Ten NGOs providing home-based care	Provide home-based care in communities around operation	Meetings and contract meetings	As required
			ActionAid	Global NGO focusing on poverty alleviation	Commented on our water and relocations at Mogalakwena	Reports and meetings	As required
			Trade and Investment Limpopo	Investment agency for Limpopo	Black economic empowerment supplier, development and preferential procurement	Meetings	As required
			Benchmark Foundation	Faith-based mining organisation. Corporate governance	Conducts research around our operations	Meetings	As required
			SOMO	Dutch-based research organisation	Conducted research into impacts of platinum	Meetings, correspondence	As required

Stakeholder group	The value of our stakeholders	Stakeholder expectations	Stakeholder name	Key attributes	Relationship to (Amplats)	Method of engagement	Frequency of engagement
Educational institutions	Opportunity to develop skills and industry education. Provide expertise	Investing in education to promote community growth and skills development	Universities/ universities of technology/ technical and community colleges	Educational institutions promoting required skills	Bursary programmes. Continuing education. MDP/ MBA. Graduate development. Beneficiation. Research sponsorship. Membership of faculty advisory boards. Interaction on planning directly and via professional bodies. Major contributor to Mineral Education Trust Fund. Sponsorship of professorial seats	Meetings	As required
Industry bodies	A view on regulations and requirements of the industry standards	Compliance of regulations and industry standards. Participation in industry debates	Chamber of Mines – SA	Industry body	Amplats is a member of the Chamber of Mines	Meetings	As required
			International Platinum Group Metals Association	Industry body	Amplats is a member	Meetings	As required
			BUSA	Industry body	Member	Meetings and events	As required
			National Business Initiative Platinum Guild International ICMM	Industry body	Member	Meetings and events	As required
Labour- sending areas	Employees to work in existing operations and for future development	Provide skills development and growth	Labour-sending area	King Sabata Dalindyebo; Nyandeni; Port St Johns; Ntabankulu; Qahkani; Mbizama; Mhlontlo municipalities	Labour-sending area	Formal and informal meetings. Chairman fund and partnership as Teba	As required
Communities surrounding our operations	Provide our "social" licence to operate. Provide employees for our operations	Engage in early stages of life cycle. Strong and effective social management systems. Compliance. Broad community support. Add sustainable value to the communities though local procurement business creation	See tables on pages 125 to 130 for full details on communities	Communities in the areas of Rustenburg municipality, Greater Tubatse Local Municipality, Thabazimbi Local Municipality, Mogalakwena Local Municipality	Communities surrounding our operations	Formal and informal meetings. Chairman's Fund	As required

Community	Classification	Relationship to (Amplats)	Local municipality	Population*
Bojanala District Municipal	ity			<u> </u>
Chaneng	Rural small village	BRPM	Rustenburg Local Municipality	6,689
Robega	Rural small village	BRPM	Rustenburg Local Municipality	3,292
Bala	Rural small village	BRPM	Rustenburg Local Municipality	3,020
Rankunyana	Rural small village	Rustenburg	Rustenburg Local Municipality	1,699
Kanana	Rural scattered	Rustenburg	Rustenburg Local Municipality	398
Rankelenyane	Urban formal town	Rustenburg	Rustenburg Local Municipality	1,718
Boitekong	Urban formal town	Rustenburg	Rustenburg Local Municipality	11,632
Zakele	Rural scattered	Rustenburg	Rustenburg Local Municipality	Unknown
Mfidikwe	Rural small village	Rustenburg	Rustenburg Local Municipality	798
Thekwane	Rural small village	Rustenburg	Rustenburg Local Municipality	3,994
Waterval	Rural small village	Rustenburg	Rustenburg Local Municipality	798
Kwa Photsaneng	Rural small village	Rustenburg	Rustenburg Local Municipality	4,314
Siyavuya	Rural scattered	Rustenburg	Rustenburg Local Municipality	318
Sefikile	Rural small village	Union	Rustenburg Local Municipality	2,702
Ga-Ramosidi	Rural small village	Union	Rustenburg Local Municipality	8,572
Greater Sekhukhune Distri	ct Municipality	·		·
Ga-Makgopa and Ext 1	Rural scattered	Twickenham	Greater Tubatse Local Municipality	100
Twickenham	Rural small village	Twickenham	Greater Tubatse Local Municipality	2,088
Ga-Mashabela	Rural small village	Twickenham	Makhuduthamaga Local Municipality	4,222
Makgake	Rural scattered	Twickenham	Greater Tubatse Local Municipality	255
Thidintitsane	Rural scattered	Twickenham	Greater Tubatse Local Municipality	295
Dipururung	Rural scattered	Twickenham	Greater Tubatse Local Municipality	4
Ga-Kgwete	Rural dense village	Twickenham	Greater Tubatse Local Municipality	5,116
Morapaneng	Rural small village	Twickenham	Greater Tubatse Local Municipality	1,523
Ditobeleng	Rural small village	Twickenham	Greater Tubatse Local Municipality	511
Maotsi	Rural scattered	Twickenham	Greater Tubatse Local Municipality	75
Ga-Masete and Ext 1	Rural small village	Twickenham	Greater Tubatse Local Municipality	974
Ga-Mashishi	Rural small village	Twickenham	Greater Tubatse Local Municipality	3,114
Manyaka	Rural small village	Twickenham	Greater Tubatse Local Municipality	1,500
Mohlope	Rural small village	Twickenham	Greater Tubatse Local Municipality	1,166
Waterberg District Municip	<u> </u>			
Northam	Urban formal town	Amandelbult	Thabazimbi Local Municipality	4,712
Ga-Tshaba	Rural small village	Mogalakwena	Mogalakwena Local Municipality	1,096
Ga-Malebana	Rural dense village	Mogalakwena	Mogalakwena Local Municipality	5,463
Ga-Masenya 1	Rural small village	Mogalakwena	Mogalakwena Local Municipality	1,879
Pholotsi	Rural small village	Mogalakwena	Mogalakwena Local Municipality	3,242
Ga-Mapela	Rural dense village	Mogalakwena	Mogalakwena Local Municipality	6,228
Ga-Masenya 2	Rural small village	Mogalakwena	Mogalakwena Local Municipality	2,116
Tweefontein	Rural small village	Mogalakwena	Mogalakwena Local Municipality	1,243
Ga-Mokaba	Rural small village	Mogalakwena	Mogalakwena Local Municipality	2,361
Magongoa	Rural small village	Mogalakwena	Mogalakwena Local Municipality	1,839
Tshamahansi	Rural dense village	Mogalakwena	Mogalakwena Local Municipality	13,274
Ga-Mmalepeteke	Rural small village	Mogalakwena	Mogalakwena Local Municipality	3,208
Ga-Letwaba	Rural small village	Mogalakwena	Mogalakwena Local Municipality	3,951
Ga-Kgubudi	Rural dense village	Mogalakwena	Mogalakwena Local Municipality	5,287

 $<sup>^{\</sup>star}$  Estimated population. To be reviewed following the release of 2011 census data.

