## Highlights of financial year 2001

#### **Financial Performance**

- Headline earnings double the previous record year
- Dividends more than doubled to R38 per share, plus special dividend of R30 per share
- Basket of metal prices (in dollars) up 47%
- Rand revenues boosted by 20% depreciation against the dollar

#### **Operational Performance**

- Breaking free from growth constraints
- 2 million ounces of platinum by 2006
- Platinum production a new high (up 8%)
- Major new projects announced
- Significant strategic acquisitions
- Steady production at the Impala operations, but disappointing cost performance
- A new Chief Executive takes up the reins.

## Year at a glance

Record Year	2001	2000	% change
Financial			
Sales revenue (Rm)	11 969	7 004	71
Operating income	6 849	3 103	121
Income before taxation	7 468	3 319	125
Attributable income	4 6 4 7	2 255	106
Headline earnings per share (cps)	7 024	3 383	108
Dividends per share	6 800	1 760	286
Cash net of short-term debt	3 013	3 081	-2
Production	10 200	te e	
Total			
Refined platinum production ('000 oz)	1 291	1 199	8
Pgm production refined	2 464	2 308	7
Impala			
Refined platinum production	1 002	1 020	-2
Pgm production refined	1877	1 913	-2
The second se			20 10

Chairman's letter to shareholders Group structure Chief Executive Officer's review **Five year statistics** Value-added statement **Financial review** Market review **Review of operations** Impala Platinum Winnaarshoek **Crocodile River** Impala Refining Services Strategic holdings Exploration Reserves and resources Corporate responsibility Corporate governance Glossary of terms Management Directors Approval of the annual financial statements Report of the independent auditors **Directors' report** Income statements **Balance sheets** Statements of changes in equity Cash flow statements Accounting policies Notes to the financial statements Notice to shareholders Shareholder information Administration Proxy

# Contents

3

6

75 76 78

79 84

114

### Chairman's letter to shareholders

#### Dear shareholder,

It is my pleasure to present to you this report on a fourth great year in a row for your company.

Last year, in recording record earnings and dividends, I rather conservatively forecast "A well positioned group, operating strongly and growing well in a firmer market suggests even better results next year". While all the good presumptions about the company did come to pass, the "firmer market" which eventuated surprised even the most bullish among us.

The extent to which the automotive industry, with its over-dependence on palladium, was hostage to Russian ability to manage this market struck home during the year, resulting in frantic activity to secure supplies (and to build stock) at almost any price. Palladium, which historically has traded at about one third of the price of platinum, overtook it first in January 2000, going on a year later to peak, in January of this year at \$1 100 per ounce (a premium of 66% to the ruling platinum price).

Parallel activities by autocatalyst manufacturers to move back from palladium rich to platinum (and rhodium)-based catalysis gathered momentum during the latter part of the year. Confidence in these developments and firmer forecasts of future palladium needs resulted in substantial consumption of their own palladium stocks by the automotive industry, with correspondingly reduced buying levels in the free market. Palladium has "come off the boil", as the market searches for its new equilibrium, and is now trading at a small discount once again to platinum.

The platinum market was caught up in the sentiment surrounding palladium, and while this was great on the way up, it is not so much fun on the way down. The realities of the platinum market in its own right should re-assert themselves in the next few months. These centre around rising autocatalyst demand, and increased jewellery demand in China (as the dollar price falls), offset by weaker jewellery demand in an economically depressed Japan and growth in supply from South Africa. We anticipate these fundamentals supporting higher long-term prices than those seen in the current market.

Implats has often been characterised in the past as "resource constrained". While the ability of our Impala operations at Rustenburg to produce at one million ounces of platinum per year for many years to come is well known, the group's growth strategy, some years in the building, is now delivering tangible results as follows:

- Owned and managed orebodies Impala, Crocodile River, Kennedy's Vale we already had, but now there is Winnaarshoek, the site of a major new mine
- Significant stakes in other mining companies, delivering an equity share in the mining and full ownership of the pgm concentrates – Zimplats, Mimosa and Aquarius
- A 27% equity stake in Lonplats, which is in the process of expanding by 25%



 Partnerships with other producers delivering full ownership of pgm concentrates – Messina, Kroondal, Marikana and Two Rivers.

The successes of this strategy are:

- The implied reserve of pgms to be produced and sold by Implats has increased by 60%
- The group, currently a 1.3 million ounce platinum producer, is poised to reach 2 million ounces by 2006 (excluding our participation in Lonplats' growth).

Of the business structures outlined above, owning and managing a complete orebody has the highest profit margins, but it is also the highest risk and the most capital intensive. The other businesses, from their lower profit bases, are equally dynamic when viewed from other perspectives such as return on investment.

The major disappointment of the year was our safety performance. I regret to record the accidental deaths of 13 of our number during the year, an increase of six on the previous year. After two years in a row where our fatality frequency rate (0.09 per million man hours) met the international benchmark of Ontario standards, this slippage to 0.16 has shaken the organisation. Most perplexing is the fact that the underlying trend of our Lost Time Injury Frequency Rate has shown huge improvement from more than 20 two years ago, to 12.6 last year and 8.5 this year. The search for answers and for safer working conditions continues. Our deepest sympathies are extended to the bereaved.

The financial disappointment of the year was the cost escalation at our Rustenburg operations. Although total Rand costs per ounce of platinum sold increased by a respectable 7% (just about equal to inflation) on-mine costs increased by 13% per ton milled and 16% per ounce of refined platinum. Most of this is rooted:

 In the need for more generous wage settlements in more successful years, (noting that labour accounts for more than 50% of our costs), and

- In the costs of meeting the new Basic Conditions of Employment Act, and
- In an alarming metallurgical performance as new plants have struggled through commissioning.

We are dismayed that counter-efforts and productivity improvements have not done more to contain the effects of the negative developments (as was the case over the preceding years). A complete review is underway.

Putting together the steady production from Impala, the new production from Crocodile River, the concentrate bought in from other miners, the buoyant market conditions, the sparkling performance of Lonplats and the 20% depreciation of the Rand, we had a year where;

- Every measure of income, from operating level through to attributable income, is more than double last year's record.
- The attributable income this year was more than the sales revenue of two years ago – a year that was then described as "fantastic"
- The proposed dividend for the year (excluding the special dividend of R30 paid in February) is 11 times the dividend of three years ago.
- The dividends for the year, including the special dividend, exceed the share price of three years ago.

The challenges facing the group are the ongoing and obvious one of optimising our current productive base and, from there, continuing to develop and deliver the growth potential of the group. All this must take place within the ever-changing dynamics of the new South Africa. We have much to be proud of in our recent history in terms of labour relations, employment equity, adult education and social upliftment, but more is required. In particular, the draft Minerals Development bill has evoked much debate. Our input thus far to the Department of Minerals and Energy has been aimed at the production of good law, rather than challenging the "use it or lose it" provisions, where we are considerably less threatened than our competitors.

The Royal Bafokeng Nation has taken issue with perceived threats in the draft Bill to their historical rights. While we fully support the Bafokeng position, it should be noted that, technically, the Bafokeng's mineral rights, and Implats' right to mine are two completely separate matters.

To face all these challenges I am delighted to welcome Keith Rumble, who joined the group as Chief Executive and Managing Director at the start of our new financial year. Keith has joined us after a dynamic career with Rio Tinto, which in recent times has seen him move from being the Managing Director and CEO of Richards Bay Minerals to being the President and CEO of its parent company, Rio Tinto Iron and Titanium in Canada. Keith's technical background and his experience in metalliferous mining and marketing position him well for success with us.

The only change that occurred to the Board during the financial year was the departure due to poor health of Steve Kearney as MD and CEO in September last year. Although Steve indicated some time previously that there were health problems, his departure was unexpected. Over a 10-year period with Implats Steve rose from Consulting Engineer to MD and latterly to Chief Executive. He was at the very centre of the resurgence of Implats, and the Board wishes to record its appreciation of his contribution.

The company was fortunate to have John Smithies to step into the gap caused by Steve's departure. John, then Operations Director, had previously indicated his wish to retire early in 2001, but agreed to continue until a long-term appointee was found. John has now retired, with the thanks of a grateful Board for the stability, energy and focus he brought to the position, and for the finalisation of so many of the growth prospects that took place during his tenure. With both the platinum and palladium markets adjusting to structural shifts against a background of global economic uncertainty we can be fairly certain that these results will not be repeated next year. In all probability we will produce results quite a bit better than the previous year, which at that time was an all-time record high for Implats. This is impressive enough in itself.

Based on the performance reported and anticipated, and in line with the more generous end of the dividend policy the Board has declared a dividend for the year of 6 800 cents, including a final dividend of 2 380 cents, payable on 4 October 2001.

Al he Malon

Michael McMahon Chairman



## Group structure

Implats' structure is as follows:



### Chief Executive Officer's review

It is my pleasure, as incoming CEO of Implats, to report on yet another exceptional year for the business, with record returns to shareholders.

#### Delivering shareholder value

Implats' mission is the delivery of real returns to shareholders. This was accomplished this year by:

- · A substantial increase in the share price; and
- Remarkable returns in cash, accentuated by a special dividend of R30 per share at mid-year.

The building blocks for growth are now firmly in place, enabling Implats to realise its aspirations to become a 2 million ounce platinum producer by 2006. Previously constrained by the limitations dictated by its single producing orebody, the Impala lease area, Implats now boasts not only the additional reserves over which it exercises management and control, but also those delivering life-of-mine concentrates, purchased from those operations in which Implats holds an equity stake and over which it exercises significant influence.

Implats has now secured its future by delivering the reserves necessary for growth and creating the flexibility required by the market.

