

lasting platinum prosperity



**Anglo American Platinum Corporation Limited**  
Annual Report 2002  
Volume 2:  
**Sustainable Development Report**



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For a full appreciation of our business, please read this Sustainable Development Report in conjunction with our *Business Report* both of which are available on the Company’s website: <http://www.angloplatinum.com>

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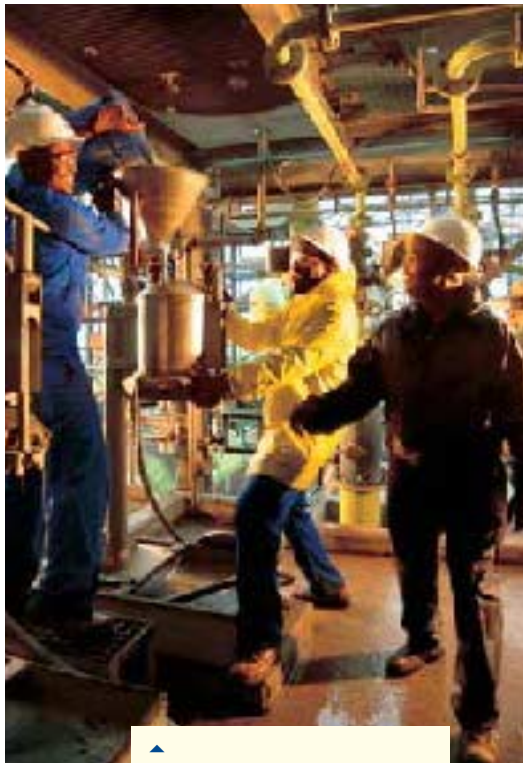
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# Profile

## Nature of Business



▲ Typical slurry sampling equipment in use at all concentrator facilities in the Anglo Platinum Group. Accurate sampling for control and metal accounting is essential.

Anglo Platinum mines, processes, refines and markets platinum group metals (PGMs) as its main products. PGMs consist of a suite of six metals: platinum, palladium, rhodium, ruthenium, iridium, and osmium. In addition, Anglo Platinum produces gold, nickel, copper and cobalt from the ores that it mines.

Referring to the Group's structure and locations illustrated below, Anglo Platinum operates six wholly owned mines in South Africa, one of which (Bafokeng-Rasimone Platinum Mine) will become a 50/50 joint venture (JV) with the Royal Bafokeng Nation (RBN) after the inclusion of the contiguous Styldrift property owned by the RBN. The Modikwa mine is a 50/50 JV with African Rainbow Minerals, an empowerment consortium. The Group also owns 22,5% of Northam Platinum, acquired prior to arranging participation by empowerment partner Mvelaphanda Platinum. Anglo Platinum and Lonmin Platinum have entered a joint venture, together with empowerment partners – the Bapo Ba Mogale Tribe and Northam Platinum – at the Pandora property east of Lonmin's current operations, which agreement is subject to various conditions precedent. Anglo Platinum's smelting and refining operations are wholly owned and situated in South Africa; they treat concentrates not only from its wholly owned operations, but also from most of its joint ventures.

Elsewhere in the world, the Group conducts exploration at the River Valley project in the Sudbury district of Ontario, Canada (via a joint venture with Pacific North West Capital [PFN] of Vancouver, who manage the project) and at Agnew Lake, also in the Sudbury District (via an agreement with PFN and New Millennium Metals Corporation). It has a joint venture with Eurasia to evaluate certain properties in the Vissim district of the Ural Mountains, near Yekaterinberg in Russia.

Anglo Platinum is the world's leading producer of platinum and accounts for about 38% of world production. The Group is engaged in an expansion programme to raise annual platinum output from the 2002 level of 2,25 million ounces to 3,5 million ounces by the end of 2006.

The Group's adherence to the ISO9000 standards promulgated by the International Standards Organisation ensures that the purity of refined metals output complies with customers' specifications and preferences. The close connection forged with customers affords the Group an intimate relationship with end-markets. Furthermore, the agency relationship with Johnson Matthey (JM) provides the intelligence and market research essential for the formulation of successful marketing and operational strategies. Anglo Platinum is firmly committed to the development of PGM markets and, in joint arrangements with JM, researches and promotes new products using PGMs. One of these joint arrangements, announced in 2002, involved the acquisition of a 17,5% stake in Johnson Matthey Fuel Cells Limited, the fuel cell components subsidiary of JM.

Anglo Platinum supported the formation of the Platinum Guild International (PGI) in 1975 and continues to provide funding for the organisation's jewellery promotion efforts. Following its initial success in Japan, the PGI established offices in Italy and Germany, and subsequently in the USA, China and India. The Chinese market has registered spectacular gains since the mid-1990s to become the largest market for platinum jewellery.

Anglo Platinum is actively involved in other industry organisations, including the International Platinum Association (IPA), which provides a communication forum for producers and fabricators and facilitates market development. Anglo Platinum is also a member of the World Fuel Cell Council (WFCC), a body dedicated to the commercialisation of fuel cell technology.

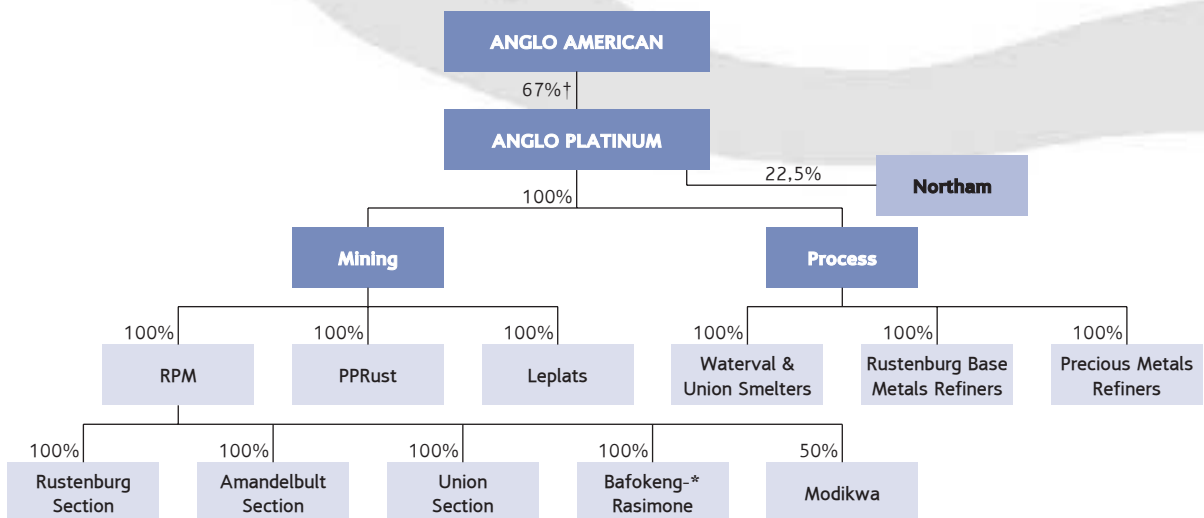
## Scale

Anglo American Platinum Corporation Limited	2002	2001
<b>Number of employees:</b>		
Gauteng	477	372
Limpopo	20 766	19 296
North West	24 189	21 489
Other	4	4
<b>Total</b>	<b>45 436</b>	41 161
<b>Total capitalisation, R millions:</b>		
Debt	136,4	—
Equity	12 968,7	12 521,6
<b>Total assets, R millions:</b>		
Property, plant and equipment	10 503,1	7 008,3
Capital work-in-progress	4 941,5	3 912,9
Platinum Producers' Environmental Trust	89,3	69,5
Investment in associates	557,6	265,7
Non-current accounts receivable	100,8	212,1
Inventories	1 497,8	1 326,4
Accounts receivable	1 617,7	1 946,8
Cash and cash equivalents	1 580,0	5 786,4
<b>Refined production:</b>		
Refined platinum, 000's oz	2 251	2 109
Refined palladium, 000's oz	1 115	1 049
Refined rhodium, 000's oz	212	200
Refined gold, 000's oz	107	102
Refined nickel, tons	19	20
<b>Gross revenue, R millions:</b>		
North America	1 697,6	1 509,9
Asia	6 840,9	5 925,6
Europe	8 782,6	8 478,2
Africa	2 944,8	2 753,9
Other	19,8	23,3
<b>Total</b>	<b>20 285,7</b>	18 690,9
<b>Total cash operating costs, R millions:</b>		
Gauteng	—	—
Limpopo	4 024,2	3 334,5
North West	4 729,5	3 629,0
Other	130,2	81,0
<b>Total</b>	<b>8 883,9</b>	7 044,5
<b>Value added, R millions</b>	<b>13 741,5</b>	16 445,4

## Location Map



## Organisational Structure



†As at 31 December 2002.

\* To become 50% JV with the RBN with the Styldrift property.

# Report Scope

Sustainable development is a concept once articulated by Sir Ernest Oppenheimer, founder of the Anglo American Corporation, as “The aim of this group is, and will remain, to make profits for our shareholders, but to do it in such a way as to make a real and lasting contribution to the communities in which we operate.” This Report identifies four component areas of these development needs and impacts:

- ▶ **Corporate Governance:** Apart from detailing the structures and systems in place to give assurance to stakeholders that the Group manages its affairs with integrity and honesty, the Report covers the Group’s business principles and code of ethics.
- ▶ **Economic Impacts:** Anglo Platinum is a significant generator of wealth, affecting the economic well-being of all its stakeholders. Report coverage includes not only the value of these various impacts, but also how the Group sustains its ability to continue delivering profits in a competitive industry. Empowerment of historically disadvantaged South Africans forms part of the management of these impacts.
- ▶ **Environmental Impacts:** The Report details the Group’s policies and programmes for managing the impacts of its activities on the quality of the environment. In addition, it examines the positive environmental impacts of Anglo Platinum’s products in their various applications.



▲ Children at the Bogatdadi Primary School at Lebowa Platinum Mines. This school is one of many funded by Anglo Platinum.

► **Social Impacts:** Extensive coverage is provided, not only of the Group's efforts in respect of the communities of which it forms part, but also of its care for and development of its employees.

Anglo Platinum's financial year is from January to December and this Sustainable Development Report therefore reviews results for calendar year 2002. By far the majority of Anglo Platinum's activities take place in South Africa, and are confined to three provinces (North West, Limpopo and Mpumalanga), with a fourth (Gauteng) being the location of centralised and Corporate Offices. Where applicable, this Report provides information at provincial level. Reporting on products is confined to the three main PGMs: platinum, palladium and rhodium. Minor attention is given to gold, since along with the three PGMs these four metals constitute '4E,' in which ore grades are measured and upon which internal evaluation is based.

Primary activities cover everything from the mining of ore to the refining and production of final metal products for sale to customers. In the case of entities not controlled by the Group, such as Northam Platinum, such impacts are excluded from this Report on the understanding that they will be reported separately by such entities. Leased facilities and plant are treated for reporting purposes as if the Group owned them.

#### APPLICATION OF GRI PRINCIPLES

In compiling this Report, we have endeavoured so far as possible to apply the guidance provided by the Sustainability Reporting Guidelines, issued by the Global Reporting Initiative (GRI) in 2002.

Our intention is to develop our sustainability reporting capability over the coming year, such that we will be in a position to prepare future reports of this nature in accordance with these Guidelines.

# Executive Chairman's Message

## Dear stakeholder,

**We strive for and measure ourselves against first-world standards.**

As I mention in the Business Report, which should be read in conjunction with this Sustainable Development Report, our chosen theme this past year has been "Lasting Platinum Prosperity." These three words define the essential concepts of our business:

▶ **Lasting:** As evidence of the Group's long-standing commitment to the concept of lasting and sustainable development, we report the 2002 results in two volumes, this Sustainable Development Report and a Business Report. This new reporting format allows you to familiarise yourself with how we maximise the economic and social benefits of our operations for all stakeholders, while minimising the negative impacts, particularly those related to safety, health and the environment.

▶ **Platinum:** Our business is the supply of PGMs. We develop PGM markets, thereby ensuring that they remain the metals of choice for a wide and growing range of applications, thus benefiting both the Group and the industries it serves. Of particular importance from the environmental standpoint, is the world-wide role of PGM-based autocatalysts in reducing noxious emissions

from motor vehicle exhausts. Advances in technology indicate that fuel cells containing PGMs may make a significant contribution to pollution control in the not too distant future.

▶ **Prosperity:** 2002 was yet another year of success for all stakeholders. PGMs continue to be among South Africa's most exciting resources and Anglo Platinum leads the way in



Kgosi Lerno Molotlegi II and Barry Davison at the official signing of the Royal Bafokeng joint venture agreement. ▶



◀ Barry Davison  
Executive Chairman

creating sustainable wealth from them. Not only this, but the Group supports local beneficiation programmes that add jobs and value to the South African economy.

We have identified many stakeholders, defined as those directly affected by our activities. These stakeholders are engaged by us across a broad front, and we continue to seek ways to improve this engagement. One purpose of this Report is to bring together in a single document all relevant information that can be used as a means of enhancing our stakeholder identification and engagement efforts.

As one of South Africa's largest and most successful companies, Anglo Platinum is especially important to the country's economy, in respect of taxation, foreign exchange earnings, salaries and wages and the opportunities it provides to the many supplier industries dependent on our business.

The Group takes its responsibility to society very seriously. There are countless ways in which our operations impact on people's lives, not only economically but also environmentally and socially. The following are the key issues facing the Group:

- ▶ The health and safety of our workforce, our objective being to cut the incidence of injuries in the workplace to the irreducible minimum.
- ▶ Relations with our employees, Unions and Associations at all levels of the organisation.
- ▶ The application of employment equity at all levels of the Group and the removal of all forms of discrimination in the workplace.
- ▶ The training and education of workers, in order to enhance their potential.
- ▶ The building of non-core infrastructure, such as schools and clinics, for employees and for the communities affected by our operations.
- ▶ Adding value to and serving the interests of the communities that host our operations.
- ▶ The reduction of emissions, effluents and wastes produced both directly and indirectly as a result of our activities, thus minimising their deleterious impacts on these communities and the environment generally.
- ▶ The importance of using PGMs to combat environmental damage in the world and the need to engage successfully with our customers to ensure PGMs continue to do this job well.

Ultimately, our Group exists to generate wealth for investors and, in so doing, create jobs.

## Executive Chairman's Message (continued)

We believe that we possess the experience, know-how and resources to make a beneficial difference to society at large, yet we cannot act alone. This is especially true when one considers some of the bigger issues we face. Our sustainable development performance is enhanced through partnership with Government, international organisations and non-governmental organisations (NGOs), each playing to its strengths.

If a company wishes to exploit a mineral deposit, it and only it should be held accountable for the negative impacts of its operations. No one should expect Government or any other body to assist in the cost of running a mine to acceptable safety, health and environmental standards, except in the sense that these costs can be legitimately deducted from profit for taxation purposes.

It is Government's role, nonetheless, to legislate minimum standards, such as those for quality of water, air and safety performance.

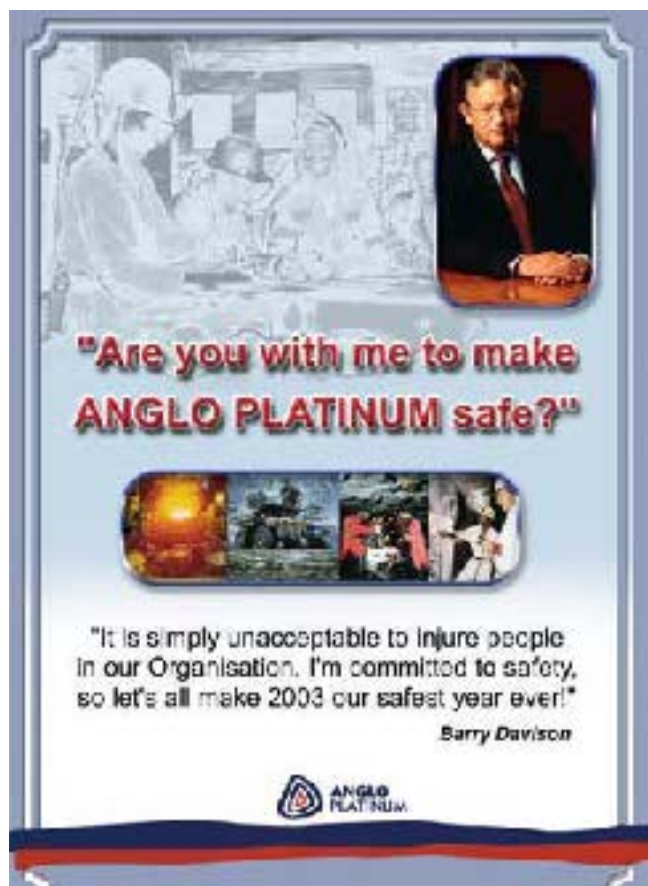
We encourage Government to penalise those operators who flout these standards and to provide security to those who behave responsibly. We strive for and measure ourselves against first-world standards.

Our interaction with Government on these issues includes our recent negotiations in respect of minerals legislation. It is clear to me that this engagement must be continuous if we are to achieve appropriate legislation.

Regarding the question of

empowerment, the value of transactions we have completed, together with those which will be concluded following agreement with Government on the Eastern Limb, is more than R8 billion. This goes most of the way to meeting the requirement of the new minerals legislation that the 15% empowerment target shall be achieved five years after enactment.

Although we have already achieved much progress in our efforts to minimise the negatives and maximise the



**"Are you with me to make  
ANGLO PLATINUM safe?"**

**"It is simply unacceptable to injure people  
in our Organisation. I'm committed to safety,  
so let's all make 2003 our safest year ever!"**

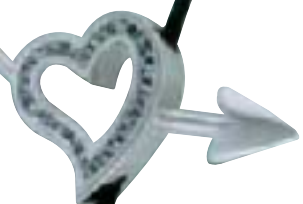
**Barry Davison**

**ANGLO  
PLATINUM**

positives of our business, there is no question that we must continue down the sustainable development road: we must spare no effort in maximising the safety of our operations; we must further enhance the potential of our employees; we must improve environmental standards; we must promote the cause of good governance and respect for human rights; we must increase the benefits that we create for the communities associated with our operations; and we must be ever mindful of stakeholder concerns.

We want our operations to command the support of the societies of which they form part. We are more likely to succeed where there is stability, peace and prosperity.

We take pride at our efforts to advance the sustainable development of our business and our leadership of the PGM mining industry.