## **ENVIRONMENTAL PERFORMANCE**

	2011	2010	2009	2008	2007
MATERIALS			Kilotonnes		
Rock broken – managed operations (100%)	111,379	102,393	73,478 <sup>1</sup>	128,089	116,162
Ore milled – managed operations (100%)	36,547	37,530	37,604	39,126	38,433
Accumulated low-grade stockpiles	19,626	16,273	16,631	19,709	18,658
Coal	140.0	125.3	127.5	113.7	119.0
Liquid petroleum gas (LPG)	4.48	5.16	4.40	4.62	6.32
Grease	0.54	0.87	0.88	1.18	1.24
			Megalitres		
Fuels	59.68	52.31	40.01	77.36	72.82
Lubricating and hydraulic oils	7.919	14.21	12.25	17.48	15.65
ENERGY			Terajoules		
Energy from electricity purchased	19,049	18,556	18,550	19,196	19,642
Energy from processes and fossil fuels	6,119	5,600	5,151	6,202	6,254
Total energy consumed	25,168	24,156	23,701	25,398	25,896
WATER			Megalitres		
Total new water use	36,340	33,817	40,600	34,944	36,166
Water used for primary activities	31,248	28,874	34,151	28,362	30,148
Water used for non-primary activities	5,092	4,943	6,449	6,582	6,018
Potable water from an external source	18,983	18,483	20,925	23,556	23,439
Non-potable water from an external source	924	935	999	1,144	1,444
Waste or second-class water used	10,638	10,673	11,171	4,170	2,909
Surface water used	1,535	_	_2	1,164	1,434
Groundwater used	4,323	3,636	4,970	8,792	9,707
Water recycled in processes	51,260	53,014	40,0743	25,231	23,590
LAND			Hectares		
Land under Group charge for current mining activities	54,640	39,0494	51,330	51,334	51,334
Land utilised for current mining and related activities	14,791	14,186	14,723	15,634	14,778
Total tailings dam area	2,848	2,555	3,127	2,310	2,310
Total waste rock dump area	790	772	844		752
Other land owned					
All land owned (new parameter from 2007)	40,136	40,136	45,855	46,974	51,102
EMISSIONS			Kilotonnes		
$GHG\;emissions, CO_2\;equivalent$	5,991	5,611	5,580	5,581	5,729
From electricity purchased	5,450	5,154	5,153	5,087	5,227
Internally generated	541	457	427	494	502
Nitrous oxides	NM <sup>5</sup>	NM	NM	NM	NM
Sulfur dioxide	18.77	17.65	15.34	15.51	18.54
Particulates (point sources)	0.42	0.46	0.45	0.38	0.46

## **ENVIRONMENTAL PERFORMANCE**

	2011	2010	2009	2008	2007
DISCHARGE			Megalitres		
Discharge to surface water	1,761	3,327	4,456	3,658	4,596
			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?	Yes	Yes	Yes	Yes	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
WASTE			Kilotonnes		
Mineral waste accumulated in:					
Tailings dams (active and inactive)	810,639	869,616	839,142	730,750	686,814
Rock dumps	752,349	715,437	692,799	665,399	566,518
Slag dumps	3,047	5,054	5,162	5	3,940
Non-mineral waste generated:					
Hazardous to landfill	18.26	4.83	5.5	13.69	7.30
Hazardous incinerated	0.80	0.01	0.03	0.02	0.03
Non-hazardous to landfill	16.18	15.80	26.63	26.13	41.35
Non-hazardous incinerated	_		_	0.03	0.04
ENVIRONMENTAL INCIDENTS AND COMPLAINTS			Number		
Levels 1 and 2	309	477	2,689	3,442	5,547
Level 3	_	_	3	1	6
Levels 4 and 5	_	_	_	_	_
Formal complaints	20	16	18	8	18
Substandard acts and conditions <sup>6</sup>	976	875	_	_	
PRODUCTS			Ounces		
Total refined PGMs and gold <sup>7</sup>	4,726,682	4,660,176	4,395,394	4,302,554	4,192,011

Large decrease due to reduced mining at Mogalakwena. Surface stockpiles were processed in 2009. Rock broken at Bokoni only included until 30 June 2009.

Data for 2007, 2008 and half of 2009 includes Bokoni Platinum Mine and Bafokeng-Rasimone Platinum Mine.

## 2011 Environmental benchmarks

	Total energy (terajoule)	Total new water (1,000 m³)	Greenhouse gas emissions (kilotonnes CO <sub>2</sub> equivalent)	Sulfur dioxide emissions (tonnes)
Anglo American Platinum	25,168	36,307	5,991	18,777
Impala Platinum	18,222	41,868	4,022	18,881
Lonmin Platinum	6,533	7,913	1,648	3,843
Northam Platinum	2,167	4,832	635	6,374

Information obtained from SD reports

<sup>&</sup>lt;sup>2</sup> Water reassigned to groundwater rainfall according to latest water model definitions.

<sup>&</sup>lt;sup>3</sup> Increase attributed primarily to better internal measurements of the overall water balance.

<sup>&</sup>lt;sup>4</sup> Reduction is due to exclusion of BRPM and Bokoni JVs.

<sup>&</sup>lt;sup>6</sup> Parameter not reported as final figures for 2008 could not be verified.

<sup>&</sup>lt;sup>7</sup> Substandard acts and conditions reported in 2010.

<sup>&</sup>lt;sup>8</sup> Excludes toll refining from Anglo Platinum marketing.

 $<sup>^{\</sup>rm 9}$  Number lower due to higher overstated figures in previous years.

## **HEALTH PERFORMANCE**

## **Health indicators**

Indicator	2011	2010	2009
Occupational exposure			
Number of pieces of equipment emitting > 110 dB(A)	29	45	500
Number of employees exposed to eight-hour time weighted average exposure noise levels > 105 dB(A)	608*	3	1,998
Number of employees exposed to eight-hour time weighted average exposure noise levels > 85 dB(A)	30,350	28,204	31,724
Occupational diseases			
Employee new cases of NIHL (ICMM definition)	53	19	42
Employee submitted cases of NIHL (> 10% deterioration)	171	32	79
Number of cases of deterioration of hearing 2.5% to 5%	760	676	829
Number of cases of deterioration of hearing 5% to 7.5%	235	257	342
Number of cases of deterioration of hearing 7.5% to 10%	141	95	105
Number of other new occupational diseases°	2	4	11
Non-occupational diseases			
Number of new tuberculosis cases	671	654	894
Number of tuberculosis cases HIV positive	441	452	572
Total number of tuberculosis deaths	60	77	113
Number of HIV/AIDS-related tuberculosis deaths	56	74	100
HIV/AIDS			
Number of employees on voluntary counselling and testing	49,212	47,197	43,138
Number of employees on disease-management programme	5,781	5,075	4,427
Number of employees on antiretroviral therapy	3,545	2,952	2,588

 $<sup>^{\</sup>star}$  Re-evaluations of noise baseline conducted resulting in more accurate exposure numbers.