All concentrates not originating from Impala's lease area are accounted for through an entity known as Impala Refining Services (IRS). The IRS business utilises surplus smelting and refining capacity to process third party concentrates from which IRS retains an agreed proportion of the metal value or receives a toll refining fee. The incremental pgm ounces generated through IRS are produced at vastly reduced capital costs and associated operating risks. The benefit that accrues to Implats from its "bought-in" ounces represents an overall reduction in the unit costs of processing Implats' in-house concentrate production and, in future, the significant minority shareholdings will contribute to earnings. Furthermore, these additional "boughtin" ounces materially add to the marketing leverage attributed to being the second largest platinum producer.

In addition to the earnings from Impala's inhouse production, and margins retained by the IRS operation, Implats benefits from dividend income declared by associated companies.

## Phenomenal growth in earnings and profits

Attributable income and headline earnings for the year ended 30 June 2001 more than doubled to R4.65 billion (US\$611 million) or 7 024 cents per share (US923 cps). This was primarily due to an increase in sales revenue of 71% to R11.97 billion (US\$1 573 million) as a result of higher dollar metal prices and a further weakening in the rand.

Strong growth was experienced in all areas of Implats' business. Contribution to attributable income from Impala increased to R3 724 million from R1 905 million in 2000. IRS generated a contribution of R300 million, up 156% from R117 million in 2000. Attributable income from Lonplats increased to R647 million from R220 million in 2000.

Despite an almost five-fold increase in total dividends to 6 800 cents per share, the anticipated level of earnings will ensure that the company remains in a sufficiently healthy cash position to realise its growth ambitions in the years ahead.

#### Record pgm market

The 2001 financial year was characterised by intense volatility in the prices of pgms, with record high palladium prices exceeding US\$1 000 per ounce. This resulted in a 47% increase in the price index (weighted average of Impala's basket of products) achieved to US\$1 254 per ounce, the highest ever recorded by Implats. While delivering record profits and cash flows to Implats, the high prices have, as expected, begun to take their toll on demand, particularly with regard to palladium.

Platinum demand remained firm despite the run up in prices. The metal used in jewellery exceeded other applications owing to strong



Implats' income streams

## Delivering shareholder value

growth in China which offset reduced demand in Japan. Platinum benefited from increased use in autocatalysts, particularly in diesel vehicles and growth in computer hard disc and LCD glass applications. Tightening emission control legislation should continue to boost platinum demand thereby ensuring a balanced market in the short to medium term, albeit at prices lower than those achieved during 2001.

The palladium market experienced strong demand particularly from the automotive and electronics sectors exacerbated by erratic supplies from Russian sources and demand quickly exceeded supply. As a result, palladium prices nearly doubled leading up to January 2001 before retreating as more product was released out of Russia towards the middle of 2001. The high prices have accelerated palladium substitution in dental and electronics applications as well as the conversion back to platinum/rhodium autocatalyst systems. Accordingly, Implat's business plan assumes further weakening of palladium demand and prices.

The long term oversupply forecast for palladium will be particularly problematic for the Russian and North American producers who collectively produce around three ounces of palladium for every ounce of platinum produced. Conversely, the South African producers only generate around half an ounce of palladium per ounce of platinum produced - a distinct competitive advantage in the near future.

#### Group safety a priority

The group safety record produced a mixed result for the year. The number of fatalities increased unacceptably to 13 from the level of seven fatalities experienced in both 1999 and 2000. Our sincere condolences are extended to the families and friends of the deceased. The lost time injury rate per million man hours, however, improved by 32% to 8.5 from the rate of 12.6 reported in 2000. Fresh initiatives will clearly be required to lift Impala's safety performance to match at least best international underground mining practice.

#### **Operational review**

Total platinum production, which includes metals sourced from concentrate purchased from third parties, increased by 8% to 1.29 million ounces.

Platinum production from the Impala lease area decreased by 1.7% to 1 million ounces of platinum. Tons mined from the Impala lease area increased by 3.3% on the previous year while tons milled increased by 1.2%. However, late delivery of the new UG2 concentrator circuit by the contractor and subsequent problems experienced during commissioning had a negative impact on Impala's performance for the year. As a result, the ore stockpile grew by around 210 000 tons to 630 000 at year end.

The smelter upgrade comprising two new converters, the enhanced acid plant and new 38MW furnace was successfully completed. However, the furnace refractories developed cracks soon after commissioning and, although this did not affect smelter output in 2001, it may necessitate premature replacement of the refractory bricks. A claim for damages has been lodged with the supplier of the refractories.

The inherent difficulties attendant on commissioning any major project were compounded in the case of two significant projects during the year.

- · The challenges of recommissioning old equipment at Crocodile River mine were exacerbated by an orebody more heterogenous than sampling had led us to believe.
- · In the case of the UG2 plant expansion, delivery by the contractor was a month late and although the designed 30% increase in capacity has been achieved, recoveries remain disappointingly below those expected. This is primarily as a result of equipment unreliability in the milling circuit which has prevented the plant from achieving steady-state production. The solution will most likely involve some circuit re-design.







Basket price - US\$/oz Pt

Solomon Moatsae on a dump truck at the open-cast operation at Impala's Rustenburg operations. The Impala lease area has sufficient reserves and resources to produce just over one million ounces of platinum per annum until 2030.

## Growing production by 10% a year

Cash operating costs per platinum ounce refined increased by 16% which is not in line with Impala's objective of delivering real decreases in the cost of metal produced. This was mainly as a result of mining costs incurred for ore which was not processed and lower recoveries in the new UG2 circuits. An above inflation wage increase of 9% also had an adverse impact on costs as well as the additional cost to the company of some 3% as a result of complying with the Basic Conditions of Employment Act, Skills Development Levy and higher regional services levies.

To get Impala's cash operating costs back on track to a level below inflation, the business improvement process (Fixco) was revitalised and several promising initiatives have been identified which should yield sustainable benefits. A number of noteworthy initiatives have already resulted in productivity increasing from 40m<sup>2</sup> to 41m<sup>2</sup> per employee, with a record level of 43m<sup>2</sup> recorded in the month of June 2001.

## Growth from mining and exploration

Implats has previously stated its objective of growing production by 10% per annum. Undoubtedly 2001 will be seen as the year that delivery on this objective gained momentum. During this year alone the company added almost 37 million attributable resource ounces of in situ platinum into its portfolio.

Implats' growth strategy comprises three paths, namely:

- · Mining projects and exploration;
- Strategic investments; and
- Processing concentrates to leverage processing and refining assets.
- The Winnaarshoek project, one of Implats' major new ventures, is a combination of the Platexco acquisition and mineral rights swaps with Anglo American Platinum Limited.
  Production is expected to commence as early as 2002 with full production of 175 0000 ounces of platinum per annum by 2004. The

agreement with Mmakau Mining (Pty) Limited and community-based empowerment participants in the Northern Province, is illustrative of Implats' ability to bring new projects on stream within the context of South Africa's proposed Minerals Development legislation.

- Barplats Mines Limited's Crocodile River mine was brought into production during December 2000. The planned mining rate of 75 000 tons per month was achieved in March 2001, although problems experienced with the re-commissioning of the concentrator resulted in lower than expected pgm concentrate production. Recovery of precious metals during the first four months of operation has been below expectations, but has improved as operations extend into less weathered ores. A number of mining and metallurgical improvements are in hand in order to ensure that the planned production of 50 000 ounces of platinum per annum is achieved
- In its exploration strategy Implats continues to pursue projects and joint ventures both in South Africa and internationally, focussing on primary pgm projects which have the potential to generate quality deposits. To achieve this, Implats supports junior exploration companies, providing funding, expertise and access to smelting and refining infrastructure. In February 2001, Implats entered into an alliance with international group Falconbridge to explore jointly for pgm mineralisation on five continents. This alliance has already identified a number of prospects, with exploration beginning at Cana Brava in Brazil in mid-2001. Exploration continued at the Kennedy's Vale project in South Africa and the Birch Lake and River Valley projects in North America.

#### Growth from strategic investments

 Delivery from Implats' 27% stake in Lonplats in terms of both production and contribution to earnings was well in excess of expectations.
Lonplats is proceeding with expansions to become a one million ounce producer and, **1**1



Managed operations Purchased concentrate (equity stake) Purchased concentrate (no equity stake) and toll refining Attributable oz from Lonplats (21%)



although capital expenditure will remain high, Implats will continue to benefit from this company's profitability.

 Relationships with Aquarius (Implats 10.1%) remain strong. Kroondal was delisted from the JSE Securities Exchange in early August. Good performance was once again achieved at Kroondal, with platinum production capacity now increased to an annual rate of 130 000 ounces. The Marikana project, scheduled to begin production in late 2002, has the potential to yield 75 000 ounces of platinum per annum.

Implats acquired an effective 40% stake in the **Ngezi-Hartley** assets of the **Zimplats** group. The first phase of production from the Ngezi open-cast mine is planned for January 2002, with full production of 180 000 tons per month from March yielding 40 000 ounces of platinum during 2002. The operation has the potential to grow even further in the future. The successful acquisition of a 35% stake in

- Mimosa Platinum, a low cost producer on the Great Dyke, is another strategic investment in this region. Mimosa is proceeding with its expansion plans to increase platinum production by 50 000 ounces to 68 000 ounces by 2003.
- Through its effective stakes in Zimplats and Mimosa, Implats, together with its partners, has access to about 85% of the primary pgm resource of the Great Dyke, which is the largest undeveloped pgm resource in the world, second only in importance to South Africa's Bushveld Complex.
- The Two Rivers joint venture with Anglovaal Mining Limited should lead to the establishment of a 100 000 platinum ounces per annum mine in 2004. This follows the successful bid by the Implats/Avmin joint venture for the Dwars Rivier reserves. Avmin will operate the project, with technical and other input from Implats, while Implats – through subsidiary IRS – will benefit from a life-of-mine concentrate offtake agreement signed with Two Rivers.