Your comments and suggestions on how we might do better would be most welcome and I encourage you to use the contact details given at the back of this Report. I look forward to strengthening relationships with all our stakeholders.

**Barry Davison**  
*Executive Chairman*

Johannesburg  
27 March 2003

**We must spare no effort in maximising the safety of our operations; we must further enhance the potential of our employees; we must improve environmental standards; we must promote the cause of good governance and respect for human rights; we must increase the benefits that we create for the communities associated with our operations; and we must be ever mindful of stakeholder concerns.**

# About Anglo Platinum

## Vision, Strategy and Values

### OUR VISION

To increase our lead as the world's number one platinum organisation and build world class relationships with all our stakeholders

### OUR STRATEGY

- ▶ Grow the market for PGMs;
- ▶ expand into that growth; and
- ▶ optimise value in current operations.

### OUR STAKEHOLDERS

- ▶ Shareholders and providers of capital. The abbreviated name under which the Company is listed on the JSE Securities Exchange, South Africa (JSE) is "AngloPlat" and the Company's JSE Clearing House Code is "AMS." The Company, which is the sole listed entity for the Group, is also listed on The Stock Exchange, London. With effect from 16 March 1998, International Depositary Receipts in respect of the Company's shares were listed on the Brussels Bourse.
- ▶ Our employees number over 40 000, with the number of contractors and temporary employees varying from time to time. At present, with the Group being involved in a major expansion drive, the number of such indirect employees is abnormally high. Anglo Platinum's values and code of ethics apply to all permanent employees, contractors and their representatives. There are certain values that apply equally to non-employees, particularly those related to safety, health and the environment. The vast majority of employees are South African citizens.
- ▶ Eighty-two percent of our employees are represented by one of nine trade unions and associations recognised by Anglo Platinum. They participate not only in collective bargaining structures, but are also involved in partnership structures which deliberate on issues affecting our employees, such as HIV/AIDS programmes.
- ▶ The communities of which our operations form a part, are spread predominantly through three provinces in South Africa: North West, Limpopo and Mpumalanga. These communities are affected by our mines and process plants in that many of their members are employees of Anglo Platinum.

- ▶ Customers include the world's leading precious metal fabricators: Johnson Matthey plc (JM); Engelhard Corporation; Tanaka Kikinokogyo KK; OMG AG & Co. KG; Heraeus; and two of the world's leading automobile companies.
- ▶ Suppliers of products and services are predominantly South African. Approximately 95% of all goods and services are sourced within South Africa.
- ▶ Other stakeholders include our joint ventures partners, platinum marketing organisations, national, provincial and local government authorities and non-governmental organisations affected by or concerned about the impacts of our activities on the economic, social and environmental welfare of the communities of which we form part.

#### STAKEHOLDER ENGAGEMENT

In the interests of effective engagement with stakeholders, the Group has developed a wide range of networks and partnerships, particularly with local, regional and provincial governments in the areas of operation.

Our philosophy in this regard is outlined in the section entitled "Good Citizenship: Our Business Principles."

Sustainable development policies are guided by these engagement initiatives.

Discussions on policy formulation are far down the road with the Rustenburg district and local municipality structures. PPRust has also developed engagement structures.

The Eastern Limb is at the forefront of this engagement drive due to the remoteness of the region. Together with other industry players, Anglo Platinum has formed a joint development forum with the Sekhukhune District in order to plan for the new expansions appropriately.

#### OUR VALUES

- ▶ Safety and health of all our people and safeguarding assets.
- ▶ Trust and respect for all employees.
- ▶ Care for our environment.
- ▶ Responsibility towards the community.
- ▶ Wealth creation for all stakeholders.
- ▶ Honesty in the conduct of our business.
- ▶ Development of our people.

In order to achieve our goals, we are guided by the following principles:

- ▶ Provide direction and leadership.
- ▶ Encourage employees to perform better at all times.
- ▶ Promote understanding through effective communication.
- ▶ Encourage personal growth.
- ▶ Empower all employees by providing the appropriate training and equipment.

**The Board affirms its commitment to the principles of openness, integrity and accountability and to the provision of timeous, relevant and meaningful reporting to all stakeholders.**

# Corporate Governance

## Introduction

Corporate governance encompasses the Group's systems, structures and culture of governance to ensure that the Group acts responsibly to all its stakeholders economically, socially and environmentally. This portion of our Corporate Governance Report represents part of our corporate governance disclosures and includes further information provided in

83 Volume 1 (Business Report).

## Principles of Corporate Governance and Structures

The Board affirms its commitment to the principles of openness, integrity and accountability and to the provision of timeous, relevant and meaningful reporting to all stakeholders. It ensures that the Group's business is conducted in accordance with high standards of corporate governance and with local and internationally accepted corporate practice. These standards are entrenched in the Group's established system of internal control by its procedures and its policies governing corporate conduct, with particular emphasis on the importance of the qualitative aspects of corporate governance.

The Directors endorse the Code of Corporate Practices and Conduct set out in the second King Report on Corporate Governance for South Africa (King 2), which was released in March 2002. The Directors are of the view that the Group adheres to the Code of Corporate Practices and Conduct contained in King 2.

The principles contained in King 2 are reflected in the Group's corporate governance structures, which are reviewed from time to time to take into account organisational changes and international developments in the field of corporate governance. It is the policy of the Board and management to actively review and enhance the Group's systems of control and governance on a continuous basis to ensure that the Group's business is managed ethically and within prudently determined risk parameters in conformity with internationally accepted standards of best practice.

## Corporate Governance Structure

### The Board

Responsible to shareholders for setting direction through strategic objectives and key policies. Monitors implementation through structured reporting systems.

Executive Committee	Administration Committee	Corporate Governance Committee	Audit Committee	Remuneration Committee	SHE Committee	Nomination Committee
<p>Barry Davison <i>(Chairman)</i> John Dreyer Dorian Emmett Eric Ngubane Roeland van Kerckhoven Sandy Wood</p> <p>Recommends policies and strategies; monitors implementation; deals with all executive business; responsible for all material matters not reserved for the Board; co-ordinates and monitors resources to achieve the Group's aims.</p>	<p>Barry Davison <i>(Chairman)</i> John Dreyer Dorian Emmett Eric Ngubane Roeland van Kerckhoven Sandy Wood</p> <p>Responsible for all matters pertaining to staff and administration.</p>	<p>Tom Wixley <i>(Independent Non-executive)</i> <i>(Chairman)</i> Dave Barber Leslie Boyd <i>(Non-executive)</i> Colin Brayshaw <i>(Independent Non-executive)</i> Mike King <i>(Non-executive)</i> Hixonia Nyasulu <i>(Independent Non-executive)</i> <i>(With effect from 10 February 2003)</i> Roeland van Kerckhoven</p> <p>Reviews the quality of corporate governance and makes recommendations thereon to the Board; provides advice to directors and management in respect of conflicts of interest.</p>	<p>Colin Brayshaw <i>(Chairman)</i> Vincent Uren <i>(Alternate Non-executive)</i> Tom Wixley</p> <p>Monitors the adequacy of financial controls and reporting; reviews the audit plans of internal and external auditors; ascertains the reliability of the audit; ensures that financial reporting complies with IFRS, GAAP and the Companies Act.</p>	<p>Tom Wixley <i>(Chairman)</i> Colin Brayshaw Tony Trahar <i>(Non-executive)</i></p> <p>Establishes the overall principles of remuneration and determines the remuneration of Executive Directors; considers, reviews and approves the Group's policy on executive remuneration and communicates this to stakeholders in the Annual Report.</p>	<p>Bill Nairn <i>(Chairman)</i> Barry Davison Mzolisi Diliza <i>(Chief Executive, Chamber of Mines South Africa)</i> John Dreyer John Johnston Eric Ngubane</p> <p>Develops framework policies and guidelines for SHE management and ensures implementation; monitors Group compliance with relevant legislation.</p>	<p>Tom Wixley Colin Brayshaw Mike King Leslie Boyd Tony Trahar Hixonia Nyasulu</p> <p>Considers suitable nominations for appointments to the Board and makes appropriate recommendations in regard thereto to the Board.</p>

Operating Committee	Transformation Committee	Finance Risk Committee
<p>Dorian Emmett <i>(Chairman)</i> Rodney Baxter Peter Charlesworth John Dreyer André Geldenhuys Werner Grundling Mike Halhead Ron Hieber John Johnston Peter Kinver Eric Magnus Eric Ngubane Richard Pilkington Chris Sheppard</p> <p>Directs, monitors and controls all technical aspects of the Group's operations.</p>	<p>Eric Ngubane <i>(Chairman)</i> Mike Appelgryn Basie du Toit Peet Els Deon Farmer André Geldenhuys Len Heyneke Henry Kemp Chris Kern Cyril Khambula Jeanne Louw Derrick Madiba Theuns Mienie Kgabo Moabelo Denzil Muller Andries Niewoudt Eric Nkosi Delane Perfetti Christo Pretorius Khumo Seopela Leon Stander Karel Venter Henry Zondi</p> <p>Monitors compliance with, and advises on, the requirements of the Employment Equity Act.</p>	<p>Roeland van Kerckhoven <i>(Chairman)</i> Sandy Wood Tim Aiken Charles Buchanan</p> <p>Responsible for treasury risk management activities, subject to overall limits set by the Board.</p>

## Corporate Governance (continued)

### THE BOARD OF DIRECTORS

The Company has a unitary Board comprising six Executive and seven Non-executive Directors. Three of the Non-executive Directors are Independent in the sense contemplated by King 2. Mr Barry Davison is both Executive Chairman of the Board and Managing Director. The Board considers that the interests of the Group are at present best served through the merging of these offices. However, a process is under way to select and appoint a new CEO and to separate this role from that of Chairman. In compliance with the

recommendations of King 2, the Board has an Independent Non-executive Deputy Chairman. All the Directors bring to the Board a wide range of expertise as well as significant financial, commercial and mining experience and, in the case of Non-executive and Independent Non-executive Directors, independent perspectives and judgement.

The Board is responsible to the shareholders for setting the direction of the Group through the establishment of strategic objectives and key policies. It monitors the implementation of strategies and policies through a

Details of attendance by Directors at Board meetings during 2002 are set out below.

#### Directors' Attendance at Board Meetings, 2002

	18 February	27 May	9 July*	12 August	29 October*	18 November
Leslie Boyd (Non-executive)	P	P	P	P	P	P
Colin Brayshaw (Independent Non-executive)	P	A	P	P	P	P
Barry Davison (Executive Chairman)	P	P	P	P	P	P
John Dreyer (Executive)	P	P	P	P	P	P
Dorian Emmett (Executive, Chief Operating Officer)	P	P	P	P	P	P
Mike King (Non-executive)	P	A	P	P	P	P
Bill Nairn (Non-executive)	P	P	P	P	P	P
Eric Ngubane (Executive)	P	P	P	P	A	P
Tony Trahar (Non-executive)	A	P	P	P	P	A
Roeland van Kerckhoven (Executive)	P	P	P	P	P	P
Tom Wixley (Independent Non-executive and Deputy Chairman)	P	P	P	P	P	P
Sandy Wood (Executive)	P	P	A	P	P	P
Vincent Uren (alternate Non-executive)		P†				

A = Absent/Apology; P = Present; \* Special Board meeting; † Attended as an alternate to Mike King.

structured approach to reporting on the basis of agreed performance criteria and defined, written delegations to management for the detailed planning and implementation of such objectives and policies. The Board meets quarterly, or more frequently if circumstances so require, to review matters specifically reserved for its decision, including financial and operational results, and to consider issues of strategic direction, major acquisitions and disposals, approval of major capital expenditure and any other matters having a material effect on the Group.

The Board has a Charter setting out its mission, role, duties and responsibilities and, in particular, important aspects concerning the following:

- ▶ the Directors' fiduciary responsibilities;
- ▶ leadership of the Board;
- ▶ the induction of new Directors;
- ▶ the evaluation of Directors;
- ▶ the Board's relationship to staff and external advisors, as well as unrestricted access to Company records; and
- ▶ Board meetings and procedures.

The Directors have a responsibility, in terms of the Board Charter, to become acquainted with all of their duties, as

well as with the issues pertaining to the operations and business of the Company to enable them to fulfil their duties. To assist new Directors, an induction programme has been established by the Company, which includes background materials, meetings with senior management and visits to the Company's various operations and projects.

In terms of the Board Charter, the Directors are required to be assessed annually both individually and collectively as a Board. In addition, the Remuneration Committee is required to formally evaluate the Chief Executive Officer (CEO) annually based on objective criteria.

All Directors are subject to retirement by rotation and re-election by shareholders at least once every three years, in accordance with the Company's Articles of Association.

The Board as a whole approves the appointments of new Directors, on recommendation by the Nomination Committee.

All Directors have access to the advice and services of the Company Secretary and are entitled to seek independent professional advice concerning the affairs of the Group at its expense.

The Board has established a number of standing committees, which are

## Corporate Governance (continued)

ultimately answerable to the Board, namely:

- ▶ the Executive Committee;
- ▶ the Administration Committee;
- ▶ the Corporate Governance Committee;
- ▶ the Audit Committee;
- ▶ the Remuneration Committee;
- ▶ the Safety, Health and Environment (SHE) Committee;
- and
- ▶ the Nomination Committee

These committees operate within the defined terms of reference laid down in writing by the Board. The Audit, Remuneration and Nomination Committees are chaired by an Independent Non-executive Director and consist entirely of Non-executive Directors. The Corporate Governance Committee is chaired by an Independent Non-executive Director and consists mainly of Non-executive Directors.

Each Committee has a Charter setting out its role, duties and responsibilities. In addition, each Committee member is expected to undertake an assessment of the Committee's performance annually.

### EXECUTIVE AND ADMINISTRATION COMMITTEES

The membership of the Company's Executive and Administration

Committees consists of the Company's six Executive Directors.

The Executive Committee is constituted to assist the CEO in managing the business of the Group when the Board is not in session, subject to statutory limits and the Board's limitations on delegation of authority to the CEO. The Executive Committee assists the CEO in guiding and controlling the overall direction of the business of the Group and acts as a medium of communication and co-ordination between business units, Group companies and the Board.

The Administration Committee is responsible for administrative issues pertaining to the Corporate Office and the operations of the Group.

### OPERATING COMMITTEE

The Operating Committee, a sub-committee of the Executive Committee, is responsible for directing, monitoring and controlling all technical aspects of the Group's operations including projects, mining, metallurgical, refining and related operations.

### TRANSFORMATION COMMITTEE

The Group has adopted a formal employment equity policy, which is aligned with the requirements of the Employment Equity Act.

**The Executive Committee:**



▲ Barry Davison

▲ Sandy Wood

Eric Ngubane ▲



▲ Dorian Emmett

Roeland van Kerckhoven ▲



▲ John Dreyer

**Barry Davison** (57)  
Executive Chairman  
Appointed a Director: 1988  
Appointed Executive  
Chairman: 2001

**John Dreyer** (58)  
Executive Director: Projects  
Appointed a Director: 1998

**Dorian Emmett** (51)  
Chief Operating Officer  
Appointed a Director: 1991

**Eric Ngubane** (48)  
Executive Director:  
Human Resources  
Appointed a Director: 1998

**Roeland van Kerckhoven**  
(51) (Belgian)  
Executive Director: Finance  
and Corporate Development  
Appointed a Director: 1994

**Sandy Wood** (51) (British)  
Executive Director: Commercial  
Appointed a Director: 2001

## Corporate Governance (continued)

The Transformation Committee, which is a sub-committee of the Executive Committee, is responsible, *inter alia*, for monitoring compliance with, and advising on, the requirements of the Employment Equity Act. It is made up of representatives from each business

Executive Committee. It is responsible for treasury risk management activities within the Group, subject to the overall limits set by the Board.

### CORPORATE GOVERNANCE COMMITTEE

The Corporate Governance Committee was established in line with the spirit of the recommendations of King 2.

It is responsible, *inter alia*, for reviewing the quality of corporate governance in the Group, to make recommendations to the Board for its enhancement and for providing advice to Directors and management on issues that may lead to conflicts of interest.

### AUDIT COMMITTEE

83 The Directors' Report in the Business Report contains a statement relating to the Directors' responsibilities. For the purposes of enabling the Directors to fulfil these responsibilities and maintain systems of internal controls aimed at reducing the risk of error or loss, the internal audit function, acting on behalf of the Board, independently appraises the Group's internal systems of control and reports its findings to the Audit Committee. The audit approach entails a thorough comprehension of the Group's financial and business objectives, and of the underlying systems and procedures.



▲ Nurse Lesley Temane in one of Anglo Platinum's mobile clinics that travel throughout the surrounding rural and informal settlements in the Rustenburg area.

unit and Corporate Office and is chaired by the Executive Director: Human Resources.

### FINANCE RISK COMMITTEE

The Finance Risk Committee, which comprises marketing and treasury executives, is a sub-committee of the

The audit plan is determined annually, based on the relative degree of the inherent risk within Group operations. The overall effectiveness of internal auditing in the Group is achieved through the development, adoption and implementation of audit standards, methodologies and techniques, and by conducting ongoing training programmes to ensure that those tasked with this responsibility remain abreast of current developments and practices.

The Audit Committee also evaluates the performance, independence and effectiveness of the external auditors and considers any non-audit services to determine whether or not such services substantively impair their independence as external auditors. The Audit Committee also considers and makes recommendations on the appointment and retention of the external auditors. Before the audit commences, the Audit Committee discusses and reviews with the external auditors, their engagement letter and the terms, scope and nature of the audit function, procedure and engagement as well as the audit fee.

The Audit Committee comprises solely of Non-executive Directors, the majority of whom, including its Chairman, are Independent Non-executive Directors. The purpose of the Audit Committee is to assist the Board in discharging its duties relating to the safeguarding of

assets, the operation of adequate systems, financial control and reporting processes and the preparation of accurate financial reporting and financial statements in compliance with all applicable legal requirements and accounting standards. The Audit Committee also provides a forum for discussing business risk and control issues, for developing relevant recommendations for consideration by the Board and for overseeing the activities of the Group's internal and external audit functions. As such, the Audit Committee is an advisory committee and not a management committee. It does not perform any management functions, nor does it assume any management responsibilities, but has an independent objective role in submitting its recommendations to the Board for its approval or final decision.

In addition to the executives and managers responsible for finance, the head of internal audit and external audit partners attend meetings of the Audit Committee. The Committee meets at least three times a year.