## **SAFETY PERFORMANCE**

		Number of	tal-injury-fro (FIF		te			
Operation	2011	2010	2009	2008	2011	2010	2009	2008
Bathopele Mine	2	0	1	0	0.084	0	0.044	0
Khomanani Mine	2	0	0	0	0.050	0	0	0
Thembelani Mine	2	0	1	0	0.044	0	0	0
Khuseleka Mine	0	0	2	4	0	0	0.024	0.035
Siphumelele Mine	0	2	3	2	0	0.052	0.047	0.021
Central Services*	0	0	0	0	0	0	0	0
Tumela Mine	1	2	0	6	0.010	0.022	0	0
Dishaba Mine	1	2	0	0	0.017	0.031	0	0
Union Mine	2	1	2	0	0.029	0.013	0.020	0
Mogalakwena Mine	0	0	0	1	0	0	0	0.040
Unki Platinum Mine	1	_	_	-	0.091	_	_	_
Rustenburg Concentrators	0	1	0	0	0	0.130	0	0
Amandelbult Concentrators	0	0	0	0	0	0	0	0
Union Concentrators	0	0	0	0	0	0	0	0
Mogalakwena Concentrators	0	0	0	1	0	0	0	0.091
Mototolo Concentrator	0	0	0	0	0	0	0	0
Unki Concentrator	0	_	_	_	0	_	_	_
Polokwane Smelter	0	0	0	0	0	0	0	0
Waterval Smelter	0	0	1	0	0	0	0.052	0
Mortimer Smelter	0	0	0	0	0	0	0	0
Rustenburg Base Metal Refiners	1	0	0	0	0.050	0	0	0
Precious Metals Refiners	0	0	0	0	0	0	0	0
Western Limb Tailings Retreatment	0	0	0	0	0	0	0	0
Greenfield projects	0	0	2	1	0	0	0.031	0.025
Total/aggregate°	12	8	14	18	0.018	0.012	0.016	0.018

<sup>\*</sup> Central Services for 2010 includes all services departments; previous year's data are for Rustenburg Services. All other data are included with the mine.

<sup>°</sup> The number of fatalities do not add up to the total shown for 2008 and 2009 because the total number of fatalities includes three fatalities at BRPM and one fatality at Bokoni Platinum Mine in 2007; two fatalities at BRPM and one fatality at Bokoni Platinum Mine in 2008; and one fatality each at BRPM's concentrator and Bokoni Platinum Mine in 2009.

	Lost-	time injury- (LTIF		rate	TRC	FR
Operation	2011	2010	2009	2008	2011	2010
Bathopele Mine	0.84	1.09	0.49	1.15	2.90	2.26
Khomanani Mine	1.49	1.35	2.03	2.77	5.04	1.73
Thembelani Mine	2.04	1.53	1.60	1.19	3.89	2.17
Khuseleka Mine	1.65	1.43	1.84	2.44	15.16¹	2.08
Siphumelele Mine	2.61	2.02	2.21	1.96	5.91	3.10
Central Services*	0.44	0.39	0.30	0.44	1.05	0.87
Tumela Mine	1.60	1.77	1.89	_	2.09	2.64
Dishaba Mine	1.94	2.03	2.58	_	2.24	2.83
Union Mine	1.31	1.16	1.21	1.32	5.82	1.91
Mogalakwena Mine	0.49	0.40	0.06	0.28	2.25	3.08
Unki Platinum Mine	0.18	_	_	_	2.28	_
Rustenburg Concentrators	0.00	0.26	0	0.19	1.03	0.78
Amandelbult Concentrators	0.10	0.26	0.40	0.82	1.30	1.49
Union Concentrators	0.34	0.12	0.57	0.49	0.90	0.47
Mogalakwena Concentrators	0.17	0.43	0.33	0.27	1.71	2.39
Mototolo Concentrator	0.66	0.61	0	0.39	2.30	1.22
Unki Concentrator	0.00	_	_	_	1.79	_
Polokwane Smelter	0.64	1.08	0.97	0.13	1.37	2.34
Waterval Smelter	0.57	0.57	0.52	0.59	1.72	1.76
Mortimer Smelter	0.00	0	0.87	0	0.58	0.59
Rustenburg Base Metal Refiners	0.74	0.50	0.68	0.12	2.31	2.04
Precious Metal Refiners	0.70	0.22	0.10	0.20	3.02	1.66
Western Limb Tailings Retreatment	0.86	0.67	0.31	0.28	1.14	1.66
Greenfield projects	0.56	0.44	0.51	0.74	1.53	1.61
Total/aggregate°	1.27	1.17	1.37	1.74	4.09	2.08

<sup>\*</sup> Central Services for 2010 includes all services departments; previous year's data are for Rustenburg Services. All other data are included with the mine.

## Membership of recognised unions and associations as at 31 December 2011

	2011	2010	2009	2008	2007
National Union of Mineworkers (NUM) United Association of South Africa (UASA) National Union of Metalworkers of South Africa (NUMSA)	29,937 6,905 247	28,538 5,098 859	28,173 4,806 1,172	30,233 5,036 1,258	30,501 4,972 673
Total	39,100	34,495	34,151	36,527	36,146
Total percentage of workforce represented, excluding management	79	76	74	73	79

Note: From 1 January 2009 Anglo American Platinum Limited recognised three major unions.

<sup>°</sup> The number of fatalities do not add up to the total shown for 2008 and 2009 because the total number of fatalities includes three fatalities at BRPM and one fatality at Bokoni Platinum Mine in 2007; two fatalities at BRPM and one fatality at Bokoni Platinum Mine in 2008; and one fatality each at BRPM's concentrator and Bokoni Platinum Mine in 2009.

<sup>&</sup>lt;sup>1</sup> Khuseleka Mine's TRCFR includes 786 MTCs due to smoke inhalation during an underground fire.