## Leveraging processing and refining assets

The above projects, along with the third party concentrate purchases and toll-refining business, will see IRS continuing to deliver robust growth both in contributions to income and in increasing the total ounces of pgms produced in the years ahead.

Created in July 1998 as a dedicated vehicle to house the tolling and metal purchase contracts built up by the group, the concept behind IRS has become a major strategic thrust and has delivered another year of phenomenal growth. Production amounted to some 587 000 ounces of pgms and 9 534 tons of base metals, of which, 267 000 ounces pgm was purchased from third parties and 320 000 ounces was toll refined.

Growth has been generated as a result of both existing business and new projects. Production in terms of existing agreements, such as with Kroondal Platinum Mines Limited and A1 Specialised Services and Supplies Inc (autocatalyst recycling), has continued during the year.

Implats' strategic partnership approach will have the additional benefit of new sources of concentrate. During 2002/2003, the group will benefit from the first scheduled production from Ngezi Mine (Zimplats) and the Marikana Mine (Aquarius), with which it has entered into life-ofmine concentrate purchase contracts. The Winnaarshoek project will come into production during 2002 and the Two Rivers project, should come into production in 2004. Further out on the time horizon are Aquarius' Everest South project and Barplats' Kennedy's Vale project.

#### Challenges and opportunities

A number of challenges and opportunities lie ahead for Implats.

 Safety is an area of primary concern.
Following several internal and external audits, a programme of behavioural motivation for both management and employees is being undertaken. New safety initiatives will be introduced in order to achieve a step-change reduction in the number of accidents.

- Although Lonplats is expected to continue to deliver excellent returns to Implats during the year ahead, we recognise that the full value of this investment is poorly reflected in the Implats share price. Attention to this unfinished business continues.
- The future of the **Gencor** shareholding is being constructively addressed by the Implats Board, in association with the Board of Gencor, to ensure a satisfactory outcome for the shareholders of both companies.
- Implats is proactively managing the impact of HIV/AIDS. A recent anonymous blood testing study conducted at Impala's 8 Shaft, confirmed an HIV prevalence of 16% which is significantly below the levels of 25 to 30% currently reported in the industry. An anonymous attitude survey also produced encouraging findings indicating high levels of understanding and education amongst employees regarding HIV/AIDS. During the year Implats commissioned an independent actuarial report to determine the potential financial impact of HIV/AIDS. The report indicates that costs for medical treatment, absenteeism, training and costs to maintain productivity, could amount to R86 million per year at a peak in 2011. However, if current education and intervention programmes are successful in only halving the rate of new infections amongst employees, there would be a dramatic reduction in HIV/AIDS costs to R46 million at the expected peak of the epidemic in 2011. This is a credible scenario if prevalence levels amongst Impala employees have indeed peaked as our research suggests. Implats spent more than R4 million during the year on various education and intervention programmes and will continue to drive these through our collaborative union/management HIV/AIDS Committee.
- Achieving a rating in the market relative to our competitors which fairly reflects the underlying value and potential of the company, is being addressed. Much work has

been done in improving disclosure to the investing community and in selling the Implats story to international investors. There have been some indications of interest from emerging market and generalist funds and reaching these potential investors in particularly Europe and North America is a key goal.

#### The year ahead

Prospects for the year ahead remain good, with continued delivery in terms of operational performance and the coming on stream of the various growth projects. The upbeat markets of the past 12 to 24 months could not be expected to continue indefinitely. Based on current market prices, Implats is therefore anticipating earnings lower than for the current year but increased from the levels of 2000 which in itself was a record year. Global economies seem to be responding sluggishly to stimuli and a prolonged slowdown may impact on pgm demand to a greater extent than anticipated in our business plan - with further negative impact on prices. In anticipation of this, Implats has emphasised process enhancements, as well as cost reduction and productivity initiatives during the year and is well-placed to capitalise on these going forward.

Chief Executive Officer

#### Income statement

for the year ended 30 June ( R million )	2001	2000	1999	1998	1997
Turnover	11 969.1	7 003.6	4 602.0	3 380.6	2 658.2
Platinum	5 253.2	3 017.2	2 251.6	2 091.6	1 742.1
Palladium	3 129.0	1 689.2	1 031.1	621.3	268.9
Rhodium	2 199.1	1 218.0	582.2	238.7	156.1
Nickel	700.2	600.4	363.5	216.7	285.7
Other	687.6	478.8	373.6	212.3	205.4
Cost of sales	5 120.3	3 900.8	2 986.8	2 567.7	2 393.7
On-mine operations	2 330.1	1 997.6	1 880.4	1 772.7	1 571.8
Concentrating and smelting operations	492.5	440.7	415.3	384.7	351.5
Refining operations	333.3	307.9	295.6	262.3	266.4
Amortisation of mining assets	212.2	139.9	148.7	135.5	113.1
Metals purchased	1 968.8	698.8	287.6	-	-
Other costs	117.1	96.6	83.2	78.7	104.0
(Increase)/decrease in inventory	(333.7)	219.3	(124.0)	(66.2)	(13.1)
	( 0.40.0	2 102 0	1 / 15 0	010.0	2445
Operating income	6 848.8	3 102.8	1 615.2	812.9	264.5
Other income/(expense)	94.5	62.0	14.2	5.9	4.2
Net financial income	383.3	228.2	185.9	44.2	1.8
Share of pre-taxation income from associates	1 031.4	332.8	204.3	54.4	21.6
Royalty expense	(890.3)	(406.4)	(237.4)	(93.1)	(5.9)
Income before taxation	7 467.7	3 319.4	1 782.2	824.3	286.2
Taxation	2 815.2	1 061.9	525.2	325.9	105.6
Consolidated income after taxation	4 652.5	2 257.5	1 257.0	498.4	180.6
Outside shareholders' interest	5.4	2.5	5.0	(2.9)	(1.6)
Attributable income	4 647.1	2 255.0	1 252.0	501.3	182.2
Earnings per share ( cents )					
– Basic	7 024	3 422	1 929	794	293
– Diluted	6 970	3 388	1 902	784	
– Headline (basic)	7 024	3 383	1 929	804	293
Dividend per abore interim propagad final (secto)	2 000	1 7/0	000	250	110
Dividend per share - interim + proposed final (cents)	3 800	1 760	880	350	110
Special dividend per share	3 000	-	-	-	-

#### Balance sheet

as at 30 June ( R million )		2001	2000	1999	1998	1997
ASSETS						
Non-current assets		6 547.8	4 230.3	3 488.5	3 037.9	2 980.3
Fixed assets		5 230.6	3 357.3	2 822.2	2 431.2	2 353.7
Investments and other		1 317.2	873.0	666.3	606.7	626.6
Current assets		5 162.3	4 504.3	3 168.3	2 143.6	1 239.4
Total assets		11 710.1	8 734.6	6 656.8	5 181.5	4 219.7
EQUITY AND LIABILITIES						
Capital and reserves		6 430.0	5 625.6	4 043.9	2 943.4	2 452.2
Outside shareholders' interest		19.2	13.8	46.9	68.7	71.6
Non-current liabilities		1 465.2	1 195.1	1 068.4	1 052.4	1 016.2
Borrowings		113.1	137.6	162.3	179.3	194.6
Deferred taxation		1 156.1	889.7	745.0	746.9	707.5
Provision for long-term responsibiliti	es	196.0	167.8	161.1	126.2	114.1
Current liabilities		3 795.7	1 900.1	1 497.6	1 117.0	679.7
Total equity and liabilities		11 710.1	8 734.6	6 656.8	5 181.5	4 219.7
Cash net of short-term borrowings		3 013.1	3 081.4	1864.9	801.8	219.2
°		2 900.0	2 943.8	1702.6	622.5	219.2
Cash, net of all borrowings		2 900.0	2 943.0	1702.0	022.3	24.0
Current liquidity (net current assets e	excluding					
inventories)		587.3	2 164.6	1 014.5	264.8	(16.0)
IMPLATS SHARE STATISTICS						
No. of shares in issue at year end	(m)	66.3	66.1	65.7	64.0	62.3
Average number of issued shares		66.2	65.9	64.9	63.1	62.2
Number of shares traded		36.4	31.7	30.1	14.7	11.7
Highest price traded	(cps)	47 300	29 600	17 200	6 800	6 900
Lowest price traded		23 980	15 400	5 100	3 450	4 050
Year end closing price		40 360	25 220	15 180	5 050	5 075

#### US\$ Information (Unaudited)

for the year ended 30 June (US\$ Million)	2001	2000	1999	1998	1997
Turnover	1 572.8	1 108.2	757.2	682.5	618.1
Cost of sales	672.8	616.8	491.4	528.4	528.1
On-mine operations	306.2	315.9	309.4	364.7	346.8
Concentrating and smelting operations	64.7	69.7	68.3	79.2	77.6
Refining operations	43.8	48.7	48.6	54.0	58.8
Amortisation	27.9	22.1	24.5	27.9	24.9
Metals purchased	258.7	110.5	47.3	-	-
Other costs	15.4	15.3	13.7	16.2	22.9
(Increase)/Decrease in metal inventory	(43.8)	34.7	(20.4)	(13.6)	(2.9)
Operating Income	900.0	491.3	265.9	154.1	90.0
Other income/(expense)	12.4	9.8	2.2	1.2	0.9
Net financial income	50.4	36.1	30.6	9.1	0.4
Share of pre-taxation income from associates	135.5	52.6	33.6	11.2	4.8
Royalty expense	(117.0)	(64.3)	(39.0)	(19.1)	(1.3)
Income before taxation	981.3	525.6	293.3	156.5	94.8
Taxation	369.9	167.9	86.4	67.1	23.3
Outside shareholders' interest	0.7	0.4	0.8	(0.6)	(0.4)
Attributable income	610.7	357.3	206.1	90.1	71.8
	000	540	010	110	445
Earnings per share (cents)	923	542	318	143	115

\* Note: Income and expenditure have been converted at the average exchange rate for the year. Sales revenue reflects actual dollar receipts.