The head of internal audit and external audit partners have unrestricted access to the Chairman of the Committee.

For reasons of good corporate governance, Mr Barry Davison relinquished his appointment as a member of the Audit Committee

on 13 February 2002, but continues to attend Committee meetings by invitation.

### REMUNERATION COMMITTEE

The role of the Remuneration Committee is to establish the overall principles of remuneration and to determine the remuneration of Executive Directors. It considers, reviews and approves the Group's policy on executive remuneration and communicates this to stakeholders in the Annual Report.

89 The Group's remuneration philosophy is outlined in the Business Report.

For reasons of good corporate governance, Mr Barry Davison relinquished his appointment as a member of the Remuneration Committee with effect from 1 January 2002 and was replaced by Mr Colin Brayshaw. Mr Davison continues to attend Committee meetings by invitation.

The Group's remuneration philosophy is designed to ensure that Anglo Platinum, by rewarding superior performance, is able to attract and retain the critical skills necessary to promote the prosperity of the Group. This philosophy is subject to ongoing review by means of internal and external benchmarking, with the objective of maintaining competitiveness in the labour market.

Executive Directors and their Alternates participate in the Group's Share Option

Scheme, which is designed to recognise the contributions of senior staff to the growth in the value of the Group's equity. Non-executive Directors do not participate in the Share Option Scheme. Within the limits imposed by the Group's shareholders, options are allocated to the Directors and senior staff in proportion to their contributions to the business as reflected by their seniority. The options, which are allocated at the middle market price ruling on the trading day prior to the date of allocation, vest after stipulated periods and are exercisable up to a maximum of 10 years from the date of allocation.

87 As has been mentioned in the Business Report, during January 2003 the Remuneration Committee recommended that the rules of the Anglo Platinum Share Option Scheme be reviewed and amended to provide for the exercise of share options based on performance-related criteria, rather than allow for share options to be exercised upon the lapsing of stipulated time periods. Work on these matters is under way and, once complete, will be submitted to shareholders for their consideration and approval.

90 The Report on Directors' Emoluments in the Business Report includes details of the emoluments of Executive Directors, including their interests in the Group's Share Option Scheme.

## **SAFETY, HEALTH AND ENVIRONMENT (SHE) COMMITTEE**

The Group strives to conduct its business with due regard for economic, social, cultural, safety, health and environmental concerns. The safety and health of the Group's employees and the well-being of the communities surrounding its mines are the focus of comprehensive policies and programmes dedicated to this end.

The SHE Committee was established to assist the Group in its endeavours to conduct its operations in a responsible manner that achieves a sustainable balance between economic and social development with due regard to the safety and health of its employees and the impact of its operations on the environment. The SHE Committee is also responsible for considering material national and international regulatory and technical developments in the fields of safety, health and environmental management.

The Committee is also charged with responsibility for monitoring Group compliance with the various safety, health and environmental laws that affect Group companies.

## **NOMINATION COMMITTEE**

The Nomination Committee has the responsibility for making recommendations to the Board on the appointment of new

Executive and Non-executive Directors, including the responsibility for making recommendations on the size, structure and composition of the Board generally and the balance between Executive and Non-executive Directors. The Committee is also charged with the responsibility of identifying and nominating candidates, for the approval of the Board, to fill Board vacancies as and when they arise. The Committee is required to put in place succession plans for the Chairperson of the Board and the Chief Executive Officer.

## **RISK MANAGEMENT**

In pursuance of its policy of aligning Group corporate governance with international best practice and thereby safeguarding the interests of stakeholders, the Executive Committee has been mandated by the Board to supplement the Group-wide system of internal control to monitor, manage and control significant Group risks. The achievement of these objectives is enhanced through compliance with and observance of the UK Turnbull Guidelines on internal control and King 2.

This risk management system is a principal factor facilitating the discharge of the Board's responsibility for ensuring that the extensive risks associated with the Group's operations are effectively managed and the interests of stakeholders safeguarded.

## Corporate Governance (continued)

Group risk management is achieved through the identification and control of all the main business risks, including operational risk, which could adversely affect the achievement of the Group's business objectives.

Fifteen risk areas have been identified, which form the basis for regular and exception reporting to the Executive Committee and the Board. Where appropriate, they are dealt with in the relevant sections of this Report and the Business Report.

For each risk area, owners have been appointed. Practical guidance for each risk area is detailed in the operational risk management handbook. The risk assessment and reporting criteria are designed to provide the Board with a consistent view of the key risks.

The established system of internal control for the management of risk, which requires transparency and clear accountability, has the commitment of senior management.

The above-mentioned system of internal control, which has been implemented at all key operations and is tailored to suit the specific circumstances of each business unit, provides reasonable rather than absolute assurance that the Group's business objectives will be achieved within the prescribed risk tolerance levels. The risk areas and control processes pertaining thereto are monitored across the Group on a continuous basis.

In conducting its annual review of the effectiveness of risk management, the Board considers the key findings from the

The Board has determined the level of acceptable risk and requires the operations to manage and report in terms thereof. Material issues and circumstances that could adversely impact on the Group's reputation are considered to constitute unacceptable risk.



ongoing monitoring and reporting processes and management and independent assurance reports. The Board also takes account of material changes and trends in the Group's risk profile and considers whether the control system, including reporting, adequately supports the Board's risk management objectives. The Board is satisfied that there is in place an adequate ongoing risk management process that identifies, evaluates and manages the main risks faced by the Group.

#### **INVESTOR AND SHAREHOLDER RELATIONS**

Regular presentations, attended by Executive Directors, are made to institutional investors, analysts and the media in South Africa, Europe and the United Kingdom and the United States to communicate Group strategy and performance. Constant contact is maintained with them by the Group's Corporate Communications Department. A corporate website (<http://www.angloplatinum.com>) facilitates the dissemination of the latest Group financial and operational data, as well as historical information.

#### **EMPLOYEE PARTICIPATION**

The new Employee Relations Policy signed between the Group and

recognised unions and associations provides for the establishment of partnership structures at business unit, regional and central levels. Their terms of reference require management and organised labour to deal with broad business issues, as well as social and environmental matters that affect the Group and its employees. The Group's communication policy involves all employees in a two-way process.

Other examples of participative structures include:

- ▶ Employment equity committees;
- ▶ SHE committees;
- ▶ Incentive Scheme monitoring committees; and
- ▶ Various joint task teams that deal with any ad hoc matters requiring in-depth investigation.

## **Good Citizenship: Our Business Principles**

#### **OUR RESPONSIBILITIES TO OUR STAKEHOLDERS**

The following highlights aspects of the Group's Business Principles, a complete copy of which will be made available on request. Our primary responsibility is to our investors. We seek to maximise shareholder value over time subject to due regard for the interests of other stakeholders.

## Corporate Governance (continued)

### Investors

We are committed to full compliance with relevant laws and rules, good corporate governance, transparency and fair dealing.

### Employees

We aim to employ the most appropriately skilled individuals and to invest in their development in a non-discriminatory environment.

### Communities

We aim to promote strong relationships with, and raise the capacities of, the communities of which we are a part.

### Customers and Business Partners

We seek mutually beneficial long-term relationships with our customers, business partners, contractors and suppliers based on fair and ethical practices.

### Governmental Bodies

We respect the laws of host countries, while seeking to observe within our operations the universal standards promulgated by leading inter-governmental organisations.

### Non-governmental Organisations

We aim for constructive relations with relevant non-governmental organisations.

## PRINCIPLES OF CONDUCT

### Business Integrity and Ethics

Without satisfactory profits and a strong financial foundation, it would not be possible to fulfil our responsibilities to shareholders. However, our corporate actions are not governed solely by economic criteria; they also take into account social, environmental and political considerations.

We will comply with all relevant laws and regulations.

We will not offer, pay or accept bribes or condone anti-competitive practices in our dealings in the marketplace and will not tolerate any such activity by our employees.

We prohibit employees from trading securities illegally when in possession of unpublished price-sensitive information.

We require our employees to perform their duties conscientiously and honestly.

### Corporate Citizenship

We seek to make a contribution to the economic, social and educational well-being of the communities associated with our operations.

We support the principles set forth in the Universal Declaration of Human Rights. Where it is within our power to do so we will seek to promote the observance of human rights in the countries where we operate.

### **Employment and Labour Rights**

We are committed to the adoption of fair labour practices and the eradication of discrimination at our workplaces.

We recognise the right of our employees to freedom of association.

We operate fair and appropriate means for the determination of terms of conditions of employment and provide employees with opportunities to enhance their skills and capabilities.

### **Safety, Health and Environmental Stewardship**

We have adopted a comprehensive Safety, Health and Environment (SHE) Policy and report regularly on our SHE performance.

Our objective is to prevent fatalities, work-related injuries and health impairment of employees and contractors and to minimise the impact of our operations on the environment.

Recognising the human tragedy caused by the HIV/AIDS pandemic we have a clear policy for addressing HIV/AIDS in the workplace and are committed to a comprehensive containment strategy, linked to programmes of care for those with HIV/AIDS.

## **Our Code of Ethics**

The following highlights aspects of the Group's Code of Ethics, a complete copy of which will be made available on request. Any contravention of the Code is regarded as a serious matter.

### **COMPLIANCE WITH LAWS AND REGULATIONS**

Employees must comply with all applicable laws and regulations that relate to their activities on behalf of the Group.

### **CONFLICT OF INTEREST**

The Group expects employees to perform their duties in accordance with the best interests of the Group and not to use their positions, or knowledge gained through their employment with the Group, for private or personal advantage.

### **Outside Activities, Employment and Directorships**

We all share a very real responsibility to contribute to our local communities. The Group encourages employees to participate in religious, charitable, educational and civic activities provided that such participation does not make undue demands on their time or create a conflict of interest.

## Corporate Governance (continued)

### Relationships with Clients, Customers and Suppliers

Employees should ensure that they are independent of any business organisation having a contractual relationship with the Group or providing goods or services to the Group.

### Gifts, Hospitality and Favours

An employee should not accept or solicit any non-minor gifts, hospitality or other favours from suppliers of goods or services.

### Personal Investments

Personal investment decisions must not contravene the conflict of interest provisions of this Code, any applicable legislation, or any policies or procedures established by the various operating areas of the Group, and must not be based on material non-public information acquired by reason of an employee's connection with the Group.

### DEALING WITH OUTSIDE PERSONS AND ORGANISATIONS

The Group strives to achieve complete, accurate and timely communications with all parties with whom it conducts business, as well as government authorities and the public. In addition, prompt internal communication is encouraged.

Employees approached by the media should immediately contact the department or individual responsible for corporate communications.



▲ Craft Planet, which commenced business in 1997, is a community project run by twelve local Bafokeng women and involves sewing, dying of fabrics, specialised printing and ethnic design. Craft Planet's proudest claim to fame is that Madiba himself is often seen wearing their hand made shirts. Anglo Platinum supports the project both in terms of resources and financial assistance.

As a general rule, the executive management of the Group will deal with the Group's position on public policy or industry issues.

## Aspects of Corporate Governance included in Volume 1

83 Aspects of Corporate Governance included in Volume 1 (Business Report) of the Annual Report which are not

specifically dealt with in this Volume include:

- ▶ Directors' responsibilities for the Annual Financial Statements;
- ▶ Empowerment of historically disadvantaged South Africans;
- ▶ A report on Directors' emoluments which includes Directors' service contracts, Executive Directors' emoluments, fees and bonuses paid in 2002 and Executive Directors' participation in share option schemes and other schemes of benefit as well as gains on share options exercised in 2002.



◀ Jerry Brander, the Group's Regional Socio-economic Development manager, at Tsholofelo Community College in Rustenburg, which is supported by Anglo Platinum.

The 2002 target for procurement from empowerment companies was R483 million.

At R502 million, actual procurement from such companies exceeded this target by 4%.

## Economic Impacts

### Employees

<b>Total Payroll and Benefits, R millions</b>	<b>2002</b>	2001
Gauteng	<b>256,9</b>	183,7
Limpopo	<b>1 656,7</b>	1 468,5
North West	<b>2 211,1</b>	1 870,3
Other	<b>9,7</b>	8,4
<b>Total</b>	<b>4 134,4</b>	3 530,9
<i>Salaries, wages and other benefits</i>	<b>3 775,7</b>	3 235,0
<i>Retirement benefit costs</i>	<b>304,6</b>	248,1
<i>Medical aid contributions</i>	<b>54,1</b>	47,8
<i>Redundancy payments</i>	<b>0,0</b>	0,0
<b>Total</b>	<b>4 134,4</b>	3 530,9

*Remuneration refers to current payments and does not include future commitments.*

### Public Sector

<b>Taxes Paid of All Types, R millions</b>	<b>2002</b>	2001
South Africa	<b>3 526,1</b>	4 744,6
Switzerland	<b>140,9</b>	170,3
<b>Total</b>	<b>3 667,0</b>	4 914,9
<b>Donations, R millions</b>	<b>2002</b>	2001
<i>Community Groups:</i>		
Cash	<b>6,0</b>	6,1
In-kind	—	—
<i>Civil Society Groups:</i>		
Cash	<b>5,6</b>	12,6
In-kind	—	—
<i>Other Groups:</i>		
Cash	<b>34,9</b>	31,1
In-kind	—	—
<b>Total</b>	<b>46,5</b>	49,8

*The Group is aware that 'in-kind' donations are made but it has not as yet measured the total; a measurement system will be introduced in 2003.*

### **Non-core Business Infrastructure Development\*, R millions**

	<b>2002</b>	2001
<b>Total</b>	<b>11,5</b>	6,3

*\*This is infrastructure built outside main business activities, such as schools or hospitals for employees and their families.*

## Private Sector

### HDSA EMPOWERMENT

Anglo Platinum recognised at an early stage the importance for the mining industry of empowering historically disadvantaged South Africans and is one of the pioneers of significant and successful transactions and initiatives to this end.

Anglo Platinum continues to support this process and is proud of the contribution the Group has made by facilitating empowerment transactions on projects and operations with a total value of over R5 billion. If the value of expected transactions flowing from the

agreement with Government on the Eastern Limb mineral rights is included, the amount increases to over R8 billion.

These transactions include facilitating the purchase of 22,5% of Northam Platinum by Mvelaphanda Platinum (August 2000), a 50:50 joint venture with a consortium led by African Rainbow Minerals in respect of Modikwa Platinum Project (August 2001) and the 50:50 joint venture with the Royal Bafokeng Nation on the Bafokeng-Rasimone Platinum Mine incorporating the Styldrift project area (July 2001), which is presently subject to certain suspensive conditions.



Moleti Mphale (right) underwent an emergency heart operation after suffering from heart-related respiratory illness. Mphale, now fully recovered, is seen here with the nursing staff from Rustenburg Section's Mine Hospital.

## Economic Impacts (continued)

The Group's commitment to fostering such projects has been reaffirmed by the agreement reached with

- 85 Government regarding substantial empowerment participation on portions of the Eastern Limb expansion projects (August 2002).

As defined by the South African Government, empowerment in the mining industry consists of a number of interrelated areas aimed at increasing the involvement of historically disadvantaged South Africans in the industry. These areas are: equity participation (or strategic partnerships); community upliftment (including corporate social investment, health, infrastructure and the social plan); support for small and medium enterprises; employment equity; and skills transfer (via education and training).

### PROCUREMENT AND OUTSOURCING IN THE PROMOTION OF EMPOWERMENT

The planned implementation of the new empowerment policy entails the deployment of Business Development Officers in various business units. Coupled with this, changes have been incorporated into the Group procurement policies, which mandate the Socio-economic Development Department to vet tendering and the mechanisms within which enquiries are issued, with a view to ensuring opportunities for HDSA's.

The 2002 target for procurement from empowerment companies was R483 million. At R502 million, actual procurement from such companies exceeded this target by 4%. The programme established 12 new business ventures. Another 37 projects are currently under consideration.

### SUPPLIERS

The following table illustrates the five largest suppliers to Anglo Platinum in 2002, exclusive of VAT (R millions):

		2002	2001
Eskom	Energy	641,0	544,3
Grinaker	Construction	310,8	108,4
Sandvik Tamrock	Mining Equipment	283,3	85,1
Brandrill Torrex	Mining	228,2	58,4
JIC Mining	Contract Mining	226,5	160,9

## CUSTOMERS

The Group is primarily a PGM producer operating in South Africa. All other metals produced result from the same indistinguishable process from which PGMs are produced.

<b>Gross Sales Revenue, R millions</b>	<b>2002</b>	2001
Platinum	<b>12 527,4</b>	9 361,3
Palladium	<b>3 773,9</b>	5 176,5
Rhodium	<b>1 862,5</b>	2 546,5
Gold	<b>351,5</b>	244,0
<i>Total 4E</i>	<b>18 515,3</b>	17 328,3
Nickel	<b>1 325,2</b>	990,5
Other	<b>445,2</b>	372,1
<b>Grand total</b>	<b>20 285,7</b>	18 690,9

<b>Gross Sales Revenue, R millions</b>	<b>2002</b>	2001
North America	<b>1 697,6</b>	1 509,9
Asia	<b>6 840,9</b>	5 925,6
Europe	<b>8 782,6</b>	8 478,2
Africa	<b>2 944,8</b>	2 753,9
Other	<b>19,8</b>	23,3
<b>Total</b>	<b>20 285,7</b>	18 690,9

The following details of Anglo Platinum market shares are based on the Group's production as a proportion of demand, which is defined by Johnson Matthey as sales of new metal.

<b>Market Share of Global Demand, %</b>	<b>2002</b>	2001
<b>Platinum</b>	<b>35</b>	34
<b>Palladium</b>	<b>23</b>	15
<b>Rhodium</b>	<b>37</b>	35

## PROVIDERS OF CAPITAL

<b>Distributions to Providers of Capital, R millions</b>	<b>2002</b>	2001
Interest on short-term debt	<b>35,4</b>	19,9
Interest on long-term debt	—	—
Dividends	<b>5 362,9</b>	6 087,4
<b>Total</b>	<b>5 398,3</b>	6 107,3
Increase in retained earnings at end of year	<b>896,6</b>	1 440,6

## Sustaining Anglo Platinum's Economic Viability

### CONTINUOUS BUSINESS IMPROVEMENT (CBI)

The CBI initiative, formerly known as 'Project Breakthrough', was vigorously pursued in 2002 with the implementation of programmes focused on improving the performance of the core processes within the business.