## **EMPLOYMENT PERFORMANCE**

## **Employment indicators**

Employment statistics as at 31 December 2011				
Breakdown of South African workforce, numbers*	2011	2010	2009	2008
Gauteng	559	488	557	736
Limpopo	24,654	23,416	23,235	28,002
North West	143	24,463	26,744	29,233
Mpumalanga	25,913	142	145	132
Total own employees	51,269	48,509	50,681	58,103
Contracting staff*				
Labour hire	516	400	941	3,779
Contractors	5,721	5,113	13,073	23,444
Total contracting staff	6,237	5,513	14,014	27,223
Employment creation in provinces, numbers				
Gauteng	71	(69)	(161)	107
Limpopo	1,238	181	(4,767)	2,655
North West	1,450	(2,281)	(2,489)	3,928
Mpumalanga	1	(3)	13	12
Total own employees	2,760	(2,127)	(7,404)	6,702
Labour turnover in South Africa, percentage (including voluntary separation				
packages)	0.40	11.00	1400	0.5
Gauteng	6.12	11.99	14.88	8.5
Limpopo	6.70 7.13	9.17 8.96	8.84 12.06	9.4 2.4
North West	7.13 1.86	8.96 9.68	3.35	6.7
Mpumalanga	1.00	9.08	3.33	0.7
Company turnover	7.03	9.1	9.78	6.7

 $<sup>^{\</sup>circ}\,$  Workforce numbers as at 31 December 2011.

Note: definition part-time employees are contractors.

## Breakdown of employment equity per occupational level at Anglo American Platinum (as submitted to the Department of Labour in May 2010)

		Mal	.e			Fema	ale		Foreign i	nationals	
Occupational levels	African	Coloured	Indian	White	African	Coloured	Indian	White	Male	Female	TOTAL
Top management	1	0	1	3	1	0	0	0	3	0	9
Senior management	62	7	18	183	10	0	4	16	9	2	311
Professionally qualified and experienced specialists and mid-management	647	26	20	935	171	11	25	198	31	7	2,071
Skilled technical and academically qualified workers, junior management, supervisors, foremen and superintendents	3,426	45	10	1,816	704	11	15	396	277	6	6,706
Semi-skilled and discretionary decision-making	27,717	47	10	333	2,499	14	9	119	4,864	3	35,615
Unskilled and defined decision-making	2,803	8	0	42	1,295	0	1	4	121	2	4,276
Total permanent employees	34,656	133	59	3,312	4,680	36	54	733	5,305	20	48,988

Note: All numbers are for the period March 2009 to February 2010.

 $<sup>^{\</sup>vartriangle}$  Workforce numbers reviewed against published Group statistics.

## **EMPLOYMENT PERFORMANCE**

## **Training**

<u> </u>										
Type of training	Black males	Black females	Coloured males	Coloured females	Asian males	Asian females	White males	White females	Total HDSA trained	Total trained
Graduates	121	70	4	1	6	5	49	12	256	268
Bursars	242	95	3	4	5	7	67	20	423	443
Learnerships (Engineering)	214	51	4	0	4	0	11	0	284	284
Learnerships (Mining)	126	23	1	0	0	0	5	0	150	155

#### Turnover

All turnover stats exclude Unki Platinum Mine in Zimbabwe

## Turnover excluding VSPs

Age group	19 – 30	31 – 40	41 – 50	51 – 60	61 – 72	Grand total
Female %	0.16	0.25	0.09	0.05	0.00	0.55
Male %	0.95	1.40	1.28	1.43	0.11	5.18
Grand total %	1.12	1.65	1.38	1.49	0.11	5.73

## Turnover including VSPs

Age group	19 – 30	31 – 40	41 – 50	51 – 60	61 – 72	Grand total
Female %	0.20	0.28	0.10	0.06	0.00	0.63
Male %	1.15	1.71	1.52	1.87	0.13	6.39
Grand total %	1.35	1.99	1.62	1.93	0.13	7.02

## Turnover per region excluding VSPs

Region	Total	%
Gauteng	50	6.12
Limpopo	1,036	4.23
Mpumalanga	8	1.86
North West	1,768	6.96
Grand total %	2,862	5.73

## Turnover per region including VSPs

Region	Total	%
Gauteng	50	6.12
Limpopo	1,639	6.70
Mpumalanga	8	1.86
North West	1,809	7.13
Grand total %	3,506	7.03

## Average training hours

Row labels	Average training hours per employee
А	82
Anglo 4	13
Anglo 5	23
Anglo 6	43
В	100
С	88
D1	74
Total per employee	94

#### **Absenteeism**

Region	Absenteeism due to work related injuries	Total
Gauteng	0%	7.83%
Limpopo	0.26%	13.74%
Mpumalanga	0.11%	14.66%
Northwest	0.21%	14.28%

## **ECONOMIC PERFORMANCE**

## **ECONOMIC INDICATORS**

## Anglo American Platinum Limited

		2011	2010	2009	2008
Total workforce°					
Full-time employees		52,152	48,807	50,681	58,103
Contractors <sup>Δ</sup>		6,389	6,908	14,014	27,223
Total capitalisation, as at 31 December, R millior					
Debt	13	5,958	6,645	22,794	16,330
Equity		56,743	55,018	32,633	29,496
Total assets, as at 31 December, R millions		•	<u></u>	·	
Property, plant and equipment		44,499	37,438	35,283	28,435
Capital work-in-progress		12,940	17,065	18,074	18,136
Investment in associates		6,870	7,339	3,301	530
		662	7,339 569	3,301 78	
Investments held by environmental trusts					66
Other financial assets		3,931	2,904	941	158
Other non-current assets		69	93	101	75
Inventories		12,525	12,558	11,292	10,064
Trade and other receivables		3,066	2,988	2,891	3,941
Other assets		419	305	328	225
Other current financial assets		3	8	_	1,615
Cash and cash equivalents		2,296	2,534	3,532	2,870
Assets held of sale		_	_	_	2,553
Refined production					
Platinum	000 oz	2,530	2,570	2,452	2,387
Palladium	000 oz	1,431	1,449	1,361	1,319
Rhodium	000 oz	338	329	350	299
Gold	000 oz	105	81	91	79
Nickel	tonnes	20	19	20	16
Copper	tonnes	13	11	11	Ş
Gross revenue, R millions		51,484	46,352	36,947	51,118
North America		4,189	3,438	2,692	3,588
Asia		18,322	15,068	10,470	23,207
Europe		18,884	19,564	18,025	14,211
Africa		8,624	7,783	5,645	10,031
Other		1,465	499	115	81
Total cash operating costs, R millions		34,976	32,447	29,573	31,561
		34,570	52,447	29,010	31,30
Gauteng		10 190	10.024	- 0.000	4040
Limpopo		12,180	10,234	8,609	10,131
		1,425	1,302	1,096	1,103
Mpumalanga		20,550	20,245	19,254	19,285
North West					
		821	666	614	1,042
North West Non-South Africa		24,874	27,368	20,977	-
North West Non-South Africa Value added, R millions					33,731 8,841
North West		24,874 10,651	27,368	20,977	33,731
North West Non-South Africa  Value added, R millions  To salaries, wages and other benefits, net of tax		24,874	27,368 9,650	20,977 8,712	33,731

O Workforce numbers based on annual average.