#### **Operating Statistics**

<b>Operating Statistics</b> for the year ended 30 June		2001	2000	1999	1998	1997
Gross refined production						
Platinum	('000 oz)	1 291	1 199	1 181	1 052	1 002
Palladium	('000 oz)	681	636	651	557	497
Rhodium	('000 oz)	164	155	159	131	141
Nickel	('000 t)	14.0	13.8	14.9	7.7	7.7
Impala refined production						
Platinum	('000 oz)	1 002	1 020	1 065	1 052	1 002
Palladium	('000 oz)	481	493	516	557	49
Rhodium	('000 oz)	128	131	143	131	14
Nickel	('000 t)	7.0	7.2	7.7	7.7	7.7
IRS refined production						
Platinum	('000 oz)	289	179	116	-	-
Palladium	('000 oz)	200	143	135	-	-
Rhodium	('000 oz)	36	24	16	-	
Nickel	('000 t)	7.0	6.6	7.2	-	
IRS returned metal						
Platinum	('000 oz)	164	102	84	-	-
Palladium	('000 oz)	116	93	104	-	
Rhodium	('000 oz)	21	17	8	-	
Group consolidated statistics						
Exchange rate:	(R/US\$)					
Closing rate on 30 June		8.06	6.92	6.00	5.48	4.5
Average rate achieved		7.68	6.40	6.08	4.94	4.20
Free market price index	(\$/oz)	1 266	914	631	611	53
Achieved price index	(\$/oz)	1 254	855	625	609	57
Prices achieved						
Platinum	(\$/oz)	586	428	358	409	418
Palladium	(\$/oz)	773	465	311	223	130
Rhodium	(\$/oz)	2 001	1 223	719	358	27
Nickel	(\$/ton)	6 951	7 500	4 466	6 062	7 17
Sales volume						
Platinum	('000 oz)	1 177	1 209	1 076	1 030	99.
Palladium	('000 oz)	543	656	585	551	49
Rhodium	('000 oz)	145	171	140	129	13
Nickel	('000 t)	14.1	14.0	14.9	7.5	7.

**1**7

#### **Operating Statistics (continued)**

r the year ended 30 June		2001	2000	1999	1998	1997
Gross margin achieved	(%)	57.2	44.3	35.1	24.0	10.0
Return on equity	(%)	82.6	55.8	43.7	20.9	7.8
Return on assets	(%)	71.0	53.3	34.7	16.5	5.9
Debt equity ratio		1:47	1:34	1:19	1:14	1:10
Current ratio		1.4:1	2.4:1	2.1:1	1.9:1	1.8:1
Tons milled ex- mine	('000 tons)	15 184	14 662	14 638	14 509	13 775
Pgm refined production	('000 oz)	2 464	2 308	2 299	1 960	1 888
Capital expenditure	(Rm)	2 090	783	431	248	266
	(US\$m)	275	124	71	51	61
mpala business segment						
Tons milled ex- mine	('000 tons)	14 840	14 662	14 638	14 509	13 775
Total cost per ton milled <sup>1</sup>	(R/ton)	213.2	188.6	179.6	172.2	166.5
	(\$/ton)	28.0	29.8	29.5	35.4	36.7
Pgm refined production	('000 oz)	1 877	1 913	1 978	1 960	1 888
Cost per pgm ounce refined <sup>1</sup>	(R/oz)	1 685	1 445	1 329	1 275	1 215
	(\$/oz)	221	229	219	262	268
Cost per platinum ounce refined <sup>1</sup>						
Total cost of operations	(R/oz)	3 156	2 711	2 471	2 369	2 281
	(\$/oz)	415	429	407	487	503
Net of revenue received for other metals	(R/oz)	(1 879)	(510)	617	1 144	1 366
	(\$/oz)	(247)	(81)	102	235	301
Capital expenditure	(Rm)	978	732	425	248	266
	(US\$m)	129	116	70	51	61
Total Impala labour complement	('000)	28.0	28.3	28.7	29.5	31.0

1. The cost of mining, concentrating, smelting, refining, marketing, head office and insurance claim as expressed per unit

## Value added statement

for the year ended 30 June (R million)	2001	% Change	2000
Group sales revenue	11 969.1	70.9	7 003.6
Net cost of products and services	3 138.5	42.3	2 206.2
Value added by operations	8 830.6	84.1	4 797.4
Income from investments and interest	1 521.1	135.6	645.7
TOTAL VALUE ADDED	10 351.7	90.2	5 443.1
Applied as follows to:			
Employees as salaries, wages and fringe benefits	1 734.7	13.1	1 534.3
The state as direct taxes	2 815.2	165.1	1 061.9
Royalty recipients	925.2	116.8	426.8
Providers of capital	3 885.0	441.8	717.1
Financing costs	17.3	31.3	25.2
Dividends	3 867.7	459.0	691.9
TOTAL VALUE DISTRIBUTED	9 360.1	150.3	3 740.1
Re-invested in the group	991.6	41.8	1 703.0
Amortisation and depreciation	212.2	51.7	139.9
Reserves retained	779.4	50.1	1 563.1
	10 351.7	90.2	5 443.1



Rockdrill operator Robert Mohohlo at Impala Platinum's 12 shaft. Production efficiencies rose during the year from 40m<sup>2</sup> per employee to 41m<sup>2</sup> per employee, which equals Impala's record achieved in 1999.

## **Exceptional** year for Implats

### **Financial** review

Implats continues to provide exceptional operating margins with positive cash flows being generated. This combination enabled the group to return R4.5 billion to shareholders in the form of dividends.

#### Results for the year

Sales revenue (or turnover) grew by R5.0 billion (up 71%) to R12.0 billion. This exceptional increase was on the back of:

- An average basket of dollar prices of US\$1 254 per platinum ounce which was
  47% higher than the previous financial year
- A 20% depreciation in the South African Rand against the US dollar.

Both of these factors combined to provide an improvement of 74% in the average Rand prices achieved for the major metals. Implats has benefited tremendously from the majority of its revenue stream being US dollar denominated while the majority of costs are incurred in Rands.

Group attributable income (or net profit) of R4.6 billion increased by 106% from R2.2 billion the previous year.

As the group continues to expand, the contributions to attributable income from the various components are changing.

Attributable Income (Rm)			
	2001	2000	Variance
Impala Platinum	3 724	1 905	1 819
Impala Refining Services	300	117	183
Crocodile River (Barplats)	(24)	13	(37)
Lonplats	647	220	427
Total	4 647	2 255	2 392

The Impala lease area still contributes most of the attributable income, but reliance on this as the major contributor will reduce over time as the recently announced projects begin to feed through to the bottom line.

IRS continues to play a central role in the group's growth strategy and contributed R300 million, up 156% on last year's figure of R117 million.

The slower than anticipated start up at Crocodile River mine had a negative impact, and the adjusted attributable income contribution reflects the group's accounting policy on the elimination of any unrealised profit on intercompany transactions. This should reverse in the next financial year.

Our shareholding in the Lonplats group has reaped significant benefits with attributable income rising from R220 million to R647 million, an increase of 194%. This figure represents the equity accounted earnings for the year up to March 2001. For the most part that attributable income was received in the form of R542 million in cash dividends. This cash is earmarked for investment in the recently announced Zimplats, Mimosa and Two Rivers Platinum projects which in turn will deliver significant contributions to the group's attributable income in the future.

The cost performance during the period under review was not in line with the group's philosophy of ensuring single digit unit cost increases. Cash operating cost per ounce of refined platinum rose by 16% to R3 156 (or in dollar terms decreased by 3% to US\$415). The effective cost of producing an ounce of platinum, net of by product revenue was a credit of R1 879 per ounce, which was 268% better than the previous year. The table below illustrates the Impala cost performance and is calculated as the cost of mining, concentrating, smelting, refining, marketing and head office costs divided by the relevant platinum production units.

Cash operating cost			
Rand	2001	2000 %	/ariance
R/ton milled	213	189	(13)
R/oz pge refined	1 685	1 445	(17)
R/oz platinum refined	3 156	2 711	(16)

The group has, in US dollar terms, benefited greatly as a result of the depreciation of the Rand against the US dollar and US dollar costs have actually decreased for the period under review.

#### financial review

Cash operating cost			
US\$	2001	2000 9	% Variance
US\$/ton milled	28	30	7
US\$/oz pge refined	221	229	4
US\$/oz platinum refined	415	429	3

With respect to margins, the Implats group derives its income from three separate revenue streams, namely :

- Mine-to-market where Implats owns and manages the operations, such as Impala Platinum, Crocodile River mine and, in the future, the Winnaarshoek project.
- Income from associated companies such as Lonplats and in the future from Zimplats, Mimosa, Two Rivers Platinum and the Aquarius group.
- Income from the processing of third party material through IRS.

The margins vary between different business units from 65% at the mine-to-market Impala model to approximately 19% from IRS activities. Implats believes that the philosophy of optimising its refining capacity through securing toll refining contracts and, in addition, acquiring significant minority equity shareholdings, is an optimal strategy. It recognises that this business will produce lower margins than the traditional mine-to-market models. The comparison is skewed, however, if the focus is on one side of the risk/reward equation only. The measure of total risk/return is a combination of weighing the project risks against the project rewards where the Implats group model delivers certain key benefits to shareholders :

- Reduced exposure to mining risk
- Lower investments (in terms of both capex and equity)
- Reduced payback periods
- Comparable return on investment to the mine-to-market model as metal prices decrease. This is as a result of fixed percentage returns on the IRS contracts.
- Exploitation of smaller deposits enabled because of the symbiotic relationship between the miner and the processor.
- · Increased process throughput allowing

economy of scale benefits to be realised and reduce the fixed cost recovery on Impala mined metals. This is estimated at approximately a 20% reduction in fixed cost recovery based on present throughput.