#### Mining Optimisation

This programme focuses on improving the performance of the underground mining process through refinement of best practices.

During 2002, each of the mining business units added additional resources to their programmes. The philosophy behind the programme is to develop employee skills through practical on-the-job mentoring, combined with ensuring that the infrastructure and appropriate support systems are in place, thereby creating sustainability. The programme continues to achieve measurable benefits in the form of additional ounces and reduced unit costs. Given the size of the mining operations and the nature of the rollout programme, it is anticipated that the programme will continue for at least an additional 18 months until all areas have been covered.

#### Mechanisation

Mechanisation, where appropriate, is seen to have a number of benefits compared with conventional mining systems, including greater safety, increased productivity, unit cost reduction and accelerated production profiles. Mechanisation also helps to mitigate the shortage of mining skills, which has been aggravated by the general expansion of the industry now taking place. It is also accepted that the Group has a responsibility to improve underground working conditions.

The main programme suites that are currently being developed, and in many cases tested, include:

- ▶ Conventional mining systems, technology that is appropriate to brownfield operations.
- ▶ Trackless mining systems, similar to the technology found in the chrome-mining industry.
- ▶ Long-hole stoping systems, currently being field-tested, in which holes are drilled to 30 metres in length.
- ▶ Rock-cutting systems whereby the rock is cut as opposed to being drilled and blasted. This technology could, in the long term, facilitate the use of continuous operations.
- ▶ Logistics systems, to efficiently transport ore generated as a result of new mining systems.

Progress has taken place on a broad front, but a major step forward has been achieved with the commissioning of Waterval mine, which is fully mechanised utilising drill rigs and trackless equipment and was producing at 180 000 tons per month within the first year.

Mechanisation is considered by the Group as an imperative and one of the key thrusts of the operations strategy. While mechanisation is still in the early stages of the R&D life cycle, it continues to represent a major opportunity for improved performance. The challenges remain to adapt and develop the technologies to the specific requirements of PGM ore bodies, to fully integrate the mining and logistical processes and to ensure understanding and acceptance by employees.

### Concentrator Optimisation

The optimisation programme to date has focused on existing operations, introducing and refining best operating practices, together with the implementation of new systems and plant and equipment to raise concentrator performance.

Efforts have concentrated on improving the performance and control of the comminution and flotation circuits, with a particular focus on the control of concentrate quality to the Process Division. Pilot programmes involving the implementation of modern maintenance and performance management systems are under way at two of the Group's concentrators.



◀ This sulzer three-boom drill rig, in operation on panel four at Union Section-Four South Decline, exemplifies the Group's policy of greater mechanisation.

### Other Programmes

It has been recognised that other supporting interventions are required that will enable the Group to raise its performance and consequently additional programmes have been initiated as part of the CBI process. These include:

the wider sharing of successes is expected to assist in lowering the risks associated with the business and improving the productivity of the Group.

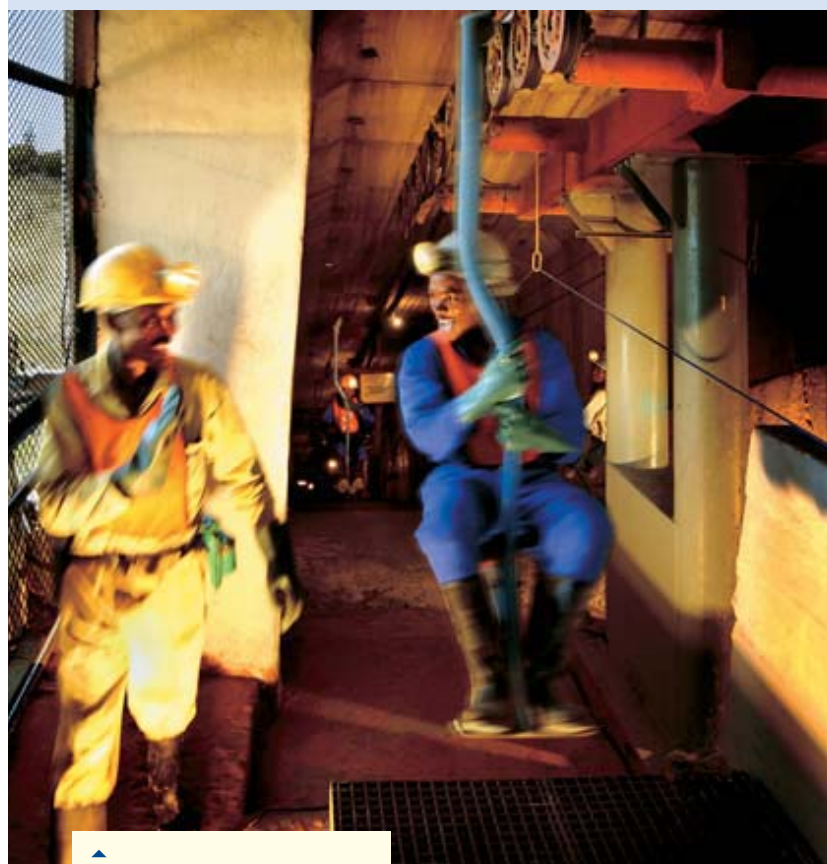
### Executive Information Systems (EIS):

In the interests of better decision-making within the Group, a comprehensive EIS has been designed and installed that provides a common database, accessible on-line to all relevant decision-makers, which provides the latest information on the performance of key parameters at Group and business unit levels.

**The Platinum Way:** A new initiative that commenced during the year was a programme to capture and standardise certain common processes and procedures, known as the “Platinum Way.” As the Group has expanded, the need to develop and implement a common approach across the operating units has become apparent.

Continuous Business Improvement is, by definition, an ongoing process that seeks to facilitate change within the organisation, as well as to act as a catalyst for optimising business processes. The integration with the overall strategic business planning process is considered to be an important factor in formalising this process and ensuring alignment with the goals of the operations.

**Knowledge Management:** Anglo Platinum launched its drive to improve the utilisation of its intangible assets by formalising a Knowledge Management approach in 2002. The longer-term objective is to develop a culture of innovation within the organisation. Learning from previous mistakes and



▲  
Miners riding the T-bar chairlift to surface at Amandelbult No.1 Shaft.

## RESEARCH AND DEVELOPMENT (R&D)

The Group's R&D efforts continued during 2002, based at the Anglo Platinum Research Centre (ARC) in Germiston, together with collaborative programmes with Johnson Matthey Technology Centre (JMTC) and Anglo American Research Laboratories (AARL). In addition, numerous programmes at universities and technical institutions, primarily in South Africa, Australia, Europe and Canada, supported the policy of accessing the best global technological input. The total expenditure on research and development in 2002 was R151,8 million.

The beneficiation and refining process is technically complex, and both current operations and the expansion programme place a heavy reliance on the technological prowess of the Group. The dedicated and platinum-focused facility at ARC, and the co-ordinated R&D strategy operated by the Group, are of strategic importance and represent a unique competitive advantage.

The high level of support to operations and the expansion projects continued

during 2002. These efforts centred particularly on the mineral processing, mineralogy and pilot facilities at the Divisional Metallurgical Laboratory (DML) pilot plant in Rustenburg and were aimed at mining and concentrator initiatives.

The minerals processing, pilot and process control sections were heavily involved in operations support, commissioning and flow sheet testing activity. In addition, programmes aimed at gaining fundamental understanding of the operations continued, with some material progress in flotation chemistry and process control.

Smelter activity included support to the commissioning of the ACP plant and the programmes for defining the impact of various potential future operating regimes.

Refinery activity was mainly aimed at the PMR expansion, where the ability to achieve increased platinum and palladium throughput in the current plant was demonstrated on-plant. New technology, developed as part of ARC's work, has allowed a deeper insight into refining chemistry.

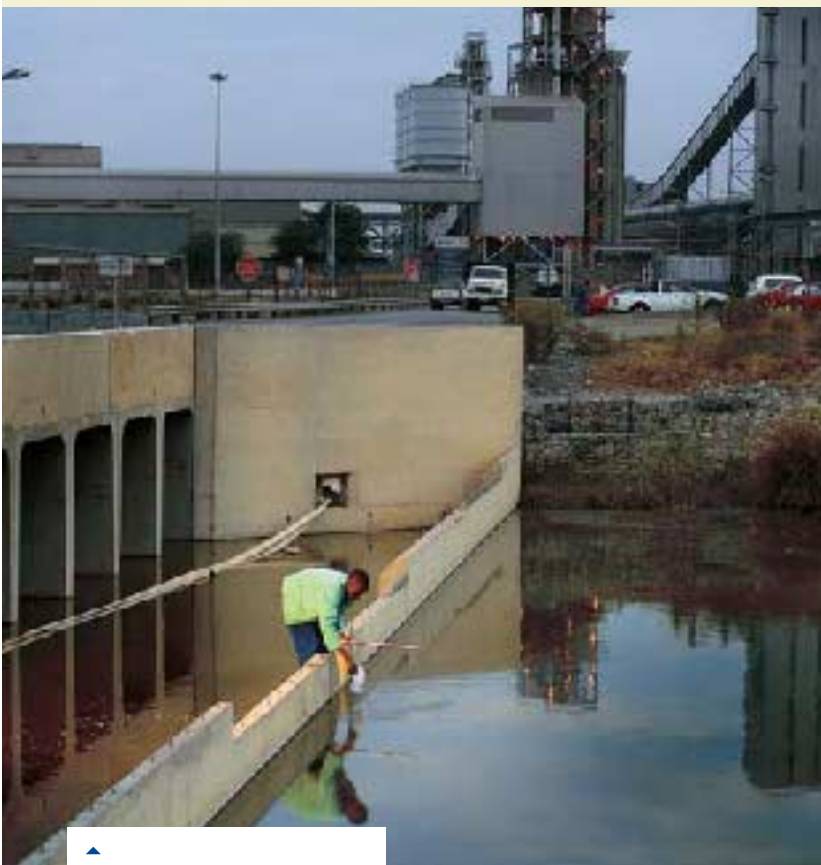
**The Group is committed to the creation of a safe and healthy environment  
for all its employees and the members of the communities with  
which it interacts.**

## Environmental Impacts

The Group affects the environment in a variety of ways. Mining uses both renewable and

non-renewable resources. In the process of mining and beneficiation, land is transformed and ground and surface water are impacted upon, resources used, substances emitted to air and wastes generated. The social and economic dynamics in the areas where operations are located are also affected. Such interaction can lead to both positive and negative environmental impacts. Most of the environmental impacts are confined to the local environment in which operations are situated, but some aspects also have positive global implications, such as the use of PGMs in autocatalysis.

To manage and mitigate the negative impacts, the Group has put into place an environmental policy, environmental management systems and management plans.



▲  
pH monitoring at the flow control dam on a stream that passes the Waterval Smelter.

### Environmental Policy and Management System

The Group is committed to the creation of a safe and healthy environment for all its employees and the members of the communities with which it interacts. In order to give expression to this commitment and to measure progress, the Group has the following aims in terms of the environment:

- ▶ Conserve environmental resources.
- ▶ Prevent or minimise adverse impacts arising from the Group's operations.
- ▶ Demonstrate active stewardship of land and biodiversity.

- ▶ Promote good relationships with, and enhance capacities of, the local communities of which it is a part.
- ▶ Respect people's culture and heritage.

All business units and contractors are also required to adhere to the eight management principles set out in the following section and to actively encourage implementation by business partners.

Notwithstanding the Group policy, each business unit derives its own specific environmental policy, taking full cognisance of the requirements of the Group SHE Policy, the Anglo American plc Group SHE Policy, local circumstances and ISO14001 requirements. A Group goal to achieve ISO14001 environmental management system certification at all operational business units by end-2004 has been set. BRPM was the first business unit to achieve certification.

Each business conducts an annual self-assessment of its environmental performance against the eight management principles contained in the SHE Policy. The results of the self-assessment are verified at a different business unit each year by an external consultant. KPMG conducted the 2002 verification at PPRust. The results of the 2002 and 2001 self-assessments are shown in the chart on page 38. Modikwa Platinum Mine, a non-managed operation, is not included in the consolidated results for the Group. It will be included in the future.

A discussion of the eight management principles follows:

#### COMMITMENT

The Group believes that environmental management is a line function. Therefore, business managers are fully responsible for implementing the Group policy at their business units. The business managers report to the divisional directors, who attend the Board SHE Committee meetings held every quarter.

Business managers are assisted by environmental co-ordinators. All business units have allocated adequate financial and human resources to proactively manage their environmental impacts.

A Group Environmental Systems Manager was appointed during the year to oversee the implementation and standardisation of environmental management systems based on the ISO14001 requirements throughout all the operational business units.

The Group's Environmental Consultant is responsible for ensuring that the Group environmental policy is uniformly implemented across all business units, that environmental aspects are properly addressed in new projects and acts in an advisory and co-ordinating capacity between business units and senior management. The Consultant also represents the Group on external committees, such as the Environmental Policy Committee at the Chamber of Mines. Material environmental impacts and statistics are reported to, and discussed at, the quarterly meeting of the SHE Committee of the Board.

## Environmental Impacts (continued)

### COMPETENCE

There has been a further advance in environmental competence throughout the Group, mostly because of appointments of highly capable environmental personnel during the year. Environmental training and awareness at management level has also increased, due to the formal implementation of ISO14001 at all operational business units.

### RISK ASSESSMENT

All business units have Environmental Management Programmes (EMPs), which have been approved by the Department of Minerals and Energy (DME) after consultation with other relevant government departments. These documents contain comprehensive environmental impact assessments, as well as environmental management plans to mitigate negative impacts and sustain positive impacts. There is a statutory obligation on all

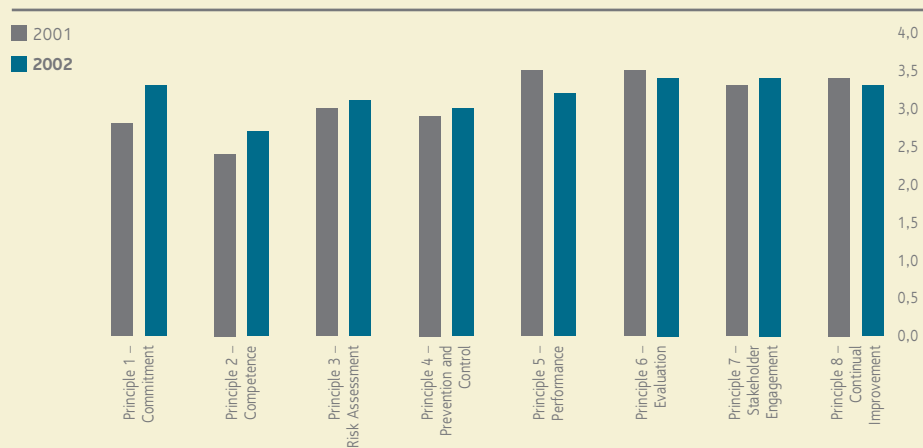
business units with approved EMPs to implement these environmental management plans. All expansion projects being undertaken also have approved EMPs.

EMPs are amended and updated as required to ensure that environmental risks are reassessed and that management plans remain relevant.

### PREVENTION AND CONTROL

Environmental management plans, as contained in the EMPs, are continually implemented at all business units.

As mentioned, Anglo Platinum has also committed itself to implementing environmental management systems based on ISO14001 at all its operational business units, key elements of which are prevention of pollution and control of impacts. BRPM achieved ISO14001 certification early in 2002. The other business units will follow during 2003 and 2004.



Anglo Platinum environmental management system self-assessment questionnaire  
0 = no compliance 4 = full compliance

## PERFORMANCE

Environmental parameters from the business units are captured on an individual basis in a Group-wide database.

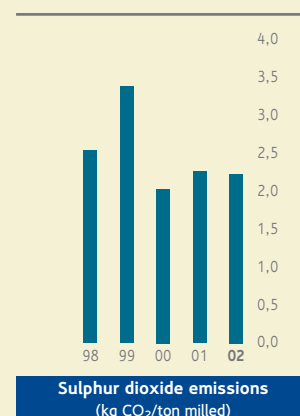
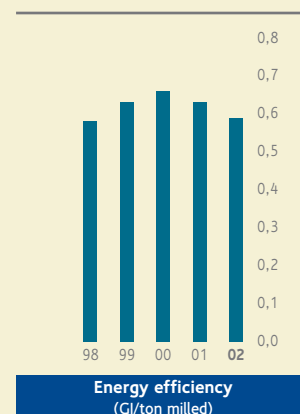
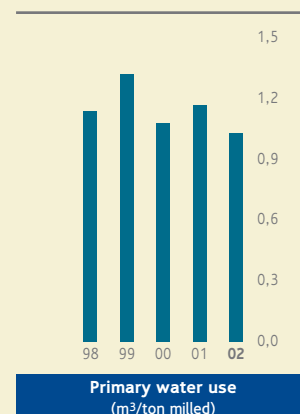
These parameters can be made to reflect various indicators. A comprehensive breakdown of these parameters is given on pages 43 to 49 and a five-year review of the key performance indicators used by the Group is given in the table below.

	2002	2001	2000	1999	1998
Land utilisation (% land utilised/land under Group charge)	17	13	11	16	16
Primary water use (m <sup>3</sup> /ton milled)	1,03	1,17	1,08	1,32	1,14
Effluent discharged: point sources (m <sup>3</sup> /ton milled)	0,08	0,09	0,09	*	*
Energy efficiency (GJ/ton milled)	0,59	0,63	0,66	0,63	0,58
Greenhouse gas (GHG) emissions (kg CO <sub>2</sub> /ton milled) from processes and fossil fuels	10,13	11,21	12,29	9,19	6,27
Greenhouse gas emissions (kg CO <sub>2</sub> /ton milled) from electricity purchased	115,50	106,43	*	*	*
Sulphur dioxide emissions (kg/ton milled)	2,23	2,26	2,03	3,38	2,54
Particulate emissions: point sources (kg/ton milled)	0,05	0,20	0,20	0,07	0,42

\* not available.

Referring to the above table:

- ▶ Land utilisation percentage has increased mainly due to a reinterpretation of the definition by some of the business units.
- ▶ The aim is to bring the primary water use down to below a target of 1 m<sup>3</sup>/ton milled.
- ▶ Water optimisation and recycling plans are under way to reduce discharges from point sources to the minimum.
- ▶ A target for energy efficiency must still be set.
- ▶ The highest contribution to greenhouse gas emissions is due to electricity purchased; less than ten percent of GHG emissions are generated at the operations.
- ▶ Sulphur dioxide emissions remain high, but will drop by over 80% once the ACP project is fully commissioned.
- ▶ Particulate emissions from point sources remain low; the main challenge is to control the total particulate emissions from diffuse sources.