 $<sup>^{\</sup>vartriangle}$  Note by definition part-time employees are contractors.



## **JOINT VENTURE COMMITTEES**

## Joint venture committees (As at 31 December 2011)

Committee	Frequency	Committee members			
Pandora (Joint-ver	nture agreement)				
		Eastern Platinum Limited (EPL)* 42.5%	Mvelaphanda Resources (Mvela) 7.5%	Bapo-Ba-Mogale Mining Company (Bapo) 7.5%	Rustenburg Platinum Mines (RPM) 42.5%
Executive Committee	Quarterly (Chairmanship rotated annually)	F Russo-Bello Tshediso Mohase Alternate: Mark Munroe Charl Klopper	Bernard van Rooyen Alternate: Glen Lewis	Mpho Maimane Alternate: Hugh Eiser	Vishnu Pillay° Deepak Desai Alternate: Gokhan Guler Ashley Lalla
Technical Committee	Monthly (Chairmanship rotated annually)	Tshediso Mohase Charl Klopper James Klopper		Jonathan Buckley	Gokhan Guler Mpho Mokgatlhe Chris Killian Alternate: Presley Reddi
Finance Committee	Quarterly (Chairmanship rotated annually)	Bothwell Mazarura Isaac Makhoana Alternate: Charl Klopper	Bernard van Rooyen	Mpho Maimane	Deepak Desai Mpho Mokgatlhe
Bokoni Platinum H	oldings (Joint-ventu	re agreement)			
		Anooraq Resources* 51%		Rustenburg Platinum Mines 49%	
Board	Quarterly (Chairmanship Anooraq)	Harold Motaung°, Bava Reddy		Vishnu Pillay, Deepak Desai, Mary-Jane Morifi	
Steering Committee	Monthly (Chairmanship Anooraq)	Harold Motaung°, Bava Reddy, Joel Kelser De Wet Schutte		Vishnu Pillay, Deepak Desai, Vincent Seboni	
Audit Committee	Quarterly (Chairmanship independent)	De Wet Schutte Patrick Cooke°		Barrie van der Merwe	
Refinance Committee	Quarterly	Joel Kelser°, De Wet Schutte		Kenny Mokoka, Deepak Desai	
Bafokeng-Rasimor	ne Platinum Mine (Jo	int-venture agreement)			
		Royal Bafokeng Resources* 67%		Rustenburg Platinum Mines 33%	
Management Committee	Quarterly (Chairmanship RBR)	Stephen Phiri°, Martin Prinsloo, Mzila Mthenjane Vicky Tlhabanelo, Nico Muller		Vishnu Pillay, Deepak Desai Alternate: Gary Humphries	
Kroondal and Mari	kana (Pooling-and-s	haring agreement)			
		Aquarius Platinum (South Africa) Limited* 50%		Rustenburg Platinum Mines 50%	
Management Committee – Kroondal	Quarterly (Chairmanship rotated annually)	Anton Lubbe, Hélène Nolte, Abraham van Ghent Wessel Phumo		Vishnu Pillay°, Deepak Desai, Ashley Lalla	
Management Committee – Marikana	Quarterly (Chairmanship rotated annually)	Anton Lubbe, Hélène Nolte, Abraham van Ghent		Vishnu Pillay°, Deepak Desai, Ashley Lalla	
Finance and Risk Committee	Quarterly (Chairmanship rotated annually)	Hélène Nolte°, Graham Ferreira		Carmen Janse van Rensburg, Deepak Desai	

Committee	Frequency	Committee members	
Union Mine (Joint-v	enture agreement)		
		Bakgatla-Ba-Kgafela Tribe 15%	Rustenburg Platinum Mines* 85%
Executive Committee	Quarterly (Chairmanship: RPM)	Clement Dube, Otukile Motshwaedi Wycliffe Mothuloe, Carol Rapoo	Pieter Louw°, Simon Kruger Mary-Jane Morifi Alternate: Liesl Withers
Modikwa Platinum I	Mine (Joint-venture a	greement)	
		ARM Mining Consortium* 50%	Rustenburg Platinum Mines 50%
Executive Committee	Quarterly (Chairmanship: ARM)	Patrice Motsepe°, Mike Arnold, Steve Mashalane Stompie Shiels, André Wilkens By invitation: Mandla Nxumalo, Hugo le Roux	Vishnu Pillay, July Ndlovu Mary-Jane Morifi, Deepak Desai
Steering Committee	Monthly (Chairmanship rotated at each meeting)	Pieter Steenkamp, Rochelle de Villiers Philip Swart, Johan Jansen	Vishnu Pillay°, Deepak Desai Vincent Seboni, Ashley Lalla
Safety & Sustainable Development Committee	Quarterly (Chairmanship: ARM)	Nerine Botes-Schoeman°, Stompie Shiels Pieter Steenkamp By invitation: Mandla Nxumalo	Vishnu Pillay, Lettie la Grange
Remuneration Committee	Quarterly	Steve Mashalane, Mike Schmidt	Vishnu Pillay
Audit Committee	Quarterly (Chairmanship independent)	Mike Arnold, Rochelle de Villiers Alternate: Tshepiso Machele By invitation: Mandla Nxumalo, Hugo le Roux Pieter Steenkamp	Deepak Desai, Mpho Mokgatlhe John Martin° By invitation: Vishnu Pillay
Mototolo Mine (Join	t-venture agreement)		
		Xstrata Kagiso Platinum Partnership* 50%	Rustenburg Platinum Mines 50%
Executive Committee	Quarterly (Chairmanship rotated annually)	Xstrata: Ben Moolman, Hanré Rossouw Rakesh Harribhai Kagiso Tiso: Nandi Khoza	Vishnu Pillay°, Deepak Desai Mary-Jane Morifi
Steering Committee	Monthly (Chairmanship rotated annually)	Deon Kruger, Ben Moolman, Johan van Tonder Brian Smith By invitation: Nandi Khoza	Vishnu Pillay°, Deepak Desai Presley Reddi, Andrew McClelland

<sup>\*</sup> Managing partner

<sup>°</sup> Chairman

#### **GLOSSARY OF TERMS**

4E: four elements. The grade at Anglo American Platinum Limited mines is measured as the combined content of the four most valuable precious metals: platinum, palladium, rhodium and gold.

ABET: adult basic education and training.