The margins on production from the Impala lease area can be summarised as follows:

Operating margin					
Rand	2001	2000 %N	/ariance		
Revenue per platinum					
ounce sold	9 433	5 883	60		
Cost of sales per platinum					
ounce sold	3 283	3 055	7		
Operating profit per platinum					
ounce sold	6 150	2 828	117		
Gross margin	65	48	36		

Further details are contained in the segmental reporting note 1 in the Annual Financial Statements.

#### Earnings per share

Headline earnings per share for the year at 7 024 cents were 108% ahead of the previous year's 3 383 cents. The previous year's earnings per share were adjusted for the change in accounting for the final dividend. The adoption of this statement had a positive impact on the current year's attributable income which increased by an amount of R55 million. This is covered in more detail in note 11 to the Annual Financial Statements.

The weighted average number of shares in issue was 66 158 million in the current year compared with 65 891 million in the prior year, an increase of less than half a percent. The increase in shares during the current financial year was mainly as a result of shares issued in terms of the share option scheme. (Details are outlined in the directors' report and note 20 to the Annual Financial Statements).

#### **Dividends**

The board has proposed a final dividend of 2 380 cents per share, bringing the total

declared and proposed dividends for the year to 6 800 cps. This includes the special dividend of 3 000 cps. The increase in interim and final dividends represents a 116% increase over the previous financial year.

Dividends are covered 1,9 times by earnings per share. This is in line with the board's stated dividend policy. The dividend cover philosophy is underpinned by an awareness of returning excess cash to shareholders. This was confirmed by the special dividend payment announced in February 2001.

#### Currency

The average Rand/US dollar exchange rate achieved was 7.68 this year, some 20% lower than last year's 6.40 achieved. Implats is well positioned to benefit from this weakening in the exchange rate as most of the group's earnings are denominated in US dollars.

Implats' policy remains to be unhedged to fluctuations in the Rand/US dollar exchange rate movement but in certain circumstances forward exchange contracts are entered into to hedge anticipated future transactions.

R/\$ for last 5 years						
	2001	2000	1999	1998	1997	
R/\$	7.68	6.40	6.08	4.94	4.29	

#### Shareholder value

We believe that the best measurement of shareholder value is the total return to shareholders (TSR) method. This is a combination of the appreciation in share price, plus dividends returned to shareholders. Implats' TSR from the end of the 1998 financial year to the end of the period under review has seen the group deliver a phenomenal return of 890%.

## Balance sheet structure and cash flow

Implats maintains a low gearing ratio and has substantial debt capacity. As a result the group's weighted average cost of capital (WACC) is not optimal. Consideration is being given to utilising part of the capacity for future projects in an appropriate manner, but taking into account the exposure to US dollar commodity prices and Rand/US dollar exchange rates.

Implats maintains a strong balance sheet in order to meet working capital requirements and provide internal funding for the majority of future capital projects.

The group generated R5.7 billion during the period under review. This was sufficient to fund capital expenditure programmes, the significant dividends paid and the payment for Platexco Inc. Despite this, Implats' closing cash position was similar to that of the previous financial year.

Implats' cash position for the next financial period is anticipated to be substantially lower than the closing position as at the end of June 2001.This is mainly due to:

- Payment for recent acquisitions (Zimplats, Mimosa and Two Rivers)
- Potentially lower metal prices
- Increased final dividend payment
- Ongoing capex on the Impala lease area, Crocodile River mine and Winnaarshoek.

#### **Capital expenditure**

Group capital expenditure was recorded at R2 090 million, of which R950 million related to the purchase of the Winnaarshoek mineral rights. Capital expenditure at Impala Platinum of R978 million for the year was R246 million higher than 2000, with expenditure on the decline projects at 1 shaft (R129 million), 12 shaft (R56 million), 14 shaft (R261 million) and 11 shaft (R116 million) accounting for more than half of that.

Capex (adjusted for the Winnaarshoek purchase) is expected to increase by R890 million, to R2 001 million in 2002. Of this, R870 million is for continued expenditure on the decline projects, R640 million for the Winnaarshoek project and R132 million at Crocodile River mine.



Pieter de Bruin filing platinum ingot at Impala's Refinery in Springs. The Enhanced Precious Metals Refinery is arguably the lowest cost primary refinery in the world.

# Robust market for our metals

### Market review

#### **Fundamentals reasserted**

The year under review was witness to immense volatility in the prices of our main metals with platinum exceeding \$600 and palladium prices soaring to over \$1 000 per ounce. These prices led to a 47% increase in the price index achieved to \$1 254 per ounce, the highest ever.

Despite almost record deliveries of Russian platinum during calendar year 2000, and a meaningful decline in Japanese jewellery demand, the platinum market remained resilient. Deteriorating economic conditions in 2001 are expected to pressurise the market but this should be countered by a robust automotive sector and stable jewellery demand outside of Japan, leaving an essentially balanced market for the year.

As forecast, substitution of palladium in the automotive and electronic industries, accelerated by the dramatic price movements of the metal and a significant slowdown in the information technology sector, will see demand shrinking from 2001. These fundamentals have been further exacerbated by consumer de-stocking and excessive Russian deliveries during the first quarter of 2001, possibly exceeding 4.0 million ounces, resulting in a near halving of the price.

The contraction of business conducted in the forward markets of Tocom and Nymex has limited the ability of producers and consumers to hedge themselves, while simultaneously reducing the speculative activity of the mainly Japanese general public. Without the influence of these forward markets, short-term supply and demand considerations are likely to have a greater influence on prices, as witnessed by activity in the daily London fixes.

#### Platinum

Demand for platinum in jewellery fell marginally (by 1%) to 2.84 million ounces, the first decrease since 1983. This was due to a sharp decline in the Japanese market, which outweighed strong growth in both China and the US.

Platinum supply and demand				
Calendar years	2001	2000		
('000 ounces)	Estimate			
Demand				
Automobile	1 980	1 925		
Jewellery (excl China)	1 550	1 740		
Jewellery (China)	1 100	1 100		
Industrial	1 485	1 450		
Investment	(30)	(60)		
Net demand	6 085	6 155		
Supply				
South Africa	4 185	3 775		
Russia	850	1 150		
Other	510	395		
Recycling	580	545		
Net supply	6 125	5 865		
Surplus/(Deficit)	40	(290)		

The ongoing weak economic conditions coupled with a surging price took its toll on fabrication in Japan, which fell by 20% to 1.06 million ounces in 2000. In terms of pieces, sales declined by only 4% compared with the previous year, due mainly to the fact that many manufacturers used this period to reduce metal stocks to alleviate difficult trading conditions. Sales in the lower price brackets were the worst affected as mainly younger buyers switched to more affordable alternatives.

China surpassed Japan as the world's leading consumer of platinum jewellery as another year of growing demand, albeit at lower rates than in previous years, resulted in sales increasing by 16% to 1.1 million ounces. This was despite the high and sometimes volatile price, resulting in the erosion of manufacturers' margins. At prices above \$600 many manufacturers halted production resulting in a shortage of product at the retail level. The move by the Chinese tax authorities to tighten up on the payment of taxes, also restricted fabrication. In the US, price was less of an issue as the market is dominated by the bridal and "upmarket" sectors. Strong growth in the first half of the year was tempered by weakening consumer confidence in the latter half as the economy began to slow. Demand





increased by 15% to 380 000 ounces. In Europe demand remained firm with the strongest growth coming from the United Kingdom where the number of pieces hallmarked increased by 29%.

The global expansion of the platinum jewellery market took another important step forward last year with the launch, in September, by the Platinum Guild International (PGI), of a platinum jewellery campaign in India. The launch was limited to a small number of authorised manufacturers and retailers in Delhi and Mumbai. Market response has been very positive and the campaign will be extended to other cities during the year ahead. Given that India is the world's largest gold market, it has the potential to be another significant market for platinum. Increased promotional spending by the PGI will bolster demand in the major markets, except Japan, which is expected to decline further next year.

Demand for platinum in autocatalysts continued to benefit from the ongoing tightening of emission legislation worldwide. The growing desire by automakers to reduce their dependence on palladium by moving to platinum-based systems began to gather momentum due to concerns about availability and price. The combined effect was that demand increased by 2.5% to 1.93 million ounces. Despite a 2% decline in European car sales, platinum demand benefited from a further surge in the sales of diesel vehicles and the introduction of Euro III legislation. The legislation, which applies to all new models from January 2000, requires higher platinum loadings for catalyst use with diesel engines. This sector will benefit further in 2001 when Euro III legislation is extended to cover all new vehicles.

In the US, there was a marginal increase in platinum demand as automakers reverted to platinum. With full compliance required this year with the Low Emission Vehicle standards, the requirements of which favoured palladium-rich systems, manufacturers are focusing on the next set of standards. This new series of more stringent emission legislation in both Europe (Euro IV) and the US (Tier 2), which places strong emphasis on carbon monoxide and oxides of nitrogen emissions will benefit platinum demand. In addition, platinum usage will be further increased by the Tier 2 standards which also require light duty trucks to meet the same stringent standards as cars, starting in 2004. Elsewhere in the world, 2000 saw the adoption of tighter emission legislation by various countries. These included Japan, China, India, South Korea and several smaller south east Asian countries.

#### Palladium

Demand increased by almost 4% to a record 8.86 million ounces primarily as a result of a further surge in automotive usage. Consumption by automakers rose by 11% to 5.38 million ounces. Palladium is the most effective metal for the control of hydrocarbon emissions, the main target of the most recent legislation. With the phase-in of these standards all but completed, automakers are now looking at reducing their dependence on palladium. Although this metal will remain a key ingredient in future formulations, usage will be cut by thrifting programmes and by moving to platinum/rhodium systems. These changes are expected to cut palladium usage by the auto industry by 30% over the next five years.