## Environmental Impacts (continued)

### Environmental Incidents

The following environmental incidents were reported during 2002 and 2001:

	2002	2001
Level 1 (minor impact)	1 933	337
Level 2 (intermediate impact)	11	8
Level 3 (major impact)	0	0

*Definitions are shown in the glossary at the end of this Report.*

All but two of the eleven Level 2 incidents were related to spills into rivers, water bodies and onto land. All the spills were cleaned up and corrective action was taken to prevent future occurrences. None had any material long-term impact on the surrounding environment. The other two Level 2 incidents relate to excessive downtime of the Waterval Smelter acid plant.

### Legal Compliance

The Group must comply with numerous environmental regulations, permits, licences and statutory management plans. To manage legal compliance proactively, most business units have established environmental legal registers, which link all environmental aspects and impacts, where relevant, to specific regulations, licences, permits or statutory management plans.

Anglo Platinum is not aware of any pending environmental litigation and no fines or penalties have been imposed during 2002 for non-compliance with environmental regulations and permits. All infringements of regulations, permit or licence conditions are reported to the relevant regulators and corrective action taken as soon as practicable in all circumstances.



Occupational Hygiene Assistant **Abraham Makodi** adjusting the alignment of the Fenceline Monitoring System's laser light to target a distant receiver at the perimeter of the ACP and Waterval Smelter complexes. The system monitors gases and airborne particles which pass through the beam.

The dramatic increase in the number of Level 1 incidents reported indicates not poorer performance but better management systems and enhanced awareness of environmental issues. It is anticipated that Level 1 incident reporting will rise further once ISO14001 is fully entrenched at all business units.

## EVALUATION

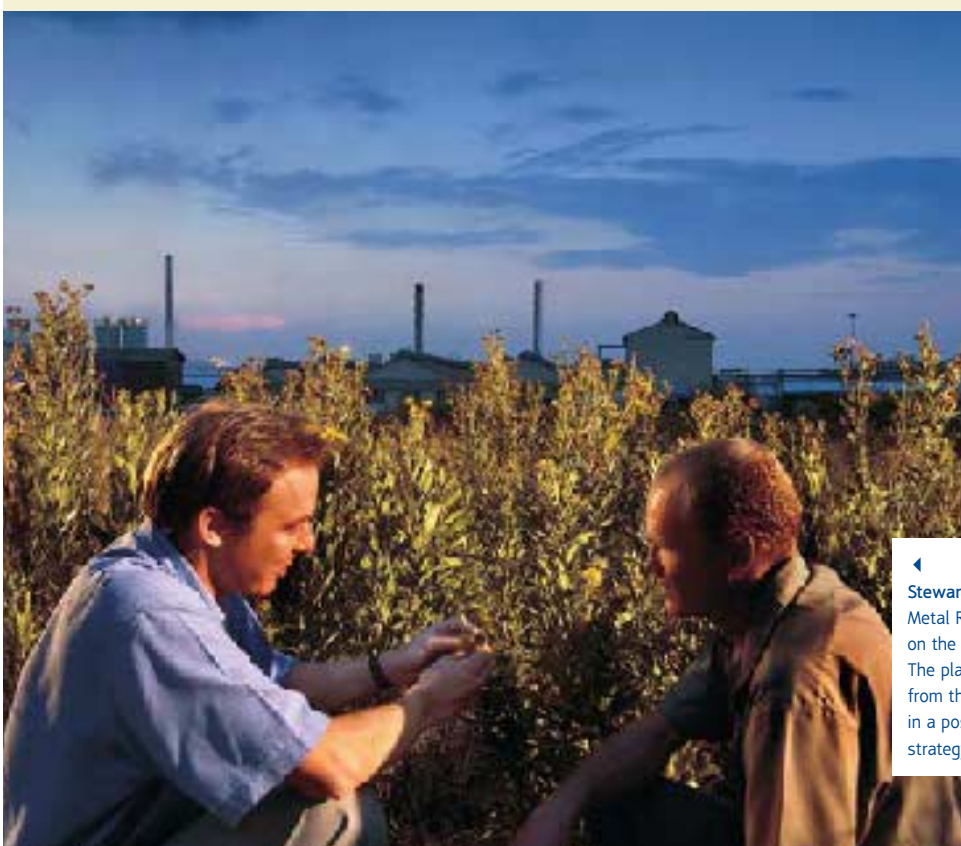
### Audits and Assessments

Environmental audits and performance assessments are key elements of evaluating environmental performance. Anglo Platinum uses a mix of in-house audits and external auditors to assess its environmental performance. These assessments and audits include statutory EMP Performance Assessments in terms of Regulation 5.18 of the Minerals Act, legal

compliance audits as well as external audits in terms of ISO14001 implementation.

The Group continues to develop and enhance the positive working relationship between Anglo Platinum and key government departments tasked to implement environmental laws. Regular contact is maintained through environmental liaison, EMP meetings and frequent site visits to Group operations.

Business unit	Internal Assessments		External Assessments	
	2002	2001	2002	2001
Rustenburg	Y	Y		
Union	Y		Y	Y
Amandelbult	Y		Y	Y
PPRust	Y		Y	Y
Leplats	Y			Y
BRPM	Y		Y	Y
Waterval Smelter	Y			Y
RBMR	Y		Y	Y
PMR	Y		Y	Y



◀ Stewart Whyte (left) of the Base Metal Refinery inspecting progress on the Berkheya Coddii project. The plants hyperaccumulate nickel from the soil and could be used in a post-closure and remediation strategy for base metal facilities.

## Environmental Impacts (continued)

Site Manager George Matome (left) of Go-Awaste, an empowerment waste management company. Go-Awaste, set up by Anglo Platinum and Anglo American's Zimele, has taken over responsibility for the landfill site at Rustenburg Section and is in the process of expanding to other operations within the Group.



Formal reports with findings and recommendations were compiled for each assessment, and follow-up action taken at business unit level.

### Reports

Environmental reports are compiled on a quarterly basis by each business unit. A consolidated environmental report for the Group is also compiled quarterly and given to the Group SHE Manager for consolidation into the quarterly SHE Report, which is distributed to the Anglo Platinum Board and to the Anglo American plc SHE Policy Unit.

### STAKEHOLDER ENGAGEMENT

Stakeholder engagement remains a key activity for Anglo Platinum in its environmental efforts. Stakeholders are engaged through comprehensive public participation processes during the development stages of all major capital projects.

### CONTINUAL IMPROVEMENT

The Group strives to continually better its environmental performance to reduce the negative impacts that it has on the natural and social environments. The following is notable in this regard:

- ▶ The ACP project commissioning commenced during 2002. One of the aims of this project is to reduce the sulphur dioxide emissions of the smelter to less than 20 tons per day.

- ▶ Emissions to air, land and water continued to be monitored and the data generated is used to demonstrate legal compliance, determine impacts and plan appropriate remediation programmes.
- ▶ Eradication of invader tree species at BRPM, Union Section, Amandelbult Section and PPRust continued during the year.
- ▶ Rescue operations of indigenous plants continued during the year at new project sites, notably at PPRust and the Twickenham project. Various nurseries were established in the Twickenham project area to protect and propagate indigenous plants to be used for rehabilitation.
- ▶ Anglo Platinum was instrumental in setting up on the Eastern Limb an empowerment company whose focus is on environmental training and awareness in the local population, and on the rehabilitation of areas disturbed due to exploration and mining activities, utilising local labour and indigenous plants.
- ▶ Go-Awaste Management Services (Pty) Ltd (Go-Awaste), a Black Empowerment waste management company, was set up by Anglo American's Zimele initiative and Anglo Platinum to provide a total waste management solution, initially to Rustenburg Section, and later to other business units.

## Environmental Performance Indicators

Data covers all Anglo Platinum operations, excluding Modikwa, the Twickenham mining and Polokwane smelter projects but including Rustenburg UG2 Phase 1 and BRPM.

### MATERIALS

Materials Use	Million tons		Tons per ounce PGM + Au	
	2002	2001	2002	2001
<i>Rock mined</i>	<b>65,961</b>	52,406	<b>16,5</b>	13,9
<i>Ore milled</i>	<b>30,864</b>	26,844	<b>7,7</b>	7,1
<i>Accumulated low-grade stockpiles</i>	<b>10,769</b>	9,553	<b>2,7</b>	2,5
<i>Coal</i>	<b>0,081</b>	0,085	<b>0,02</b>	0,02
<i>Liquid petroleum gas (LPG)</i>	<b>0,003</b>	0,001	<b>&lt;0,01</b>	<0,01
<i>Grease</i>	<b>0,001</b>	0,001	<b>&lt;0,01</b>	<0,01

	000's litres		Litres per ounce PGM + Au	
	2002	2001	2002	2001
<i>Fuels</i>	<b>40,545</b>	37,260	<b>10,1</b>	9,9
<i>Lubricating and hydraulic oil</i>	<b>2,389</b>	1,754	<b>0,59</b>	0,46

Definitions are shown in the glossary at the end of this Report.

### ENERGY

Energy	000's Gigajoules		GJ per ounce PGM + Au	
	2002	2001	2002	2001
<i>Energy from electricity purchased</i>	<b>14 433</b>	13 359	<b>3,61</b>	3,53
<i>Energy from processes and fossil fuels consumed</i>	<b>3 661</b>	3 544	<b>0,92</b>	0,94
<i>Renewable energy</i>	<b>0</b>	0	<b>0</b>	0
<i>Energy used for travel* (product and people transport)</i>				
<i>Total energy consumed</i>	<b>18 094</b>	16 903	<b>4,53</b>	4,47

\*Not available at present.

Definitions are shown in the glossary at the end of this Report.

Energy used for transport of concentrates between mines and smelters, transport of final product to market and business travel of employees has not yet been quantified and is therefore excluded from the total energy calculation at this stage.

Anglo Platinum makes no use of renewable energy at present.

## Environmental Impacts (continued)

### WATER

Water	000's m <sup>3</sup>		m <sup>3</sup> per ounce PGM + Au	
	2002	2001	2002	2001
<i>Water use for primary activities</i>	<b>31 928</b>	31 390	<b>7,98</b>	8,31
<i>Potable water from an external source</i>	<b>21 006</b>	15 625	<b>5,25</b>	4,14
<i>Non-potable water from an external source</i>	<b>2 065</b>	1 447	<b>0,51</b>	0,42
<i>Waste water/second class water used</i>	<b>969</b>	1 052	<b>0,24</b>	0,23
<i>Surface water used</i>	<b>325</b>	573	<b>0,08</b>	0,15
<i>Groundwater used</i>	<b>9 501</b>	15 721	<b>2,38</b>	4,16

*Definitions are shown in the glossary at the end of this Report.*

Water use for non-primary activities, such as water supply to mining villages, informal settlements, golf courses and swimming pools at mining villages is not included in the above uses, as it is not production-dependent; it typically varies between three and five million cubic metres per annum.

Water recycled from tailings return water dams is also not included in the above water uses. The water balances are being improved to quantify such recycled water more accurately.

The management of water and its accurate measurement are complex at many business units. Much effort is put into optimising water balances and improving measurement and reporting of water use. The water figures must at this stage be viewed as good approximations.

### BIODIVERSITY

Biodiversity	Hectares	
	2002	2001
<i>Land under Group charge</i>	<b>46 996</b>	52 482
<i>Land altered for mineral extraction activities</i>	<b>8 109</b>	6 851
<i>Mining in formerly protected areas</i>	<b>0</b>	0

*Definitions are shown in the glossary at the end of this Report.*

The Group holds surface and freehold rights over large tracts of land, but uses a relatively small section of this land for mining and infrastructure purposes. Of the total area where surface rights or freehold titles are in place, only about 17% are altered for mining operations and infrastructure.

The land under Group charge is lower for 2002, not because of the disposal of any land but as a result of a reinterpretation of the definition of such land by some business units.

### Rehabilitation

All the mines, except PPRust, are underground mines. However, limited opencast mining has been taking place during the past few years at some of the traditionally underground operations. These are rehabilitated concurrently with mining. The open

pits at PPRust (currently Sandsloot and Zwartfontein South) will not be backfilled once mined out.

### Protection and promotion of biodiversity

The Group is involved in various projects to promote, protect and advance knowledge on biodiversity.

Parks dedicated to conserving and promoting biodiversity have been created at Union and Amandelbult sections. The total area of these parks is over 2 000 hectares and will be increased in future.



Occupational Hygiene Assistant Richard Smith performing routine inspection and maintenance of monitoring equipment at the Waterval Village Air Quality Monitoring station.

## Environmental Impacts (continued)

### EMISSIONS, EFFLUENTS AND WASTE

Emissions to Air	000's tons		kg per ounce PGM + Au	
	2002	2001	2002	2001
<i>Greenhouse gas emissions, CO<sub>2</sub> equivalent:</i>				
<i>From electricity purchased</i>	<b>3 565</b>	2 857	<b>891</b>	757
<i>Internally generated</i>	<b>313</b>	306	<b>78</b>	81
<i>Ozone-depleting compounds, vented/released to atmosphere</i>	<b>0</b>	0	<b>0</b>	0
<i>Sulphur dioxide</i>	<b>68,7</b>	61,4	<b>17</b>	16
<i>Particulates (point sources)</i>	<b>1,4</b>	1,9	<b>&lt;1</b>	<1

Definitions are shown in the glossary at the end of this Report.

Most of the GHG emissions (90%) are due to electricity purchased from the public utility, Eskom. Only about 10% of the GHG emissions are due to processes and fossil fuel usage.

Ozone-depleting substances have been phased out from all major installations, but there are a few minor installations in which these substances are still present. These include certain fire-fighting systems and some domestic appliances used at the business units.

As previously mentioned, sulphur dioxide emissions will fall by over 80% once the ACP project is fully commissioned. Monitoring stations have continuously been measuring ambient sulphur dioxide concentrations at five locations in the Rustenburg region since 1995. These stations are

placed at various distances from the Waterval Smelter. Ambient climate conditions, topography, location of residential areas and the impact zone from the Smelter were taken into account when the locations of the monitoring stations were determined. The results of these measurements can be used in real-time models to predict air quality conditions under various production scenarios. The hourly average South African sulphur dioxide guideline (300 parts per billion) was exceeded 66 times during 2002, of which 47 instances occurred at the Waterval Village monitoring station. During 2001, there were 90 such cases, of which 57 occurred at the Waterval Village monitoring station. The poor performance of the smelter's acid plant (which is being replaced with a new one as part of the

ACP project) was to blame for most of these cases at the Waterval Village monitoring station. Although the ambient monitoring is done by Anglo Platinum, other sources in the area also contribute to increased levels of sulphur dioxide in the Rustenburg region. It is expected that the incidence of excessive emissions will drop and be in line with international ambient guidelines, once the ACP is fully commissioned.

Even though particulate emissions from point sources remain fairly constant,

ongoing effort is put into lowering them by specifically improving the ceramic filter installation at the Waterval Smelter and installing an additional boiler with pollution abatement equipment at RBMR to reduce the load on the current boilers. The monitoring of ambient fine particulate (PM<sub>10</sub>) concentrations has been measured at two of the above-mentioned monitoring stations since 2001. The ACP and work at the RBMR boiler plant will reduce PM<sub>10</sub> emissions from the Anglo Platinum operations in Rustenburg.

Effluents	000's m <sup>3</sup>		Litres per ounce PGM + Au	
	2002	2001	2002	2001
<i>Effluent to surface water</i>	<b>2 511</b>	2 491	<b>629</b>	660
<i>Surface water quality monitored at all operations</i>	<b>Yes</b>	Yes		
<i>Surface water quality deterioration off-site</i>	<b>Yes</b>	Yes		
<i>Adverse biophysical environmental impact on surface water</i>	<b>No</b>	No		
<i>Adverse surface water impact on humans</i>	<b>No</b>	No		
<i>Groundwater quality monitored at all operations</i>	<b>Yes</b>	Yes		
<i>Groundwater quality deterioration</i>	<b>Yes</b>	Yes		
<i>Adverse biophysical environmental impact on groundwater</i>	<b>No</b>	No		
<i>Adverse groundwater impact on humans</i>	<b>No</b>	No		

Definitions are shown in the glossary at the end of this Report.

## Environmental Impacts (continued)

A sample collection from the ACP pollution control dam with the ACP in the background.

All operations, except two, have a negative water balance. This means that no water is discharged from these operations from point sources, but diffuse discharges due to spills and pipeline failures sometimes occur.

Two operations, Leplats and Amandelbult Section, have excess water due to their geology. Water optimisation programmes are ongoing at all operations to minimise new water use and at these two operations to minimise discharges. The water discharged typically has elevated nitrate, sulphate and chloride concentrations, but at the discharge concentrations these do not pose a danger to livestock or humans if consumed.

Ground and surface water is monitored at all operations, both up- and downstream of operations, as well as inside and outside of the mining areas. Monitoring results are used to model groundwater flows and contaminant plumes, if any, and surface water results are compared against various Department of Water Affairs and Forestry standards.

Bio-monitoring of surface water bodies is also conducted at most operations.

While all business units have some impact on ground and surface water in the immediate vicinity of operations, no agricultural activities, livestock watering or human use is adversely affected. In many of the areas of operation, the background groundwater conditions are poor as a consequence of the mineralogy.

Acid base accounting (ABA) to determine acid rock drainage (ARD) and hazardous leachate potential on both Merensky and UG2 tailings have indicated that such tailings have a negligible potential to generate acid or mobilise metals. Although acid production and metal mobilisation does not occur, the sulphide content is sufficient to produce some soluble sulphates under oxidising conditions. This has the effect of increasing the sulphate concentration of water that comes into contact with the tailings.

Waste	000's tons		Tons per ounce PGM + Au	
	2002	2001	2002	2001
<i>Mineral waste:</i>				
<i>Accumulated tailings in tailings dams (active and inactive)</i>	<b>737 691</b>	520 990	<b>184</b>	138
<i>Accumulated waste in rock dumps</i>	<b>285 159</b>	235 512	<b>71</b>	68
<i>Non-mineral waste:</i>				
<i>Hazardous to landfill</i>	<b>1,05</b>	0,08		
<i>Hazardous to incineration</i>	<b>0,05</b>	0,01		
<i>Non-hazardous to landfill</i>	<b>7,71</b>	7,29		
<i>Non-hazardous to incineration</i>	<b>0,04</b>	0,05		
<i>Low-level radioactive waste generated</i>	<b>0</b>	0		

Definitions are shown in the glossary at the end of this Report.