ACP: Amplats Converting Process, a pyrometallurgical process used at the Waterval Smelter complex in Rustenburg.

Adverse groundwater impacts on humans: evidence of adverse impacts on human health or activities as a result of discharge to groundwater.

Adverse surface water impacts on humans: evidence of adverse impacts on human health or activities as a result of discharge to surface water.

AEW: Anglo Environment Way.

AFRS: Anglo fatal risks standards.

Anglo American 5 X 5 risk matrix: a risk matrix characterised by a five-category scale for (a) likelihood and (b) consequence.

ARM: African Rainbow Minerals Limited.

ART: antiretroviral therapy, used to mitigate the effects

Asbestosis: a lung disease caused by inhaling asbestos particles

Aspect: element of an organisation's activities, products or services that can interact with the environment.

Basel Convention: the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal was drafted and adopted in 1989 and came into effect in 1992. The convention works to reduce the movement of hazardous wastes, to ensure that wastes are disposed of as close as possible to where they were produced, and also to minimise the generation of hazardous wastes in terms of their quantity and level of hazard.

Base metal: a common metal that is not considered precious, for example copper, tin or zinc.

BAU: business as usual.

BBBEE: broad-based black economic empowerment. This represents 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. BEE is a policy of the South African Government, aimed at increasing the access that black South Africans have 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'

Bokoni Platinum Mine: joint-venture mine.

BRPM: Bafokeng-Rasimone Platinum Mine.

CED: Community Engagement Department.

CEMSS: central electricity management support

CEO: chief executive officer.

CO: carbon monoxide

COP17: 17th Conference of the parties to the United Nations Framework Convention on Climate Change, held in Durban from 28 November to 9 December 2011

COa: carbon dioxide.

Discretionary spend: spending for the long-term profitability of a company.

**DMR:** Department of Mineral Resources.

DSM: demand-side management.

DWA: Department of Water Affairs.

EAP: economically active population.

Effluent to surface water: total volume of excess water discharged to surface water (eg rivers, dams, pans) during the reporting period.

EIA: environmental impact assessment.

EMP: environmental management plan.

EMS: environmental management system.

Energy from electricity: electricity purchased from the national utility, Eskom.

Energy from processes and fossil fuels consumed: total energy excluding electricity purchased.

ERRA: employee relationship recognition agreement.

ESOP: Anglo American Platinum Limited's shareownership plan

Exco: Amplats' Executive Committee.

FIFR: fatal-injury-frequency rate; the number of fatal injuries per 200,000 hours worked.

FOG: fall of ground.

FOGM: fall-of-ground management.

Fuels: diesel, petrol and paraffin consumed for processes and utilities.

Fundamental human rights conventions of the International Labour Organization: international labour standards covered in the Declaration on Fundamental Principles and Rights at Work (adopted by the International Labour Conference at its 86th session, Geneva, 1998):

Convention No 29: Forced Labour, 1930 Convention No 87: Freedom of Association and Protection of the Right to Organise, 1948 Convention No 98: Right to Organise and Collective Bargaining, 1949

Convention No 100: Equal Remuneration, 1951 Convention No 105: Abolition of Forced Labour, 1957

Convention No 111: Discrimination (Employment and Occupation), 1958

Convention No 138: Minimum Age, 1973 Convention No 182: Worst Forms of Child Labour,

GHGs: greenhouse gases.

GJ: gigajoules (109 joules).

Global compact: the United Nations Global Compact is a "strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anticorruption".

Grease: total quantity of all types of grease used in all types of equipment during the reporting period.

Greenhouse gas emissions, CO<sub>2</sub> equivalent: quantity of  ${\rm CO_2}$  from electricity purchased and internally generated. Conversion factors used are as recommended by the Intergovernmental Panel on Climate Change (IPCC). Gases include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub>, and other CO<sub>2</sub> equivalents.

Grey water: poor-quality water obtained from an external source, eg municipal sewage effluent. Does not include non-potable water, or internally recycled

GRI: the Global Reporting Initiative. It was established in 1997, with the mission of designing globally applicable guidelines for the preparation of enterpriselevel sustainable development reports.

Groundwater quality deterioration: monitoring results indicate deterioration of groundwater quality because of the operation's activities.

Groundwater quality monitoring: monitoring programme to monitor water quality. Required sites are those identified for monitoring by legal permit requirements or by the site EMS. See above for meaning of EMS.

Groundwater used: water abstracted/collected by the operation from groundwater sources, eg from boreholes and mine dewatering, which is used by the

Hazardous waste to incineration: this may include sludge contaminated by heavy metals; contaminated containers (reagent containers, oil/grease containers, anti-freeze drums); medical waste; vehicle batteries; and oil-contaminated material (gaskets, filters, soaking agents, rags). Incineration takes place in a facility designed and operated in a manner compliant with legislation or internationally accepted practice (this does not include burning of waste in a pit or open

Hazardous waste to landfill: may include sludge contaminated by heavy metal; contaminated containers (reagent containers, oil/grease containers, anti-freeze drums); contaminated soil; and oilcontaminated material (gaskets, filters, soaking agents,

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, 1993 (Act No 200 of 1993), came into operation". The Company definition of HDSAs includes employees who are classified as African, Asian, coloured or women, regardless of citizenship status.

HIV/AIDS: human immunodeficiency virus/acquired immune deficiency syndrome

HMO: health maintenance organisation.

ICMM: International Council on Mining and Metals.

IDC: individual development charter.

IDPs: integrated development plans, as specified in the mining scorecard in respect of mine community and rural development, and legislated by Government in terms of the Local Government Municipal Systems

IFRS: International Financial Reporting Standard.

IIED: International Institute for Environment and Development.

ILO (International Labour Organization): the specialised UN agency that seeks the promotion of social justice and internationally recognised human and labour rights. It was founded in 1919.

IPA: International Platinum Association, which provides a communication forum for producers and fabricators, and facilitates market development.

IPP: independent power producer.

IRM: integrated risk management.

ISO: International Organization for Standardization.

ISO 14001: an EMS standard published by the ISO. See above for meaning of EMS.

IUCN protected area categories: the World Conservation Union (IUCN) defines a protected area as "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of the natural and associated cultural resources, and managed through legal or other effective means". IUCN categorises protected areas by management objective and has identified six distinct categories of protected areas

JM: Johnson Matthey plc, a leading fabricator of PGM products and leading researcher and developer of PGM applications and uses, based in London

JSE: JSE Limited, the Johannesburg-based securities exchange.

JV: joint venture.