The strong move away from palladium to nickelbased multi-layer ceramic capacitors in the electronics industry continued with less than 50% of capacitors produced containing palladium. The substitution trend is forecast to continue and the shift will become more pronounced as production declines with the current economic slowdown.

Although usage in its two major applications is forecast to decline, the market will require Russian sales from stock to satisfy demand for the next few years. Thereafter, the market will return to a natural supply/demand balance to the benefit of both supplier and consumer.





Palladium supply and demand		
Calendar years	2001	2000
('000 ounces)	Estimate	
Demand		
Automobile	5 155	5 380
Dental	745	820
Electronics	1 865	2 140
Other	535	520
Net demand	8 300	8 860
Supply		
South Africa	2 050	1 840
Russia *	4 750	5 200
Other	1 180	950
Recycling	320	265
Net supply	8 300	8 255
Surplus/(Deficit)	-	(605)

#### Nickel

Despite weakening consumption, the nickel market remained in deficit due to a combination of production cutbacks, disruptions and operating difficulties. The slowdown in stainless steel demand that emerged during the second half of 2000 has carried into 2001. With production continuing to expand through a combination of brownfield and greenfield expansions, the market is forecast to move into surplus this year.

\* Supplies required to balance the market in 2001

#### Rhodium

The rhodium market remained underpinned by strong demand from its main user, the automotive industry. Demand for autocatalysts rose by 17% to 579 000 ounces. A combination of more stringent emission legislation and the desire by automakers to thrift palladium were the main drivers of growth. This trend is expected to continue and will gain more impetus through new emission legislation, a feature of which is tighter limits for N0x for which rhodium is better suited.

Rhodium supply and demand		
Calendar years	2001	2000
('000 ounces)	Estimate	
Demand		
Automobile	585	579
Other	89	92
Net demand	674	671
Supply		
South Africa	439	411
Russia*	80	80
Other	21	21
Recycling	101	91
Net supply	641	603
Surplus/(Deficit)	(33)	(68)

\* Excludes significant off-market transactions which have been placed in inventories





# One million

## Ptounces D

Sinking of the new ventilation shaft at Impala's 14 shaft decline. Impala's capital efficient decline programme will extend the lives of existing shaft systems.

### Impala Platinum

Known colloquially as "the engine", Implats' major operational unit, Impala Platinum, comprises 13 shaft systems and Mineral Processes (concentrating and smelting activities) located near the towns of Phokeng and Rustenburg on the world-renowned Bushveld Complex, as well as the company's Precious Metals and Base Metals Refineries some 200 kilometres away, near Springs in Gauteng. These operations employed 27 979 people during 2001.

#### Safety

The tragic loss during the year of 13 employees in work-related accidents was a devastating reversal of the previous year's significant success in making the business of mining less hazardous. The fatality rate of 0.16 per million man hours reflects the second worst year since 1997.

Falls of ground accidents remain the biggest cause of fatalities and claimed four lives this year; followed by scraper and winch operation related accidents; explosive accidents; and rock handling accidents. Two fatalities also occurred at the 14 shaft project.

A root cause analysis by International Risk Control Africa (IRCA) of these accidents revealed that too much effort is being placed on managing the consequences of accidents rather than preventing them, indicating a need to address the safety culture of the company. Safety was further compromised by the loss of experienced crew captains during the course of the year.

On the positive side, internal and external audits have indicated that safety programmes and training are in place and this is reflected in the improving trend of the lost time injury frequency rate. This year's rate of 8.5 lost time injuries per million man hours is the best ever, and shows an improvement of 32% compared to last year. Two shafts achieved two million fatality free shifts and a further five achieved one million shifts during the course of the year. The operations as a whole achieved this milestone twice. The emphasis for the year to follow is on ensuring that:

- management accepts accountability for the safety culture of the organisation
- · risk assessments take place
- new, inexperienced crew captains receive further best practice training
- contractors' health, safety and environmental management systems and training are aligned with those of Impala.

During the year:

- Good progress was made with training at all levels. An additional 1 642 safety representatives completed a safety representative training programme. Some 500 crew captains completed a risk management programme and 580 passed a principles of supervision programme.
- Four CAP (Common Audit Process measure against ISO standards) were conducted and an external audit of the code of practice to combat rock falls and rockburst accidents was concluded.
- A joint Health, Safety and Environment summit was held with participation from all stakeholders.

Impala Refineries achieved its lowest ever lost time injury frequency rate of 0.8 per million man hours. The Refineries achieved a NOSCAR rating during 1999 and has maintained it since then.

During the coming year Implats will:

- Improve support standards in stoping and development areas
- Improve action-plan implementation following risk assessments and routine process measurement audits
- Formalise a monitoring programme for actionplan implementation to ensure continuous improvement
- Develop a process for accumulating corrective and preventative action resulting from audits, inspections and other managementmeasurements systems



0.20







#### Mining

Tons mined increased by 3.3% on last year to 15.05 million. Headgrade declined slightly, however, to 4.9 g/t owing to a narrowing of the Merensky channel and an increase in pre- and redevelopment. Headgrade should improve in the year ahead as more ore will be mined from the Merensky reef.

On-mine cost per ton mined increased from R137 to R154 (12%) mainly as a result of an above inflation wage increase of 9% and an additional 3% as a result of the implementation of the Basic Conditions of Employment Act. An increase (6%) in on-reef development from 210 700 metres in 2000 to 224 200 metres in 2001 also had an adverse effect on costs. Problems in the concentrator resulted in 210 000 tons of ore being added to the live ore stockpile, again adding to costs. Cost performance on a tons milled basis therefore increased from R136 to R156 (14.7%).

#### **Decline projects**

Impala aims to maintain production at the one million ounce level until 2030 at an affordable annual capital cost. To achieve this, Impala embarked on a programme to extend the lives of the third generation shafts by means of decline shafts or shaft systems that utilise existing infrastructure. Five decline shafts and a vertical shaft to link in with 12 shaft are currently in progress at a total capital cost of R4 billion



**10 shaft:** Development of the 10 shaft decline began in 1993. Mining at this triple decline system began in 1997 and the first three levels are already producing. Development of the final level station is in progress and full production should be achieved by October 2001.

1 shaft: This project commenced in 1997. Production from the first level was achieved in July 2000. Rock weakness led to some modifications to this decline that will now comprise four rather than six levels. Production will be unaffected as the change has allowed earlier mining than originally planned. Full production will be achieved in the 2004 financial year.

11 shaft: Sinking commenced at this triple decline system in 1999. Stoping will commence in 2002 and full production will be attained in 2007. The ventilation shaft has been commissioned and sinking of the second downcast man and material shaft will start in 2001.

**12 shaft south**: The start-up development of this three level, twin-shaft decline is well advanced. The first level was accessed in March 2001 and full production should be attained in 2004.

12 shaft north: Work on this vertical shaft system commenced in June 2001. The system comprises a downcast man and material shaft and an upcast ventilation shaft. The first ore from this project will be processed in the 2004 financial year. This shaft is the first at the Rustenburg operations to embrace the "pillar and stall" mining method, using trackless machinery and conveyor belts for moving ore.

14 shaft: This project comprises the development of a five-level decline and the upgrading of infrastructure for increased



Location of shafts on the Impala Platinum lease area

			Decline Project:	S		
Project	Start of mining	Maximum production	Reserves	Reefs mined	Capex (R million)	Life of shaft (years)
		/month (m <sup>2</sup> )	('000t)			
10# decline	2000	28 000	20 675	Merensky	171	29
1# decline	2000	45 000	25 761	Merensky and UG2	726	16
11# decline	2001	45 000	15 001	Merensky and UG2	721	14
12# south decline	2002	18 000	5 151	Merensky	256	8
14# decline	2004	45 000	37 922	Merensky and UG2	1 656	25
12 # north decline	2004	15 000	8 263	Merensky	471	10

tonnages. Development commenced in 1999 and good progress was made to establish the access ways. Shaft sinking of a vertical ventilation shaft is also underway. Final project completion is scheduled for 2006.

#### Metallurgical processing

Impala continues to dedicate significant attention and resources to its metallurgical operations with a capital expenditure programme of R280 million in 2001 for concentrating and smelting. This will reduce to R100 million in 2002.

#### Concentrator

Tons milled for the year were 14.84 million, 210 000 tons less than tons mined, mainly due to an additional public holiday and a three day stoppage at the UG2 plant owing to an electric substation failure.

Problems were also experienced with the start up of the UG2 ore separation project. The plant was commissioned two months late and recoveries were not at expected levels. Throughput improved to acceptable levels and a 30% increase in plant capacity was realised by year-end. Initial results indicate a 3% cost per ton reduction. Work to balance the volumes through the high grade and low grade circuits to improve recoveries is in progress. The higher volume through the UG2 plant will enable more mills to be dedicated to Merensky ore in the main plant, allowing for a finer grind and thus improved recoveries. Stabilisation and optimisation of the Merensky flotation plant has continued but further optimisation is required in order to achieve design recoveries.

The net impact of these difficulties has been a 2.5% drop in metallurgical recoveries compared to the previous year.

#### Smelter

Impala's smelting operation continued its excellent performance during the year. The smelter expansion project was delivered timeously and within the R230 million budget. The expected benefits of capital efficiency, by far the lowest costs in the industry, and increased flexibility and contingency have been realised.

However, the refractory bricks of the new furnace housing started to crack soon after commissioning, apparently as a result of a problem with the brick manufacture. Although

Impala mining statistics						
		2001	2000	1999	1998	1997
Tons milled	('000)	14 840	14 662	14 638	14 509	13 775
% UG2 milled		49.6	50.6	48.1	45.9	45.6
Headgrade (g/t 5 PGE + Au)		4.90	4.97	5.31	5.17	5.22
M2 per stoping employee		41	40	41	40	36
Tons per employee		53	51	51	48	44
Number of employees (working cost)	('000)	28.0	28.3	28.7	29.5	31.0



the furnace itself is stable and extensive condition monitoring continues, operating life will be shortened. A spare furnace lining has also been ordered from Austria which will arrive in October 2001.