The Group has ten operational tailings dams and seven dormant dams.

A project to re-treat four of the dormant dams at Rustenburg Section is underway. The re-treated tailings will be disposed of in a single consolidated tailings dam.

The non-mineral wastes to landfill figures will evolve as the systems to measure these improve. These figures should thus be viewed as indicative at this stage and not as an accurate reflection of waste disposal to landfill. Many operations are improving their non-mineral waste management practices (which include increased recycling, waste separation and re-use).

#### PROVISION FOR REHABILITATION

Each business unit annually calculates its expected environmental closure cost. This figure is used to calculate the contributions to the Platinum Producers' Environmental Trust. Each operation contributes to the trust on an annual basis. Even though the various investments in the fund are pooled, each business unit has its own account with the fund.

The accumulated funds in the Platinum Producers' Environmental Trust as at 31 December 2002 amounted to R89,3 million. These funds will be used for rehabilitation and associated environmental costs at mine closure.

## Environmental Impacts (continued)

The total discounted amount of the obligations as at 31 December 2002 was R192,8 million consisting of R129,2 million decommissioning costs and R63,6 million restoration costs.

### PRODUCTS AND SERVICES

#### How PGMs Enhance Our Lives, Today and in the Future

Concerns over the environment have increased in the past few years, with the sustainability and protection of the environment now firmly on the global political agenda. The role of PGMs is not confined to the reduction of harmful exhaust emissions; PGMs possess unique physical and chemical properties that lend themselves to a host of industrial applications. Their high corrosion and heat resistance imbues products containing PGMs with strength and durability, reducing waste. Further, it is possible to recover almost all PGMs from old scrap, as processing losses are small.

The fitment of autocatalysts containing PGMs has reduced the amount of carbon monoxide (CO), hydrocarbons (HC) and oxides of nitrogen (NO<sub>x</sub>) emitted by internal combustion engines

since the 1970s. The use of PGMs in petroleum refining has been instrumental in the reduction of lead and sulphur in fuel, further enhancing the quality of the atmosphere.

The use of PGMs in fuel cells will provide renewable, sustainable and clean energy, both for transport and for residential uses. Attention has recently focused on the emission of greenhouse gases, in addition to polluting gases. There is a strong drive in Europe, California and Japan to reduce the emissions of carbon dioxide. The amount of CO<sub>2</sub> emitted from an engine is related to fuel economy; reductions can be achieved by using lean burn engines, for example by using diesel. Battery-powered vehicles are charged from conventional national power grids and power stations still produce electricity predominantly through the combustion of fossil fuels, generating large amounts of CO<sub>2</sub>. It is therefore not surprising that most auto-manufacturers are researching and developing fuel cells to power vehicles that produce no harmful emissions.

The development of fuel cell technology has also accelerated owing

to concerns about dwindling supplies of fossil fuels. It is believed that the world is close to the point of maximum exploitation of known oil reserves. There is a need to explore and develop renewable and sustainable energy resources. Hydrogen and oxygen are the most abundant elements on earth and can be easily produced. Fuel cell technology is therefore not reliant on non-renewable oil supplies.

#### **Recycling of PGMs**

The durability, anti-corrosiveness and high heat resistance of PGMs result in lasting products; very little metal is lost in use and a large proportion is recoverable at the end of products' lives. The relatively high value of the product also offers incentive for scrap dealers to remove products such as autocatalysts for recycling. At present, about 40% of PGMs in

autocatalysts are recycled from old scrap. This proportion will grow, especially as legislation is implemented to ensure the collection of scrap from dealers.

#### **Other Ways in which PGMs Benefit**

##### **Our Quality of Life**

Platinum is used in catheters and pacemakers as a consequence of its purity, conductivity, durability, biological compatibility and resistance to corrosion. Treatments for cancer containing platinum, such as Cysplatin and Carboplatin, are extending people's lives.

The role of PGMs in the cleaning and preservation of the environment has been clearly demonstrated in the past. Their role in the future is assured, on account of the part they play in the provision of clean, sustainable power and other technologies that enhance our quality of life.

The cicada, *Pycna sylvia*, last collected in 1906 and long thought to be extinct, was discovered during a faunal survey for the Der Brochen Project along the Groot Dwars River on the Eastern Limb.



**Stable employee relations and better human capital performance.**

## Social Impacts

### Human Resources

A progressive human resource (HR) strategy, launched in 2001, is being implemented. Consistency and synergy in the application of HR systems and processes resulting in best practice approaches have resulted in stable employee relations and better human capital performance. The major focus areas have been safety, employee relations, performance management, HR development, skills acquisition and retention as well as the development and implementation of systems and processes that promote HR best practice.



Luke Zindi, Economic Resource  
Manager at Rustenburg Section. ▶

## SAFETY

Business Unit	Number of Fatalities		Fatality Rate *		Lost-time Injury Frequency Rate (LTIFR)*†		Absenteeism Rate	
	2002	2001	2002	2001	2002	2001	2002	2001
Rustenburg Section	12	10	0,04	0,04	1,36	1,32	0,60	0,90
Amandelbult Section	2	6	0,02	0,05	2,87	6,69	2,53	3,92
Union Section	3	4	0,02	0,04	1,31	3,17	4,10	4,90
PPRust	0	0	0,00	0,00	0,68	1,05	2,00	10,00
Leplats	3	1	0,06	0,03	0,53	1,12	6,20	8,70
BRPM	2	0	0,03	0,00	0,58	0,59	4,17	6,57
Waterval Smelter	0	1	0,00	0,04	0,17	0,24	3,80	5,00
RBMR	1	0	0,07	0,00	0,30	0,59	3,48	4,15
PMR	0	0	0,00	0,00	0,00	0,54	3,40	3,19
Projects	3	0	0,02	—	0,23	—	3,80	3,95
<i>Total/aggregate managed</i>	<b>26</b>	22	<b>0,03</b>	0,03	<b>1,24</b>	2,55	<b>2,55</b>	3,71

\*per 200 000 hours worked.

† >1-day definition.

Statistics include all contractors' safety performance.

The safety and health of its employees are of critical importance to the Group's success. Accordingly, intensive efforts continued in 2002 to lead business units towards becoming zero-fatality operations. These included the introduction of a Behaviour-Based Safety Process (BBS) at all operations, being tailored to each. Although still in its early stages, BBS has already helped lead to a marked drop in the LTIFR.

During the year, the ex-Principal Inspector of Mines from the UK continued with his

inspection of the business units, which in turn led to a series of recommendations; these have been addressed by the business units. It is encouraging to note that a year-on-year improvement in safety conditions and processes was evident during these visits.

Another initiative was the introduction of an electronic business management system (EBMS) that formalises and captures work practices, legal requirements, standards and procedures to facilitate access to required

Anglo Platinum has stepped up efforts to create a safe working environment. Various programmes, such as the Behaviour Based Safety (BBS) initiative, have been rolled out throughout the Group. At the core of the BBS initiative is a move to change employees' behaviours. Paul Nash (below) is the Safety Manager Operations.



## Social Impacts (continued)

documentation and to ensure consistency and uniformity across the Group.

Training in the principles of safety management at all levels of management and supervision has been identified as essential to the

The year under review saw the introduction of the “Platinum Rules” for safety. In 2003, business units will be audited on the degree to which they have implemented these rules, which are considered to be non-negotiable conditions of employment.

The year saw a promising fall in the overall LTIFR, from 2,6 to 1,2. The fall in the fatality rate was not nearly as steep, despite intensive efforts, and 26 workers lost their lives in accidents, 4 more than in 2001. The Group is, however, determined to implement successfully its safety and health initiatives to achieve its ultimate goals of zero fatalities and an LTIFR better than world best practice.

During 2002, the British Standards Institute (BSi) conducted preliminary audits to determine the requirements for OHSAS18001 certification in 2003. Following management reviews, action plans are in place to ensure that this can be achieved at all operations. The PMR has been recommended for OHSAS18001 certification.

maintenance of healthy and safe working conditions. To this end, a Safety Management Steering Committee was established to address the key training and competence issues. Recommendations of this Committee will be introduced in 2003.



▲ Safety first . . . Amandelbult Section's full-time safety representative Walter Taubokong in a celebratory mood after the mine achieved one million fatality free shifts. Being presented with a shield from the Mine Health and Safety Council is one of the incentives given to the mines to encourage them to adhere to best practice when it comes to safety.

## EMPLOYMENT

Breakdown of workforce	Numbers	
	2002	2001
Gauteng	477	372
Limpopo	20 766	19 296
North West	24 189	21 489
Other	4	4
<i>Total workforce</i>	<b>45 436</b>	41 161
Outsourced	2 745	2 100
Volume contractors	10 944	2 632
Direct contractors	956	788
Through labour brokers	6 266	3 980
<i>Total contracting staff</i>	<b>20 911</b>	9 500

Average Labour Turnover	Percentage	
	2002	2001
Gauteng	6,7	5,6
Limpopo	7,5	5,8
North West	9,2	7,8
Other	—	—
<i>Average</i>	<b>7,8</b>	6,4



◀ Safety first . . . Mine overseer Patrick Papela (left) showing team members the safest way to install a pillar. Patrick is Amandelbult's first black mine overseer, having worked his way up through the Group's ABET training scheme.

**EMPLOYEE RELATIONS**

Following the finalisation of a new Employee Relations Policy agreement with all representative unions and associations in March 2002, the following initiatives were successfully pursued:

- ▶ The establishment of a consolidated collective bargaining forum, resulting in the conclusion of a 2-year wage agreement, with effect from 1 July 2002.
- ▶ The establishment of partnership forums at business unit, regional and central level. These forums are contributing to improved employee relations.
- ▶ The establishment of the joint unions/associations, senior management and leadership forum, chaired by the Chief Operating Officer, has contributed to stable employee relations in the Group.
- ▶ In order to sustain effective employee relations, an annual audit of structures and policy implementation was completed towards the end of 2002.
- ▶ In 2003, management will, with unions/associations, embark on leadership training to further enhance relations and promote better understanding between the parties.
- ▶ Joint working committees are established by the parties to focus on key policy and procedures development to support the employee relations policy implementation and governance structures.
- ▶ Leadership training and development for full-time shop stewards is being incorporated into HRD processes.

**Anglo Platinum: Membership of recognised Unions and Associations  
as at 31 December 2002**

<b>Union/Association</b>	<b>Membership</b>
National Union of Mineworkers	17 891
Mouthpeace Workers Union	5 387
Commercial Workers Union of South Africa	2 890
United Association of SA	2 586
Building, Motor, Engineering and Allied Workers Union	1 769
Steel, Mining and Commercial Workers Union	1 672
National Employees Trade Union	1 215
Mine Workers Union Solidarity	390
National Union of Metalworkers of SA	226

## HUMAN RESOURCE DEVELOPMENT

Human resource development (HRD) is a core component of Anglo Platinum's HR and Group strategy. HRD plans are continuously integrated with the business plan, assessed, reviewed and revised, covering short-, medium- and long-term human capital development commitments of the organisation.

Anglo Platinum regards people and leadership development across all levels as a key component of good corporate governance.

During 2002, intensive research and assessment took place to ensure that

the HRD strategy and practices are fully aligned with the Skills Development Act, compliant and approved by the relevant authorities.

Anglo Platinum obtained ISO9001 accreditation for its HRD processes and met all the Mining Qualifications Authority's (MQA) current requirements for accreditation as a Training Provider. Furthermore, the Group continuously maintains strong representation within national structures, such as the MQA, through which it contributes positively to HRD developments within the mining industry. The HRD strategy implementation is achieved through the Anglo Platinum Development Centre (ADC),



◀ As Anglo Platinum expansion projects move into full swing, the Group continues to recruit graduates who are trained through the Anglo Platinum Development Centre. In the photograph are Nurie Bedesi and Chief Operating Officer Dorian Emmett, during the Anglo Platinum Academic and Graduation Award ceremony.

## Social Impacts (continued)

situated in Rustenburg and the HRD functions at each business unit. As a result of production expansions, a need for additional central training facilities to address engineering, mining, leadership and safety training requirements was also identified. The increase in HRD capacity continues to receive attention.

The attraction and development of high quality professional staff to manage and lead the Anglo Platinum business units into the future remains a key focus area. The growing shortage of critical skills in the mining industry and the South African labour market, combined with Anglo Platinum's increased need for such skills in the light of its expansion programme has made increasingly clear the importance of proper talent management.

The Anglo Platinum bursary scheme is directed at providing skills at the lower professional levels. Bursar numbers have accordingly increased as follows:

<b>Year</b>	<b>Number of Bursars</b>
2000	220
2001	252
2002	324
2003	446

During 2002, some 60 university graduates and technikon diplomats obtained their academic qualifications under this scheme.

In an endeavour to increase the participation of historically disadvantaged South Africans in the bursary scheme, Anglo Platinum will in 2003 be sponsoring learners to receive extensive technical and life skills training prior to furthering their professional and academic development.

The Randfontein-based Engineering Skills Training Centre (ESTC), acquired by Anglo Platinum in 2000, ran at maximum capacity during 2002, mainly as a result of the training activities associated with the expansions. The ESTC continues to produce quality artisans highly rated in the industry, and the average pass rate, of 89%, continues to exceed the mining industry average of 78%.

The ADC provides basic education and training of lower-level employees.

The Centre is also tasked with the identification and development of high-potential employees at operational levels.

<b>Average Annual Training</b>	<b>Hours/ employee/year</b>	
	<b>2002</b>	2001
Legislators, senior officials, managers and owner managers	<b>10,4</b>	5,9
Professionals	<b>18,4</b>	11,4
Technicians and associated professionals	<b>27,3</b>	33,3
Clerks	<b>13,3</b>	15,1
Service workers, shop and market sales workers	<b>25,9</b>	22,3
Agricultural and fishery workers	<b>0,0</b>	0,0
Craft and related trade workers	<b>30,0</b>	27,2
Plant and machine operators and assemblers	<b>17,8</b>	19,7
Labourers and related workers	<b>45,1</b>	19,4
<b><i>Weighted average</i></b>	<b>26,0</b>	19,9



◀  
 Apprentices working on shaping machines in the fitting and turning workshop.

**TRANSFORMATIONAL  
TRAINING**

Senior and middle managers at most of the business units underwent transformation training, with particular emphasis on managing diversity, teamwork and performance optimisation. Anglo Platinum regards transformational leadership competence as essential for meeting the organisational demands of the future and creating a solid platform for sustainable leadership development and organisational growth.

**EMPLOYMENT EQUITY**

The second Employment Equity progress report was presented to the Department of Labour in October 2002. The Employment Equity plans of the Group will ensure that the 2005 target will be met.

The Employment Equity committees at the business units play an enabling role in ensuring the success of the Group's workplace skills plans in terms of the Act. All business units have Employment Equity Coordinators, who report to the business managers and, on a quarterly basis, the Executive Committee is provided with a progress report. Ultimately, the Employment Equity Strategy is not just a legal requirement for Anglo Platinum, but an integral part of its business strategy. In compliance with Section 22 of the Employment Equity Act, the table opposite summarises the progress report as submitted to the Department of Labour, setting out the occupational categories as at May 2002 and targets for 2005.



A SAP workshop at the Waterval development centre. ▶

Occupational categories	31 May 2002				Target 2005			
	White number	Designated number	%	White number (including white female)	Designated number	%	People with disabilities	Females (all races)
Legislators, senior officials and managers	322	18	5,3	296	105	27,2	2	24
Professionals	934	227	19,6	664	663	53,5	12	164
Technicians and associated professionals	428	340	44,3	577	508	50,3	11	134
Clerks	437	567	56,5	362	812	77,3	27	268
Service and sales workers	141	683	82,9	275	546	70,0	10	86
Skilled agricultural and fishery workers	0	0	0,0	0	0	0	0	0
Craft and related trade workers	1 684	1 886	52,8	1 154	1 376	55,7	31	144
Plant and machine operators and assemblers	493	23 308	97,9	2 190	19 901	91,0	430	647
Elementary occupations	197	10 611	98,2	1 364	8 629	87,8	313	686
<b>Total permanent employees</b>	<b>4 636</b>	<b>37 640</b>	<b>89,0</b>	<b>6 882</b>	<b>32 540</b>	<b>84,2</b>	<b>836</b>	<b>2 153</b>
Non-permanent employees	80	60	42,9	7	12	70,6	0	2
<b>Total group</b>	<b>4 716</b>	<b>37 700</b>	<b>88,9</b>	<b>6 889</b>	<b>32 552</b>	<b>84,2</b>	<b>836</b>	<b>2 155</b>

#### STAFFING FOR EXPANSIONS

Given Anglo Platinum's business strategy of raising its production to 3,5 million annual ounces of platinum by the end of 2006, a number of new mines and concentrators are currently in the pipeline. The challenge to the HR function is to supply adequate skilled personnel timeously for the planned expansions.

Despite higher productivity, including that due to the mechanisation of existing operations, it is clear that high

turnover rates, exacerbated by HIV/AIDS, limit human resource availability for expansion projects.

Expansion projects will create approximately 13 000 new positions between 2002 and 2006. This will bring special challenges for recruitment, training and development. For this purpose, a Group HR plan has been developed and a specialist recruitment function has been established within the Projects Division. To allow a sustainable, quality build-up of human

## Social Impacts (continued)

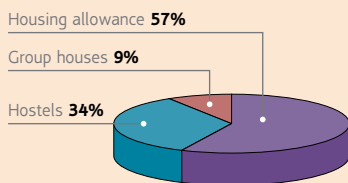
resources through training programmes and recruitment, an employment vehicle, Platinum Mines Expansion Services (Pty) Ltd, was established. The HR plan similarly addresses competency requirements for brownfield operations.

The Group's HRD capacity is being increased in order to provide for the development of skills at all levels through special training interventions and through various trainee schemes. An HRD Manager has been appointed in the Projects Division for this purpose.

Local recruitment, high unemployment, community expectations and other socio-political factors lead to the need for innovative approaches to recruitment practices and HRD. Technologically advanced mining methods and equipment require higher skills and competency levels than in the past and the screening of potential staff has consequently become even more stringent. A result of this process is that education levels at new operations are invariably much higher than at existing operations.