King Report: the King Committee on Corporate Governance in South Africa was formed in 1992 (under the auspices of the Institute of Directors in southern Africa and with Mervyn King as chair) to promote the highest standards of corporate governance in South Africa. Corporate governance in the country was institutionalised by the publication of the King Report on Corporate Governance in 1994, by the release of an updated version (King II) in 2002 and, more recently, by the release of King III in September 2009. The King Report features a Code of Corporate Practices and Conduct, which the JSE stipulates all listed companies must follow. The Global Reporting Initiative (see entry above) is referenced in this code.

Land disturbed for mineral extraction activities: area of land under Group charge where the original characteristics have been disturbed by mineral extraction and ancillary operations. This includes open pits and quarries, access roads, stockpiles, tailings/ slimes dams and co-disposal facilities, offices, dumps, villages, land awaiting rehabilitation, screening banks, and concentrator, smelter, and refinery complexes. Disturbance can be by both physical and chemical

Land under Group charge: includes land falling under the direct management of the Group (including all land owned, leased or covered by surface rights), but excludes land that does not fall under the direct management of the Group. It also excludes prospecting rights.

Level 1 incident: an unplanned or unwanted event that results in minor impact, defined as: lasting for a week or less; and/or affecting a small area (measured in metres); and/or impacting a receiving environment that is highly altered with no sensitive habitats; and/ or occurring in an area with no biodiversity value (urban/industrial area). All Level 1 incidents should be classified and investigated to the appropriate level of detail to determine the root cause of the event and to prevent a repeat occurrence. They do not have to be

reported to the authorities. Repeat or continuous Level 1 incidents must be escalated to Level 2 if the impact is not mitigated within the scheduled period of time appropriate to the severity of the impact.

Level 2 incident: an unplanned or unwanted event that results in low impact, defined as: lasting for weeks; and/or affecting a limited area (measured in hundreds of metres); and/or impacting a receiving environment that is altered with little natural habitat; and/or occurring in an area with low biodiversity value. All Level 2 incidents should be classified and investigated to the appropriate level of detail to determine the root cause of the event and to prevent a repeat occurrence. They do not have to be reported to the authorities. However, repeat or continuous Level 2 incidents must be escalated to Level 3 if the impact is not mitigated within the scheduled period of time appropriate to the severity of the impact.

Level 3 incident: an unplanned or unwanted event that results in medium impact, defined as: lasting for months; and/or affecting an extended area (measured in kilometres); and/or impacting a receiving environment that comprises largely natural habitat; and/or occurring in an area with moderate biodiversity value (determined using the Anglo American "Guideline for preparing biodiversity action plans"). All estimated Level 3 incidents should be classified and internally investigated to the appropriate level of detail to determine the root cause of the event and to prevent a repeat occurrence. Repeat or continuous Level 3 incidents must be escalated to Level 4 if the impact is not mitigated within the scheduled period of time appropriate to the severity of the impact. A Level 3 incident triggers specific reporting and investigative procedures. It is reported to senior Amplats management and to the authorities in terms of the National Water Act and the National Environmental Management Act.

Level 4 incident: is termed a "significant incident" and refers to an unplanned or unwanted event that results in high impact, defined as: lasting for years; and/or affecting the catchment on a sub-basin scale; and/or impacting a receiving environment that has sensitive natural habitat; and/or occurring in an area with high biodiversity value (determined using the Anglo American "Guideline for preparing biodiversity action plans"). All estimated Level 4 incidents will trigger a formal independent investigation as covered in Anglo American plc's "Procedure for incident reporting and investigation" and will be subject to specific reporting and investigative protocols. Reporting to the authorities is done in terms of the National Water Act and the National Environmental Management Act.

 $\textbf{Level 5 incident:} \ is \ termed \ a \ "significant incident" \ and$ refers to an unplanned or unwanted event that results in major impact, defined as: having a permanent impact on the environment; and/or affecting a catchment area on a whole-basin scale; and/or impacting a receiving environment classified as having highly sensitive natural habitat; and/or occurring in an area with very high biodiversity value (determined using the Anglo American "Guideline for preparing biodiversity action plans"). All estimated Level 5 incidents will trigger a formal independent investigation as covered in Anglo American plc's "Procedure for incident reporting and investigation" and will be subject to the same reporting and investigation protocols. Reporting to the authorities is done in terms of the National Water Act and the National Environmental Management Act.

Lost-time injuries (LTIs): any occupational injury that renders a person unable to perform his/her regular duties for one full shift or more following the day on which the injury was sustained, whether a scheduled work day or not.

LPG: liquefied petroleum gas.

LTIFR: lost-time injury-frequency rate; the number of lost-time injuries per 200,000 hours worked.

Lubricating oil and hydraulic oil used: total quantity of all types of lubricating oil and hydraulic oil added to all types of equipment.

MCP: magnetic concentration plant.

Mineral Resources: see Integrated Annual Report.

Mining Charter: the promulgation of the Mining Charter in 2004 was intended to bring the mining industry in line with South Africa's overall social and economic transformation. The charter went through a revision in 2010. It re-emphasised that 26% of South Africa's mining assets would have to be BEE (see above) compliant by 2014; provided for the complete elimination of hostel accommodation on the mines; and introduced a sustainable element, on the understanding that mines' social licence to operate would be linked to their environmental, health and safety performance. It also made provision for penalties for non-compliance. The Codes of Good Practice and The Housing and Living Conditions Standard for the South African Minerals Industry were gazetted in 2009.

MI: one million litres.

MQA: Mining Qualifications Authority. The MQA is a body of the South African Government, charged with: developing standards and qualifications for the country's mining sector; maintaining the quality of standards, qualifications and learning provision; developing and implementing a sector skills plan; disbursing grants from the Skills Development Levy; and establishing, registering, administering and promoting learnerships and the administration of apprenticeships.

Mt: one million tonnes.

NEMA: National Environmental Management Act.

NGO: non-governmental organisation.

NIHL: noise-induced hearing loss.

Non-hazardous waste to incineration: the disposal of waste by incineration, in a facility designed and operated in a manner compliant with legislation or internationally accepted practice (this does not include the burning of waste in a pit or open area).

Non-hazardous waste to landfill: the disposal of domestic-type waste at on-mine and off-mine landfill

Non-potable water from an external source: water obtained from an external source that is untreated or only partially treated and is not of a standard suitable for drinking. This does not include waste water/ second-class water, which is effluent from sewage works. It also does not include untreated surface water and groundwater extracted by the operation itself.

NWA: National Water Act.

OHSAS 18001: Occupational Health and Safety Assessment Series (specifications for occupationalhealth and safety-management systems).

Opsco: Amplats' Operations Committee.

Oz: troy ounce.