The smelter complex processed a record 79 800 kilograms of matte this year, a 13% increase on 2000. Concentrating and smelting costs increased from R30 to R32 per ton (6.8%) and were well contained given the amount of construction work in the area.

#### Refineries

The Refineries' solid performance was sustained and the cost per refined platinum ounce was contained to an increase of only 7.4% despite substantial cost increases in reagents and chemicals.

The completion of process enhancements at the Enhanced Precious Metals Refinery (EPMR) led to much improved performance in the rhodium and iridium circuits with a further release of metal from process inventories. A programme of fine-tuning the EPMR circuit will commence in the new financial year at a capital cost of some R50 million. These will allow for throughput in excess of 2 million ounces of platinum per year, along with associated pgms.

#### People and technology

The concept of unlocking the potential of our people is a key strategic driver for Impala. As our employees' skills increase, the need for new technology to improve performance further and ensure our position as industry leader in efficiencies becomes increasingly important. Thus, a strategy combining the performance of our people and advances in technology, will continue to deliver the improvements in efficiencies for which the company has become known within the industry.

Five years ago Impala introduced the Fixco process with the "One team – one vision" concept central to that initiative. The aim of Fixco was to secure Impala's long-term future through a real reduction in unit costs at a time when the company was viewed as competitively disadvantaged by its high cost of production and labouring under a capital inefficient expenditure programme. This objective was achieved by drawing on the combined energies and initiatives of the people of Impala – and with a dramatic decrease in the labour force – resulted in Impala boasting the highest productivity levels in the South African hard rock mining industry.

During 1999/2000, Implats realised, however, that the impetus of the initial Fixco process had largely dissipated and that, with certain once-off initiatives having being achieved, step-change improvements were unlikely.

#### **New Fixco initiatives**

A highlight of the year was undoubtedly the reenergising of the Fixco process by the combined management/employee team as part of Impala's core "One team – one vision" philosophy. This vision continues to have as its aim the delivery of just over a million ounces of platinum per annum from the Impala lease area over the life-of-mine, with unit costs in line with or better than inflation and an affordable capital funding programme.

The management-employee Fixco committee is focused on three key areas, headgrade, recoveries and efficiencies and has identified 18 separate initiatives and appointed a champion at mine level to lead each initiative. The committee meets on a regular basis to evaluate progress and determine new objectives. Major advances have been achieved during the year:

- Production efficiencies across the operation are up from 40m<sup>2</sup> per employee to 41m<sup>2</sup> per employee, which equals the previous record achievement in 1999;
- A 5% reduction in compressed air usage achieved;
- A 3% improvement was recorded in Merensky headgrade in the last quarter.

In the past a great deal of emphasis was placed on reducing employee numbers, but no major decrease is anticipated over the next few years. Instead, the implementation of Fixco and other control mechanisms to identify and address problem areas are poised to deliver the requisite improvements in productivity.

#### Breakthrough technology

From trackless mining to new cutting and blasting techniques, leading to better mine layouts, improved safety and productivity are expected to provide further impetus to Impala's drive for the highest efficiencies and lowest costs in the industry.

Implats is currently engaged in a number of new technology initiatives either directly or in partnerships with research organisations, suppliers and other companies. This thrust is aimed at mechanisation that can be applied to a relatively narrow, tabular hard rock orebody. The challenge is to tap the appropriate technology to deliver cost reductions, productivity improvements and improved safety.

#### **Exploration**

Evaluation of the Impala lease area continued during the year with a 3D seismic survey extending to the southern border of the property and to 1 800 metres below surface. Fifteen boreholes were drilled in the deeper part of the lease area to supplement seismic surveys, while 86 shallow boreholes were drilled to evaluate the Merensky open-cast potential.

Name	Strategic	Description	Objective	Targeted monthly
	Partner			advance (m)
Penetrating	Brandrill	A plastic cartridge, filled with	To continuously mine/break	60
Cone Fracture	Limited	propellant, initiated by an	with non-explosive propellant	
(PCF)		electronic detonator	using drill holes	
Mini Disk Cutter	CSIR	A low profile cutter with	To continuously mine a breast	140
(MDC)	Miningtek	mini disks	or longwall stope	
Oscillating Disk	AMIRA	A 300 mm oscillating disc	To continuously mine a breast	120
Cutter (ODC)	International	(single or multiple)	or longwall stope and a tunnel	
Pneumatic Drill Rigs	Novatek Drills	Pneumatic operated drills	Accurate, less strenuous, stope	Not
		mounted on a single or	drilling	applicable
		double boom		
Hydropower Drill Rigs	Novatek Drills	Hydro-power operated closed	Accurate, less strenuous, stope	Not
		circuit drills mounted on a	drilling with improved	applicable
		single or double boom	efficiency	
Mineral Resource	GMSI	Integrated production info	Electronic planning with	Not
Management		system comprising a suite	rolling short, medium and	applicable
		of GMSI modules	life-of-mine plan	
Low Profile	Not	Employing trackless mining	Mechanisation of stoping	30
Trackless	applicable	techniques at a 1.5 metre	operations	
Mining		stope width		

\* Current face advance with manual mining methods =  $22 \text{ m}^2$ 

## Najor new platinum mine on the astern Limb

Drilling at the box-cut at the Winnaarshoek project on the eastern limb of the Bushveld Complex. The project will see the development of a major new platinum mine in a relatively underdeveloped area, involving the creation of 1 500 new jobs.

### Winnaarshoek

In December 2000, Implats acquired Platexco Inc, a Toronto-listed junior mining company, for C\$191 million (R950 million).

Located on the eastern limb of the Bushveld Complex, near the town of Steelpoort in South Africa's Northern Province, the Winnaarshoek project has the potential for the development of a mine producing 175 000 ounces of platinum for at least 30 years.

#### **Mineral rights**

The project comprises the Winnaarshoek property as well as the mineral rights associated with adjacent properties Clapham, and portions of Driekop and Forest Hill. The Driekop mineral rights are subject to a 1.5% royalty payable to each of Anglo Platinum and the Lebowa Minerals Trust calculated on the value of the metals contained in the concentrate.

#### Major empowerment initiative

The project will be held 80% by Implats and some 10% each by Mmakau Mining (Pty) Limited and community-based investors from the Northern Province. Mmakau Mining is a wellestablished mining concern chaired by its founding shareholder, Bridgette Radebe.

Both Mmakau Mining and the community empowerment participants will be represented on the board of the Winnaarshoek project and Mmakau Mining will also be represented on the project's executive committee. This arrangement provides a major black empowerment participation in a large-scale pgm project. It is expected that the financing for the empowerment transaction and the Northern Province empowerment participants will be finalised by the end of 2001.

#### Mining and processing

Extensive exploration drilling has been conducted since January 2001 and will continue for the remainder of the year and into next year, targeting specifically the shallower areas from the outcrop to 450 metres below surface. The exploration results will facilitate mine planning in respect of the underlying geological structure, grade, resources and reserves estimates and the rock engineering requirements for mechanised mining.

The mine will utilise a mechanised pillar and stall mining method with dense media separation to remove waste. The orebody will be accessed by means of two separate decline shafts, sunk onreef from the outcrop position, situated approximately 1 300 metres apart on strike. Decline development will begin in mid-2002, with the first production from stoping by December 2002. Full mill production will be reached by 2004. Mining will first concentrate on the UG2 reef, with development on the Merensky reef commencing later.

The project has entered into a life-of-mine concentrate purchase agreement with IRS for the smelting, refining and marketing of its concentrate.

Capital cost for the project is estimated at some R1.6 billion spread over the first four years of the project. It is intended that this will be funded jointly from Implats' internal resources and by the capital raised by the empowerment partners.

During the expected mine life over 30 years, the mine will employ some 1 500 people in a relatively remote and underdeveloped area. A number of environmental and social challenges remain and a dedicated team is in place to ensure that the positive influences of the mine balance any potential negative influences on the surrounding environment and communities.

Winnaarshoek Project		
Purchase price	C\$191 million (R950 million)	
Mineral Resource 45.4 million tons-Merensky		
	22.9 million tons-UG2	
Planned production	175 000 Pt oz pa	
Capital expenditure	R1.6 billion over 4 years	
Job creation	1 500 employees	
Life-of-mine	30 years	
Full production	2004	

## Crocodile River opened under budget

Excavating portal area pit no 1 at Barplats' Crocodile River mine. The mine was brought into production under budget in February 2001, just one year after approval for the reopening was given by the board.
## **Crocodile** River

Crocodile River is wholly owned by JSE-listed Barplats Investments Limited, which in turn is 83% held by Implats. In February 2000, the directors of Barplats approved the re-opening of the mine (which had been mothballed since 1991), near Brits in South Africas North West Province, with the intention of bringing it on stream in 2001.

During the year, the mine was brought into production under budget but with some difficulties experienced with re-commissioning the concentrator. Capital costs thus far have been in the region of R149 million (excluding the rehabilitation assets), funded by an intercompany loan from Impala Platinum. Further capex for the remaining current life-of-mine of 14 years is expected to be in the region of R314 million.

#### Mining

Open-cast mining operations commenced on the eastern side of the property at the Maroelabult section in December 2000. Underground mining is set to commence in October 2001, with good progress having been made on the preliminary construction for the sinking of a decline shaft. The mine will adopt the pillar and stall mining method and this, together with dense media separation techniques, will improve the extent of the resource base.

With one milling circuit of the Crocodile River concentrator in operation, the planned milling target of 75 000 tons per month was achieved in March 2001. An additional flotation circuit to treat the old tailings dam was commissioned in July 2001.