An important aspect of HRD is the identification of potential employees at schools, colleges, universities and technikons and the Group has established relations with such institutions. Trainees from other Anglo American plc divisions have assisted in increasing the graduate feedstock to Anglo Platinum.

### TOTAL WORKFORCE ACCOMMODATION



## HOUSING

The Group housing policy was ratified in May 2002. Formulated in conjunction with the ER Policy, it encourages and supports employees, where possible, to own their own homes. Where it is provided, employees are encouraged to access Group accommodation subject to availability, affordability and specific operational requirements.

Anglo Platinum Group Properties forms part of the Anglo Platinum Shared Services Unit (ASSU) and has responsibility for the management and control of the Group's property portfolio. In 2002, project plans were developed for housing needs over the next four years, including Rustenburg (721 houses), Burgersfort (627 houses), PPRust (520 houses), Leplats (227 houses), Thabazimbi (86 houses) and Boshhoek (1 400 low-cost houses).

Over the year, 324 houses were built in Rustenburg and 210 temporary and 5 permanent houses were built in Burgersfort. 10 houses were completed in Mokopane.

The housing projects are expected to gain momentum in 2003: 133 houses are planned for completion in Burgersfort; 104 houses in Mokopane; 70 houses in Polokwane; 397 houses in Rustenburg; 86 houses in Thabazimbi; and 300 low-cost houses at Boshhoek.

## Society

### HIV/AIDS

Launched in 1998, the Anglo Platinum HIV/AIDS strategy is built on a foundation of renewal through ongoing research and learning from experience. The strategy is to protect the Group and its stakeholders through the containment and management of HIV/AIDS, both at its operations and in surrounding communities. Based on the Family Health International model, the Anglo Platinum HIV/AIDS programme comprises eight interlocking phases:

- ▶ Strategic planning.
- ▶ Technical strategies.
- ▶ Operationalising.
- ▶ Administration and resource management.

- ▶ NGO involvement.
- ▶ Costing and use of human resources.
- ▶ Managing the supply of drugs and consumables.
- ▶ Measuring for impact.

The HIV/AIDS strategy is driven at both the corporate and the operational level and the Group's progress in implementing its strategy and plans is the subject of a formal monthly reporting system.

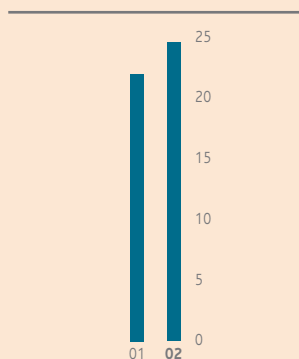
The objectives of the programme are to minimise the total impact of the HIV/AIDS pandemic on the Group and its stakeholders, ensuring the long-term sustainability of its business operations by reducing the infection rate among employees and surrounding communities.



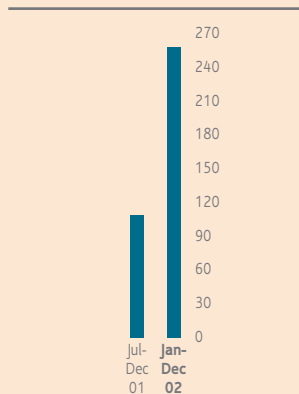
◀ **Margareth Hlungwani**, who has worked at the Waterval Smelter since 1996, walking back home from the day shift. Margareth is single and works at the Protection Services Department.

◀ **Anglo Platinum management and members of trade unions and associations** after the signing of the HIV/AIDS Agreement. The agreement seeks to encourage a partnership between Anglo Platinum and its stakeholders in developing and maintaining responsible and effective programmes to minimise the impact of HIV/AIDS at the workplace.

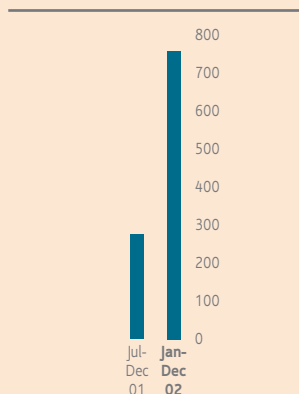
## Social Impacts (continued)



HIV/AIDS prevalence testing at Anglo Platinum (%)



HIV-related deaths at Anglo Platinum



TB cases at Anglo Platinum

\*No data is available for the period Jan – June 01.

HIV/AIDS work is being actively extended into partnerships with communities. Development projects, which take into account the implications of HIV/AIDS, will reduce the spread of the disease and minimise its economic and social impact. Collaboration and partnerships are central to a sustained response. To this end, the HIV/AIDS programme is closely linked with Corporate Social Investment and socio-economic empowerment community programmes to provide a concerted and co-ordinated response to the pandemic.

### Stakeholder Engagement

Of great importance has been the emphasis on stakeholder engagement, particularly with the nine representative labour organisations, culminating in the signing of the HIV/AIDS Partnership Agreement by their leaderships. In August, Anglo American plc announced the introduction of antiretroviral therapy (ART) in all operating divisions. Towards the end of 2002, an Anglo Platinum ART task team compiled an ART strategy to be incorporated into a health programme for infected employees in 2003. In order to facilitate the planning, budgeting and management of such an endeavour, Anglo

Platinum conducted voluntary testing at all business units in late 2002.

### Economic Impact Containment

Anglo Platinum manages a detailed impact assessment programme that seeks to quantify the effects of the disease on its operations. Anonymous voluntary prevalence testing, conducted in late 2002, reflects a weighted average prevalence of 24,6% within the workforce. This is the first time that all business units have been exposed to testing.

Test results are imported into a financial model to help the Group to plan, budget and manage the care and treatment of infected employees, particularly with the inclusion of ART into the health programme in 2003. These and other social studies are undertaken to facilitate the decision-making process and to focus interventions. The Group anticipates a projected HIV/AIDS cost of R75,7 million in 2003. The loss of staff due to the disease is expected to be less than 4% per annum, peaking in 2006.

### Pandemic Impact Containment

Ongoing interventions include education and the promotion and provision of condoms. A major initiative for 2002 was the starting of regional campaigns to

prevent or treat sexually transmitted infections (STIs) because reducing STIs is instrumental in containing HIV/AIDS incidence and ultimately reducing prevalence.

### Living with HIV/AIDS

Anglo Platinum recognises that, assisted by appropriate interventions, people with HIV/AIDS can extend their longevity, continuing to lead healthy and productive lives.

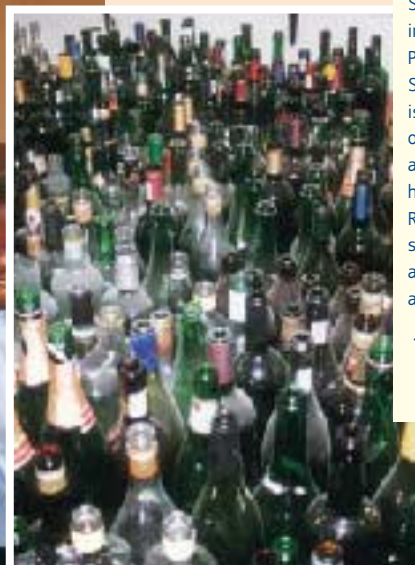
The major thrust for 2003 will be the provision of a comprehensive health programme, including ART, and the expansion of current health services by providing employees with the knowledge and skills they need to change their lifestyles.

### Programme Development and Renewal

As mentioned, 2002 witnessed the signing of the HIV/AIDS Partnership Agreement between Anglo Platinum and the nine unions and associations active in the Group. Discussions will continue in 2003 to give substance to the agreement in the form of policy and procedures, as well as through consultation with community leaders, local and district government and other regional stakeholders.

### ANGLO AMERICAN CORPORATION CHAIRMAN'S FUND

Anglo Platinum's 2002 contribution of R35 million represents a substantial proportion of the total allocated to the Anglo American Corporation Chairman's Fund.



◀ Mfidikwe Primary School principal Cornelia Makgatlha with some of her learners. Mfidikwe Primary School, one of the educational institutions supported by Anglo Platinum through its Corporate Social Investment programme, is committed to the protection of the environment. Teachers and learners at the school have established the Mfidikwe Recycling Centre inside the schoolyard to help raise funds and create environmental awareness.

◀ Bottles collected by Mfidikwe Primary School, ready for recycling.

## Social Impacts (continued)

The fund's approach is to respond to requests from a variety of community and developmental agencies seeking opportunities that contribute to improving the quality of life in South African society.

### **BUSINESS TRUST INITIATIVE**

Anglo Platinum's annual contribution of R7 million represents its ongoing commitment to assisting development in South Africa via the programmes of the Business Trust Initiative. The Trust was formed in 1999 by leading South African Corporations to co-ordinate the joint efforts of business and government to address poverty and crime via education and job creation initiatives.

### **IN-HOUSE PROGRAMMES**

The above two programmes operate at a national level. The third leg of Anglo Platinum's social investment involves the long established policy of developing relationships and partnerships with stakeholders in close proximity to Group operations.

Accordingly, business units have developed plans with government and local communities to address development issues in an integrated manner. The programmes and projects concentrate strongly on community empowerment, education, infrastructure development and access to health care, basic needs and job creation.

A total of R26 million was allocated to these programmes; some of the more important ones are described below:

### **Education**

The Anglo Platinum Schools Project was initiated in 1991 to assist in the upgrading of the quality of education around its operations and to increase the local skills pool. It remains a key programme for the Group, since education is an essential factor in developing a vibrant environment for Group operations. In support of this, the Group has extensive Adult Basic Education and Training (ABET) programmes at all the operations.

The objectives of the project are to develop centres of excellence in schools around Anglo Platinum's operations, developing learners for recruitment purposes and building capacity at regional and district office levels. The project embraces some 17 000 learners, 600 teachers and four district offices.

The Group was involved, individually or in partnership, in the renovations and/or rebuilding of 16 schools and smaller assistance to an additional 10 schools.

### **Skills Development**

In addressing poverty levels, skills development and training for out-of-school youth, Anglo Platinum supports a number of initiatives aimed at developing marketable skills. The programmes are

geared to the needs of the communities in the vicinity of business units and address the strengths and opportunities that exist within them.

The Tsholofelo Community College and the Leplats multi-purpose centre, for example, continue to provide much needed skills training in line with realistic work opportunities. The Limpopo province nominated the Leplats multi-purpose centre as a top-three project and the Minister of Labour visited it in September 2002.

#### **Basic Needs and Infrastructure**

Anglo Platinum continues to support projects that deal with the most basic needs of water and sanitation access, particularly in the remote areas not yet serviced by Government.

#### **Health**

Anglo Platinum has embarked on a programme, in partnership with

Government, to provide health facilities for very remote areas and informal settlements. Two mobile clinics are in operation in Rustenburg and one in the Mokopane District. The Group has also completed the final phase of the Monakato Clinic in the Rustenburg District.

#### **Agricultural Projects**

One of South Africa's greatest challenges is tackling the high level of unemployment. Group support for subsistence growers and farmers continues to promote self-reliance for basic foodstuffs.

#### **Local Beneficiation**

The Group continued to support the Technikon Pretoria platinum manufacturing and design workshop, as well as the annual PlatAfrika awards and is involved in discussions via the Millennium Development Fund on further promotion of the local jewellery industry.



◀ **Improving healthcare facilities**  
... Anglo Platinum Executive Director: Finance and Corporate Development, Roeland van Kerckhoven (left) and Union Section Business Manager Noel Williams at the official opening of a newly revamped mine hospital. Anglo Platinum has been spending millions of rands in upgrading Platinum Health Medical Centres on its mines as part of its commitment to ensuring that its employees and their dependants receive high quality healthcare.

◀ **Vincent Chipa and Ilze Jooste**, third year diploma students in Jewellery Design and Manufacture, busy manufacturing platinum wedding bands in the Hans Merensky Platinum Studio at the Pretoria Technikon. Anglo Platinum is a co-sponsor of the Studio.

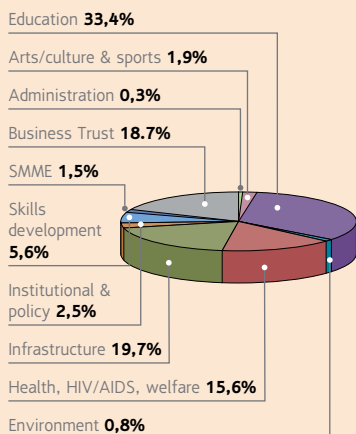
## Social Impacts (continued)

### SOCIO-ECONOMIC DEVELOPMENT EXPENDITURE, 2002

	In-house Programmes Rm	Paid to Anglo American Rm	Total Rm	Percentage
Administration	0,2	—	0,2	0,3
Arts/Culture & Sports	0,4	1,0	1,4	1,9
Education	7,6	17,4	25,0	33,4
Environment	0,1	0,5	0,6	0,8
Health, HIV/AIDS, welfare	1,6	10,1	11,7	15,6
Infrastructure	11,5	3,2	14,7	19,7
Institutional & policy	0,9	1,0	1,9	2,5
Skills development	2,5	1,7	4,2	5,6
SMME	1,1	—	1,1	1,5
Business Trust	14,0#	—	14,0	18,7
<b>Total</b>	<b>39,9</b>	<b>34,9</b>	<b>74,8</b>	<b>100,0</b>

#2001's contribution of R7 million was included with the 2002 contribution.

#### SOCIO-ECONOMIC DEVELOPMENT EXPENDITURE, 2002



Gertrude Nomzamo, foreground, is the proprietor of the cafeteria which is situated between the main mine at PPRust and the Open Cast operation. Gertrude started business on 9th September 2002. The cafeteria was built and fully equipped by Anglo Platinum from whom she rents the equipment and premises. The enterprise has been successful allowing Gertrude to recently purchase a computer and a second till-point. ▶

## Product Responsibility

### CUSTOMER HEALTH AND SAFETY

All products sold have a material safety data sheet (MSDS) which is used to assist all those handling or purchasing the products, and which is reviewed and updated on a regular basis.

The base metal refinery is ISO9002 accredited to ensure good product stewardship and traceability of material through the process to the customer.

The South African Bureau of Standards (SABS) regularly carries out audits.

Rustenburg Nickel is a registered brand on the London Metal Exchange (LME). Certified materials needing to meet physical and chemical specifications also require approval of the way in which they are packaged.

Anglo Platinum is a member of a research organisation currently participating in the European Union's (EU) risk assessment of substances. EU regulation 793/93 is concerned with the evaluation and control of exposure of existing substances, in order to protect the general population, workers, consumers and the environment.

### Advertising

The Group's policy is to channel corporate advertising assignments

through a single agency, one that has over a number of years proven itself to have a good understanding of the Group and the environment within which it operates.

The agency subscribes fully to and is guided by the Code of Advertising Practice. This Code is specifically applicable to South Africa, but its use automatically results in compliance with other known codes because of its stringent nature, particularly in respect of comparative advertising. The agency is aware of certain international advertising restrictions, specifically those pertaining to the USA.

There has been no record of any charges having been laid by competitors or the public regarding non-compliance.

### Respect for Privacy

The Group's policy is to make use of public media. Direct mailing has been used only in the case of people in a position to directly influence the Group, such as investment analysts and decision-makers in Government.

The agency and the Group have never engaged in the dissemination of unsolicited information on the Internet or in the use of mass SMS marketing.

No complaints of breach of privacy have been received.

## Consolidated Financial Statements

# Extracts from Consolidated Financial Statements

## Consolidated Income Statement

for the year ended 31 December

	2002 Rm	2001 Rm
<b>Gross sales revenue</b>	<b>20 285,7</b>	18 690,9
Commissions paid	<b>733,0</b>	812,0
<b>Net sales revenue</b>	<b>19 552,7</b>	17 878,9
<b>Cost of sales</b>	<b>10 129,9</b>	8 262,9
Cash operating costs	<b>8 883,9</b>	7 044,5
On-mine	<b>7 369,4</b>	5 948,6
Purchase of metals in concentrate	<b>121,9</b>	—
Smelting	<b>640,6</b>	441,9
Treatment and refining	<b>752,0</b>	654,0
Amortisation of operating assets	<b>763,8</b>	498,8
(Increase)/decrease in metal inventories	<b>(109,1)</b>	45,1
Other costs	<b>591,3</b>	674,5
<b>Gross profit on metal sales</b>	<b>9 422,8</b>	9 616,0
Other net (expenditure)/income	<b>(754,7)</b>	2 452,7
Market development and promotional expenditure	<b>(266,5)</b>	(251,0)
<b>Operating profit</b>	<b>8 401,6</b>	11 817,7
Net investment income	<b>155,7</b>	340,3
Income from associates	<b>181,6</b>	170,6
<b>Profit before taxation</b>	<b>8 738,9</b>	12 328,6
Taxation	<b>2 998,9</b>	4 308,8
<b>Net profit</b>	<b>5 740,0</b>	8 019,8
<b>Headline earnings</b>	<b>5 630,4</b>	8 008,2
Number of ordinary shares in issue (millions)	<b>214,9</b>	214,1
Weighted average number of ordinary shares in issue (millions)	<b>214,5</b>	217,0
Earnings per share (cents)		
– Basic	<b>2 676,0</b>	3 695,8
– Headline	<b>2 624,9</b>	3 690,4
– Diluted (basic)	<b>2 671,0</b>	3 692,4
– Diluted (headline)	<b>2 620,0</b>	3 687,0
Dividends per share (cents)	<b>1 800,0</b>	2 200,0
– Interim	<b>900,0</b>	1 100,0
– Final	<b>900,0*</b>	1 100,0
Special dividend (cents)	—	500,0
Dividend cover (headline earnings before special dividend)	<b>1,5</b>	1,7

\* Proposed dividend.

This is an extract of the Consolidated Financial Statements which are set out in full detail in Volume I (Business Report) of the Annual Report and is provided for convenience of users only.