Ozone-depleting compounds (ODCs): quantity

## **GLOSSARY OF TERMS**

of ozone-depleting compounds released/vented to the atmosphere during the reporting period, expressed as CFC-11 equivalent. ODCs include the following compounds: chlorofluorocarbons (CFCs) (CFC-11, CFC-12, CFC-113, CFC-114, CFC-115); hydro-chlorofluorocarbons (HCFCs); halons (halon 1211, halon 1301, halon 2402); carbon tetrachloride; trichloroethane; methyl bromide; and hydrobromofluorocarbons.

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 in size and are called  $PM_{10}$ " "Small" particles are under 2.5 micrometres in size and are called  $PM_{25}$ . They cause more severe health effects. Anglo American Platinum Limited data on particulates refer to the mass of particulates released to atmosphere from point sources during the reporting period.

PCBs: polychlorinated biphenyls, which are mixtures of chlorinated compounds.

PGI: Platinum Guild International, based in London, It is the key promoter of platinum jewellery worldwide.

PGMs: 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.

PJ: petajoules (1015 joules).

Pneumoconiosis: a lung disease caused by inhaling

POPs: persistent organic pollutants. These are chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of living organisms, and are toxic to humans and wildlife. POPs circulate globally and can cause damage wherever they travel.

Potable water from an external source: water obtained from an external source (eg a local authority) that has been treated to a standard suitable for drinking

Precious metals: all PGMs and gold. See above for definition of PGMs.

Primary activities: those activities in which the operation engages to produce its product(s), including dust suppression within the operational area

PwC: Pricewaterhouse Coopers, who administer the external panel that reviews Amplats' annual Sustainable Development Report prior to its publication.

R&D: research and development.

Ramsar Wetland: an area designated as a wetland of international importance because of its role in preserving biological diversity, or because it is a representative, rare or unique wetland type.

RBMR: Rustenburg Base Metal Refiners/Rustenburg Base Metals Refinery

RBR: Royal Bafokeng Resources.

RDP: Reconstruction and Development Plan.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemical Substances. It is a European Community regulation.

ROD: record of decision.

RPM: Rustenburg Platinum Mines.

RPMR: Rustenburg Precious Metal Refiners/ Rustenburg Precious Metals Refinery.

S&SD Committee: Amplats' Safety & Sustainable Development Committee.

SANS: South African National Standards.

SD: sustainable development

SDD: safety and sustainable development.

SEAT: Anglo American Socio-economic Assessment

Section 54 stoppage: issued when a mining inspector orders a work stoppage after a death or other accident at a mine. Such stoppages are legislated by section 54 of the Mine Health and Safety Act.

SED: socio-economic development.

SHE: Safety, Health and Environment

SMMEs: small, medium and micro enterprises.

SO, from processes: mass of sulfur dioxide released to atmosphere, from point sources and fugitive emissions, during the reporting period.

#### Social incidents:

- Minor social incident: an incident related to Anglo American (Anglo) that results or could result in a stakeholder complaint that is isolated within an annual reporting period; and/or produces significant negative publicity that is local or regional in nature; and/or results in a breach of Anglo policies or standards that is short-term in nature and is quickly reversible (in under one month) with or without significant intervention; and/or involves no injury to or health impacts on any member of the
- b) Moderate social incident: an incident related to Anglo American (Anglo) that results in multiple stakeholder complaints that are widespread or repeated within an annual reporting period; and/ or produces significant negative publicity that is national in nature; and/or results in a breach of Anglo policies or standards that has medium- to long-term impacts (longer than a month) and is reversible with or without significant intervention; and/or results in actions by stakeholders or employees/contractors that break the law, or lead to a serious disturbance requiring the attention of private or public security forces; and/ or involves minor or moderate injuries to or health impacts on members of the public as a result of operational, security or other actions by Anglo staff or contractors, or as a result of actions by state security forces during an incident specifically related to Anglo and/or involves fatalities or one or more injuries (of any severity) to members of the public as the result of operational, security or other actions by Anglo staff or contractors, or as the result of actions by state security forces during an incident that could be perceived to be related to Anglo.
- c) Serious social incident: an incident related to Anglo American (Anglo) that produces significant negative publicity that is international in nature; and/ or results in a breach of Anglo policies or standards that is non-reversible; and/or involves fatalities or one or more serious injuries to members of the public as the result of operational, security or other actions by Anglo staff or contractors, or as the result of actions by state security forces during an incident specifically related to Anglo.

Stockholm Convention: a global treaty to protect human health and the environment against persistent organic pollutants (POPs). In implementing the convention, governments take measures to eliminate or reduce the release of POPs into the environment. See above for definition of POPS.

Surface-water quality deterioration: monitoring results indicate a deterioration of surface-water quality off-site, because of the operation's activities, during the reporting period.

Surface-water quality monitored: a surface-water quality-monitoring programme to monitor water quality at all the required monitoring sites. Required sites are those identified for monitoring by legal permit requirements or by the site EMS. See above for meaning of EMS.

Surface water used: water abstracted/collected by the operation itself from surface-water sources, eg from rivers, dams and pans, and which is used by the operation, but excludes water recycled internally from stormwater and tailings return-water dams

Tailings: that portion of the ore from which most of the valuable material has been removed by concentrating, and which is therefore low in value and rejected.

TB: tuberculosis.

Tonne: unless otherwise defined, this refers to a metric tonne (1,000 kg).

Total energy used: energy from electricity purchased, plus energy from fossil fuels consumed.

TRCFR: total recordable case-frequency rate. This represents the total of all fatalities, serious injuries, and lost-time and medical-treatment cases and first aid cases, during the year.

TSF: tailings storage facility.

**UNEP-WCMC:** the World Conservation Monitoring Centre of the United Nations Environment Programme.

VCT: voluntary counselling and testing.

VSP: voluntary severance package

Water used for primary activities: total new or make-up water entering the 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 and not used for any primary activities. (It may be discharged or evaporated, but these are not primary activities)

WBCSD: World Business Council for Sustainable Development.

WHO: World Health Organisation.

WLPF: Western Limb Producers' Forum.

WULA: water-use licence application.

## SUSTAINABLE DEVELOPMENT REPORT 2011

# Please let us have your views of this report Format Content Insufficient detail Too much detail Other comments Name Organisation Address Government/regulator Investor/shareholder Data protection: as a result of completing this form, your name and address may be added to or updated on our central database, which is accessible by our offices worldwide and by our associated companies. The information we collect will be used to help us improve the format and content of reports. We may also use this information to send you business communications in the future. If you would prefer not to receive such communications, please tick here Thank you. Fax or post your feedback to Stephen Bullock, sustainable development manager +27 (0)11 373 5646, or PO Box 62179 Marshalltown 2107, or fill in your comments online at www.angloplatinum.com



# ANGLO AMERICAN PLATINUM LIMITED (formerly Anglo Platinum Limited)

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A member of the Anglo American plc Group