## Consolidated Balance Sheet

as at 31 December

	2002 Rm	2001 Rm
<b>ASSETS</b>		
<b>Non-current assets</b>	<b>16 192,3</b>	11 468,5
Property, plant and equipment	10 503,1	7 008,3
Capital work-in-progress	4 941,5	3 912,9
Platinum Producers' Environmental Trust	89,3	69,5
Investment in associates	557,6	265,7
Non-current accounts receivable	100,8	212,1
<b>Current assets</b>	<b>4 695,5</b>	9 059,6
Inventories	1 497,8	1 326,4
Accounts receivable	1 617,7	1 946,8
Cash and cash equivalents	1 580,0	5 786,4
<b>Total assets</b>	<b>20 887,8</b>	20 528,1
<b>EQUITY AND LIABILITIES</b>		
<b>Share capital and reserves</b>		
Share capital	21,5	21,4
Share premium	754,0	1 203,6
Accumulated profits before proposed dividends and related secondary tax on companies (STC)	12 193,2	11 296,6
Accumulated profits after proposed dividends and related STC	10 017,3	7 449,0
Proposed ordinary dividends	1 934,1	2 354,0
Proposed special dividend	—	1 070,0
STC in respect of proposed dividends	241,8	423,6
<b>Shareholders' equity</b>	<b>12 968,7</b>	12 521,6
<b>Non-current liabilities</b>		
Deferred taxation	3 763,3	2 562,3
Environmental obligations	192,8	174,3
Employees' service benefit obligations	488,3	529,7
Obligations due under finance leases	136,4	—
<b>Current liabilities</b>	<b>3 338,3</b>	4 740,2
Accounts payable	1 893,7	1 731,6
Taxation	1 444,6	3 008,6
<b>Total equity and liabilities</b>	<b>20 887,8</b>	20 528,1

## Consolidated Financial Statements (continued)

### Group Statement of Changes in Shareholders' Equity

	Share capital Rm	Share premium Rm	Accumulated profits Rm	Total Rm
<b>Balance as at 31 December 2000</b>	<b>21,7</b>	<b>1 836,4</b>	<b>9 856,0</b>	<b>11 714,1</b>
Net profit			8 019,8	8 019,8
Dividends paid in cash			(6 087,4)	(6 087,4)
Share capital issued	0,1	70,7		70,8
Repurchase of ordinary shares	(0,4)	(703,5)	(491,8)	(1 195,7)
Company 2 228 267 shares at cost (cancelled)	(0,2)	(701,4)		(701,6)
Subsidiary 1 673 400 shares at cost	(0,2)		(490,2)	(490,4)
Associated expenditure		(2,1)	(1,6)	(3,7)
<b>Balance as at 31 December 2001</b>	<b>21,4</b>	<b>1 203,6</b>	<b>11 296,6</b>	<b>12 521,6</b>
Net profit			5 740,0	5 740,0
Dividends paid in cash			(5 362,9)	(5 362,9)
Share capital issued	0,1	74,8		74,9
Repurchase of ordinary shares	—	(524,4)	519,5	(4,9)
Cost of shares sold by wholly owned subsidiary to parent company	0,2		491,8	492,0
Unrealised after-tax Group profit on disposal of holding company shares to parent company			27,7	27,7
Shares repurchased by parent company from wholly owned subsidiary (cancelled)	(0,2)	(524,4)		(524,6)
<b>Balance as at 31 December 2002</b>	<b>21,5</b>	<b>754,0</b>	<b>12 193,2</b>	<b>12 968,7</b>

This is an extract of the Consolidated Financial Statements which are set out in full detail in Volume I (Business Report) of the Annual Report and is provided for convenience of users only.

## Consolidated Cash Flow Statement

for the year ended 31 December

	2002 Rm	2001 Rm
<b>Cash flows from operating activities</b>		
Cash receipts from customers	20 004,9	17 700,8
Cash paid to suppliers and employees†	(10 399,6)	(5 122,3)
Cash from operations	9 605,3	12 578,5
Interest paid	(35,4)	(19,9)
Taxation paid	(3 304,1)	(2 588,7)
<b>Net cash from operating activities</b>	<b>6 265,8</b>	<b>9 969,9</b>
<b>Cash flows used in investing activities</b>		
Purchase of property, plant and equipment	(5 994,1)	(3 586,1)
To maintain operations	(2 140,9)	(1 117,7)
To expand operations	(3 853,2)	(2 468,4)
Proceeds from sale of property, plant, equipment and mineral rights	778,4	31,7
Associates acquired	(300,3)	(2,4)
Interest received	203,1	373,9
Capital reduction by Northam Platinum Limited	39,0	–
Dividends received	89,7	122,8
<b>Net cash used in investing activities</b>	<b>(5 184,2)</b>	<b>(3 060,1)</b>
<b>Cash flows used in financing activities</b>		
Proceeds from issue of share capital	0,1	0,1
Increase in share premium	74,8	70,7
Own shares purchased	—	(1 195,7)
Payment of long-term borrowings	—	(33,9)
Dividends paid	(5 362,9)	(6 087,4)
<b>Net cash used in financing activities</b>	<b>(5 288,0)</b>	<b>(7 246,2)</b>
<b>Net decrease in cash and cash equivalents</b>	<b>(4 206,4)</b>	<b>(336,4)</b>
Cash and cash equivalents at beginning of year	5 786,4	6 122,8
<b>Cash and cash equivalents at end of year</b>	<b>1 580,0</b>	<b>5 786,4</b>

†Includes foreign exchange gains and losses.

# Glossary of Definitions, Terms and Acronyms

**Accumulated Low-grade Stockpiles:** accumulated quantity of low-grade ore stockpiled for possible future processing.

**Accumulated Permanent Waste Rock/Overburden:** accumulated quantity of waste rock and overburden sent for disposal on surface.

**Accumulated Tailings in Active and Inactive Tailings Dams:** accumulated tonnage of tailings deposited in active and inactive tailings/slimes dams.

**Adverse Biophysical Environment Impact:** evidence of adverse impacts on the biophysical environment as a result of discharge to surface water.

**Adverse Biophysical Impact on Groundwater:** monitoring results indicate deterioration of groundwater quality as a result of the operation's activities, during the reporting period.

**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.

**Arisings:** the valuable product after a stage in processing.

**Built-up Head Grade:** the total 4E grams produced from the concentrating process from concentrate, metallics (where applicable) and tailings divided by the total tons milled. See definition of 4E below.

**Capital Expenditure:** total capital expenditure on mining and non-mining property, plant and equipment and capital work-in-progress.

**Concentrating:** this is the process of separating milled ore into a waste stream (tailings) and a valuable mineral stream (concentrate) by the flotation operation. The valuable minerals in the concentrate contain almost all the base metal and precious metal minerals; these minerals are treated further by the smelting and refining processes to obtain the pure metals (PGMs, Ni and Cu).

**Effluent To Surface Water:** total volume of effluent discharged to surface water (e.g. rivers, dams, pans) during the reporting period.

**Energy from Electricity:** electricity purchased from the national utility.

**Energy from Processes and Fossil Fuels Consumed:** total energy excluding electricity purchased.

**Flotation:** in the flotation process, milled ore mixed with water or pulp is passed through a series of agitated tanks. Various chemicals are added to the pulp in sequence to render the valuable minerals hydrophobic (water repellent) and the non-valuable minerals hydrophilic (water loving). Air is dispersed throughout the agitated tanks and rises to the surface. The hydrophobic particles attach to the rising air bubbles and are removed from the main volume of pulp as a soapy froth. In this manner, various combinations of flotation cells in series are utilised to produce a concentrated stream of valuable mineral particles called the 'concentrate' and a waste pulp stream called 'tailings.'

**Fuels:** diesel and petrol consumed for processes and utilities.

**Grease:** total quantity of all types of grease used in all types of equipment during the reporting period.

**GMI:** Global Mining Initiative, established in October 1998. Founders were Anglo American, BHP Billiton, Codelco, Noranda, Newmont, Phelps Dodge, Placer Dome, Rio Tinto and WMC.

**Greenhouse Gas Emissions, CO<sub>2</sub>-equivalent:** quantity of CO<sub>2</sub> from electricity purchased and internally generated. Conversion factors used are as recommended by the Intergovernmental Panel on Climate Change (IPCC).

**GRIT™:** The Global Reporting Initiative was established in 1997, with the mission of designing globally applicable guidelines for preparing enterprise-level sustainability reports.

**Groundwater Used:** water abstracted/collected by the operation itself from groundwater sources, e.g. from boreholes and mine dewatering, which is used by the operation.

**Groundwater Quality Deterioration:** monitoring results indicate deterioration of groundwater quality due to the operation's activities.

**Groundwater Quality Monitoring:** is a groundwater quality monitoring programme in place to monitor water quality at all the required groundwater quality monitoring sites. Required sites are those sites identified for monitoring by legal permit requirements or by the site Environmental Management System.

**g/t:** grams per ton, the unit of measurement of grade. One gram per ton is one part per million.

**Hazardous Waste to Incineration:** this could include: heavy metal contaminated sludge; contaminated containers (reagent containers, oil/grease containers, anti-freeze drums); medical waste, vehicle batteries and oil contaminated material (gaskets, filters, soaking agents, rags). Incineration refers to incineration 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 area).

**Hazardous Waste to Landfill:** this could include: heavy metal contaminated sludge; contaminated containers (reagent containers, oil/grease containers, anti-freeze drums); medical waste; vehicle batteries; and oil contaminated material (gaskets, filters, soaking agents, rags).

**ICME:** International Council on Metals and the Environment, established in 1990, is an association of metals, mining and processing companies committed to high environmental standards.

**IIED:** International Institute for Environment and Development.

**IRCA:** International Risk Control Africa.

**ISO14001:** An environmental management systems standard published by the International Standards Organisation.

**Land Altered for Mineral Extraction Activities:** area of land under Group charge where the original characteristics have been altered 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, concentrator, smelter and refinery complexes.

**Land Under Group Charge:** area of land under mineral rights and/or surface rights. This includes land falling under the direct management of the Group (including all land owned, leased, covered by surface rights, or occupied by third parties), but excludes undeveloped projects/prospects where the land does not yet fall under the direct management of the Group. This also excludes prospecting licenses and claims.

**Level 1 Incidents:** minor impact on the physical or biological environment with no significant or long-term impairment of ecosystem function or ground/surface water resource; and/or an inconvenience/disturbance/disruption/annoyance of short duration and with no long-term effect on the community; and/or a release of material which has the potential to cause illness, injury or property damage to the public, or one which causes short-term discomfort; and/or isolated public complaints; and/or minor infringements of legal requirements.

**Level 2 Incidents:** moderate impact on the physical or biological environment with limited impairment of ecosystem function or ground/surface water resource;

and/or an inconvenience/disturbance/disruption/annoyance of moderate duration or with medium-term effect on the community; and/or a release of material which causes severe but reversible illness or moderate property damage to the public; and/or attention from local media or widespread complaints; and/or formal intervention by authorities or where prosecution and conviction has led to fines totalling less than US\$100 000 per event.

**Level 3 Incidents:** significant impact on the physical or biological environment with extensive or long-term impairment of ecosystem function or ground/surface water resource; and/or an inconvenience/disturbance/disruption/annoyance of long duration or with long-term effect on the community; and/or a release of material which causes chronic illness, permanent disabling injury, fatality or extensive property damage to the public; and/or public or national/international media outcry; and/or instances where prosecution has led to conviction and fines totalling more than US\$100 000 per event.

**LPG Used:** liquefied petroleum gas (LPG) consumed for processes and utilities during the reporting period.

**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.

**Merensky Reef:** a band in the Bushveld sequence often containing economic grades of PGMs.

**Milling:** a process to reduce broken ore to a size at which concentrating can be undertaken.

**Mining Area:** the area for which a mining authorisation/permission to mine has been granted.

**MMSD:** The Mining, Minerals and Sustainable Development project, an independent analytical study funded through the WBCSD, as part of the GMI.

**NGO:** Non-governmental organisation.

**Non-hazardous Waste to Incineration:** Incineration refers to incineration 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 area).

**Non-Hazardous Waste to Landfill:** Domestic-type waste to on-mine and off-mine landfill sites.

**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 typically sewage effluent. It also does not include untreated surface water and groundwater, extracted by the operation itself.

**NOSA:** The National Occupational Safety Association provides an integrated auditing and certification service. Star ratings, awarded according to an operation's level of compliance with NOSA standards, range from 1 (fair) to 5 (excellent).

**OHSAS18001:** Occupational Health and Safety Assessment Series (specifications for occupational health and safety management systems).

**Ore milled:** total tons of ore milled during the reporting period.

**Ozone-Depleting Compounds Vented/Released to Atmosphere:** quantity of ozone-depleting compounds (ODCs) released/vented to atmosphere during the reporting period, for example through inadequate disposal. 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:** mass of particulates released to atmosphere from point sources during the reporting period.

**PGM:** platinum group metal; six elemental metals of the platinum group nearly always found in association with each other. Some texts refer to PGE (platinum group element). These metals are platinum, palladium, rhodium, ruthenium, iridium and osmium.

**Platreef:** the name of the ore mined at PPRust.

**Potable Water from an External Source:** water obtained from an external source (e.g. local authority) that has been treated to a standard suitable for drinking. This parameter is used to identify the source of new water consumption.

**Refined Ounces:** refined metal available for sale.

**Rock Mined:** total tons of ore and waste/overburden mined during the reporting period.

**SO<sub>2</sub> from Processes:** mass of SO<sub>2</sub> released to atmosphere from point sources and fugitive emissions during the reporting period.

**Stoping:** operations directly associated with the extraction of reef.

**Surface Water Quality Deterioration:** monitoring results indicate a deterioration of surface water quality off-site due to operation's activities, during the reporting period.

**Surface Water Quality Monitored:** is a surface water quality monitoring programme in place to monitor water quality at all the required surface water quality monitoring sites. Required sites are those sites identified for monitoring by legal permit requirements or by the site Environmental Management System.

**Surface Water Used:** water abstracted/collected by the operation itself from surface water sources, e.g. from rivers, dams and pans, and which is used by the operation, but excludes water recycled internally from storm-water and tailings dams.

**Tailings:** that portion of the ore from which most of the valuable material has been removed by concentrating and that is therefore low in value and rejected.

**Total Energy Used:** Energy from electricity purchased plus energy from fossil fuels consumed.

**UG2:** a chromite reef in the Bushveld sequence often containing economic values of PGMs.

**Waste Water/Second Class Water Used:** poor quality water obtained from an external source, e.g. municipal sewage effluent. Does not include non-potable water. Does not include internally recycled effluent.

**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.) Primary activities are those activities in which the operation engages to produce its product(s) and include dust suppression within the operational area.

**WBCSD:** The World Business Council for Sustainable Development, an association of corporations that presents the business case for sustainable development.

**4E:** four elements. The grade at Anglo Platinum mines is always measured as the combined content of the four most valuable precious metals: platinum, palladium, rhodium and gold.

# Contact Details

For further information, please contact us via e-mail at:

**[sustainabledevelopment@angloplat.com](mailto:sustainabledevelopment@angloplat.com)**

or complete the questionnaire overleaf.

## Anglo Platinum Website

**<http://www.angloplatinum.com>**

## Other Useful Websites

Anglo American plc website	<i><a href="http://www.angloamerican.co.uk">http://www.angloamerican.co.uk</a></i>
GMI	<i><a href="http://www.globalmining.com">http://www.globalmining.com</a></i>
ICME	<i><a href="http://www.icme.com">http://www.icme.com</a></i>
IIED	<i><a href="http://www.oneworld.org/iied/">http://www.oneworld.org/iied/</a></i>
Johnson Matthey's fuel cell website	<i><a href="http://www.fuelcelltoday.com">http://www.fuelcelltoday.com</a></i>
MMSD	<i><a href="http://www.oneworld.org/iied/mmsd">http://www.oneworld.org/iied/mmsd</a></i>
NOSA	<i><a href="http://www.nosa.co.za">http://www.nosa.co.za</a></i>
WBCSD	<i><a href="http://www.wbcSD.ch">http://www.wbcSD.ch</a></i>

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## Acknowledgements

### ACKNOWLEDGEMENTS FOR PHOTOGRAPHIC MATERIAL

Platinum Guild International; Johnson Matthey plc; Tanaka Kikinzoku Kogyo KK; Shimansky Collection (Cape Town); Toyota Motor Corporation; Cartier (Paris) and Engelhard Metals Limited.

### OTHER ACKNOWLEDGEMENTS

International Platinum Association

Whilst great care has been taken to ensure that all the information and statistics herein are accurate, no responsibility can be accepted for any mistakes, errors or omissions or for any action taken in reliance thereon. Opinions expressed herein represent those of Anglo Platinum at the time of publication.

# Dear stakeholder,

Due to the outbreak of the war in Iraq, shortly before this Annual Report went to print, the Company was informed that postal services would be severely disrupted and that, as a consequence, an International Business Reply Service would not be available to stakeholders who wished to provide the Company with their views on the Sustainable Development Report.

The Company would, however, value your views on the Sustainable Development Report and, accordingly, requests that you complete the questionnaire, which appears over the page, and fax it to the Company.



# Fax

To: Anglo American Platinum Corporation Limited  
Fax number: (+27) (11) 373-5111  
Re: Anglo Platinum Annual Report Volume 2:  
Sustainable Development Report 2002

## Anglo Platinum Annual Report Volume 2: Sustainable Development Report 2002

Please let us have your views on this report.

Format

Content

Not sufficient detail

Too much detail

Other comment

Tick here if we may record your views on our website.

Tick here if we may include your name and address.

Tick here if you wish to receive future reports.

Name

Organisation

Address

**Thank you.**



# unleashing lasting platinum prosperity

At Anglo Platinum, true prosperity is measured by the lasting benefits derived from platinum. As the world's largest platinum producer, a huge responsibility rests on our shoulders: as much effort needs to be applied to developing opportunities for the people of South Africa as into generating outstanding returns to shareholders. We employ and train tens of thousands of people every year and directly improve the well-being of South Africans through education and healthcare programmes.

Our communities benefit from royalties paid to them. More importantly, Anglo Platinum successfully participates in circles of prosperity in every community in which it operates, creating markets for goods and services and assisting local communities to become vibrant participants in the economy – formally and informally.

South Africa's mineral heritage is a powerful tool for creating sustainable wealth for all and nobody is more committed or better equipped to make it work than Anglo Platinum. Through the creation of empowerment partnerships and co-operation with all levels of Government, we will ensure that the country's platinum resources are optimally utilised to sustain generations of healthier, better-educated and happier South Africans. **Anglo Platinum – unleashing lasting platinum prosperity.**



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A member of the Anglo American plc group

[www.angloplatinum.com](http://www.angloplatinum.com)

BASTION GRAPHICS

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**ANGLO AMERICAN PLATINUM CORPORATION LIMITED**

Incorporated in the Republic of South Africa

(Date of incorporation: 13 July 1946) Registration number: 1946/022452/06  
JSE Code: AMS ISIN: ZAE00013181

A member of the Anglo American plc group

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