#### **Re-commissioning difficulties**

Problems were experienced with the re-commissioning of the concentrator when only 63% recovery compared with the expected 79% was achieved, as a result of the oxidised ore being more difficult to treat than was initially anticipated. Some of the deeper ore (of more than 35 metres below the surface) has now been treated, achieving recoveries in excess of 70%.

Further work to enhance recoveries and to reduce the chrome content in concentrate is continuing and steady-state operating performance is expected by December 2001. These difficulties and a late start meant that the mine achieved an output of 14 900 ounces of platinum in concentrate during the first six months of operation, some 40% short of the planned 25 000 ounces.

Investigations to extend the life of mine further are underway.

Crocodile River production and o	COSTS
	Financial year
	2001
In concentrate production	
Platinum ('000 oz)	15
Palladium	7
Rhodium	2
Nickel (tons)	19
Cash operating cost	
R/Ton milled <sup>1</sup>	109
R/oz pge in concentrate <sup>2</sup>	1 315
R/oz platinum concentrate <sup>3</sup>	2 527
Operating margins	
Revenue per platinum ounce in concentrate	7 847
Cost of sales per platinum ounce in concentrate	3 887
Operating profit per platinum refined <sup>3</sup>	3 960
Gross margin	50
1. The cost of mining and concentrating is expressed per ton mill	ed

2. The cost of mining and concentrating is expressed per ounce of pge in concentrate

3. The cost of mining and concentrating is expressed per ounce of platinum in concentrate

	Crocodile River Mine		
Reserves and Resources	25.7 million tons – UG2		
Planned production	50 000 Pt oz pa		
Capital expenditure	R314 million		
Job creation	450		
Life-of-mine	14 years		
Full production	FY 2002		

Offloading of autocatalyst powder at Impala's Rustenburg smelter operations. Implats' wholy-owned subsidiary Impala Refining Services (IRS) is, through its association with A1 Specialised Services and Supplies Inc, the leading recycler of autocatalysts in the world.

# a major strategic thrust

# Impala Refining Services

Created in July 1998 as a dedicated vehicle to house the toll refining and metal concentrate purchases built up by the group, the concept behind Impala Refining Services (IRS) has become a major strategic thrust of the business.

During the year, production of precious metals grew from approximately 395 000 ounces to 587 000 ounces. Of this, 267 000 ounces of precious metals was purchased from and processed on behalf of third parties and 320 000 ounces was spot refined. Production of base metals exceeded 9 500 tons.

Operating profit rose to R363 million from R142 million in the previous year.

IRS uses the Impala processing assets for which it is charged a market related fee.

#### Existing business grows

The life-of-mine concentrate offtake agreement continued with Kroondal Platinum Mines during the year with increasing throughput to IRS as the mine built up to steady-state production. Further growth in production is expected from Kroondal during 2001/2002 and the agreement has been extended to include the additional concentrate produced.

IRS through its association with A1 Specialised Services and Supplies Inc remains one of the world's leading recyclers of autocatalyst materials.

The opening of the Crocodile River mine in early 2001 saw additional concentrates being delivered to IRS. Production at the Mimosa mine in Zimbabwe, with which IRS has an existing agreement and in which Implats now has a substantial shareholding, has commenced with significant expansion and will contribute to future growth.

Deliveries from Messina, a subsidiary of SouthernEra Inc, are expected to commence during late 2001.

#### New projects bring growth

During 2002/2003, IRS will benefit from the first scheduled production ounces from the Ngezi mine (Zimplats) and the Marikana mine (Aquarius). The Winnaarshoek project will come into production by the end of 2002 with metal production during 2003 and the Two Rivers joint venture should come into production in 2004. Further out on the time horizon are Aquarius' Everest South project and Barplats' Kennedy's Vale mine.



IRS production and costs Financial year				
Production				
Platinum	289	179	61	
pgm production refined	587	395	49	
Operating margins				
Turnover	1 872	835	124	
Cost of sales	1 509	693	118	
Operating profit	363	142	156	
Gross margin	19	17	12	

Metallurgical Superintendent Ken Youngman, observing the mill at the Kroondal Platinum Mines' metallurgical circuit. Implats' relationship with Kroondal's parent company, Aquarius, strengthened during the year:

# Relationships Eorged

# Strategic holdings

Relationships continued and strengthened with Lonplats, the platinum division of London-based Lonmin plc and Australian and London-listed Aquarius Platinum Limited. New relationships were forged with Avmin, Zimplats and Mimosa.

#### Lonplats

Implats continues to hold a crucial 27% stake in Lonmin's Lonplats, comprising Western Platinum Limited and Eastern Platinum Limited, which brings with it 50% board representation and certain pre-emptive rights. Despite high levels of capital expenditure the contribution this operation has made to the bottom line is considerable. During the financial year, Lonplats announced an aggressive expansion programme to take advantage of favourable market circumstances, which should see the company achieve production of one million ounces of platinum by 2007.

Despite its significant contribution to Implats, the company recognises that the full value of this investment is not yet reflected in its share price and ways of releasing value and providing a better return to shareholders are constantly under review.

#### **Aquarius**

Implats' relationship with Aquarius Platinum Limited, in which it holds a 10,1% interest, increased and strengthened during the year. Kroondal Platinum Mines Limited delisted at the beginning of August 2001 and the company is now 99% held by Aquarius and Implats (5%). It is Aquarius' intention that the company should become a wholly-owned subsidiary in the near future.

The Kroondal mine, located near Rustenburg on the Western Limb of the Bushveld Complex, has continued to perform well. The operation is in the process of increasing output by 50 000 ounces to 130 000 ounces per annum, with a slight decrease in life-of-mine. The installation of a regrind circuit in the metallurgical processing operation should also result in increased recoveries in the year ahead. Kroondal continues to deliver to IRS in terms of the life-of mine contract and this relationship has now been extended to cover the additional concentrate being produced.

Implats also holds a direct stake of 25% in Aquarius Platinum (SA) Limited, a subsidiary of Aquarius Platinum and the owner of mineral rights relating to the Marikana, Everest South and Chieftain's Plain projects. The Marikana project, an 18 million ton resource located on the Western Limb of the Bushveld Complex, is likely to be brought into production in late 2002, while the start-up of Everest South is scheduled for 2003.

Aquarius has undertaken to enter life-of-mine smelting, refining and marketing contracts with IRS on behalf of the Marikana, Everest North and South and Chieftain's Plain projects. In the medium term, it is Implats' objective to increase its stake in Aquarius to around 35%.

Effective contribution of Implats' 27.1% share in Lonplats				
Year to March		2001	2000	% change
Sales revenue	(Rm)	1 653	837	98
Income before taxation		1 031	333	210
Attributable income		647	220	194
Dividends received		542	148	267
Refined production				
Platinum	('000 oz)	178	172	3
Palladium		80	77	4
Rhodium		25	23	9

#### Zimplats

In March 2001, Implats announced the acquisition of an effective 40% stake in the Ngezi-Hartley assets of the Zimbabwe Platinum Mines Limited (Zimplats) group. The transaction was structured on two tiers in line with Implats' *modus operandi* of investing in both the parent and operating companies.

First, Implats acquired from Delta Gold Limited a 30% stake in Australian-listed Zimplats in a joint venture with South African financial institution ABSA Bank Limited, for an amount of R131 million (US\$16.3 million or A\$22.1 million). Implats holds pre-emptive rights over ABSA's stake and ABSA has signaled its intention of retaining its holding for the short-term only. Delta Gold continues to hold 21% of the company, with the balance held by minority shareholders.

At the second tier, Implats holds a 30% direct stake in the Ngezi-Hartley project, which comprises the now abandoned Hartley Platinum Mine, the Ngezi project and the Selous Metallurgical Complex (SMC). The purchase consideration still to be paid in respect of this stake is an amount of R240 million (US\$30 million). The deal follows the completion of a bankable feasibility study by independent consultants, SRK.

Ngezi is located some 75 kilometres from the SMC and has the potential to produce 100 000 ounces of platinum (200 000 ounces of pgms) per year. The orebody, which lies about 20 to 50 metres below surface, will be accessed by open-cast mining methods. Ore will be transported via Australian-style road trains to the SMC and smelter matte will be transferred via road to IRS in South Africa.

Good progress has been made in preparation for production in mid-2002, with the construction of a road from Ngezi to the SMC currently underway. Production is scheduled to begin in 2002, with full production being attained by later in the year.

Zimplats holds extensive mineral rights on the Great Dyke and it is Implats' intention to participate further in these in the longer term.



#### **Two Rivers**

In May 2001, Implats and Anglovaal Mining Limited announced the joint acquisition of the pgm mineral rights to the farm Dwars Rivier from Associated Manganese Mines of South Africa Limited. Implats will acquire its 45% stake in the resultant Two Rivers Platinum project for an amount of R248 million (US\$30 million).

The project is located on the Eastern Limb of the Bushveld Complex, south of the town of Steelpoort in South Africa's Mpumalanga province. Exploration drilling is currently being undertaken to confirm preliminary evaluation of the resource of 50 million tons of UG2 reef. A feasibility study is currently underway to determine the optimal design and output of the mine which is expected to be in the region of 100 000 ounces of platinum per annum. The mine will have a 20-year life and come into production in 2004.

The mine will be operated by Avmin (holding 55%), who will also market the base metals production which will be toll-refined by IRS. IRS will smelt and refine the concentrates and market the resultant pgms.

#### Mimosa

During the year Implats negotiated a 35% stake in Mimosa, the only successful platinum mine currently operating on the Great Dyke and arguably the lowest cost primary pgm producer in the world, for a consideration of US\$30 million. IRS has had a smelting, refining and marketing agreement with Mimosa since production began five years ago.

The deal was announced post year-end in July 2001, with Mimosa signaling its intention to increase production by 50 000 ounces per year to 68 000 ounces per year by 2003.

#### Philnico

The group's nickel strategy to reduce capital and operating costs of the base metal refinery by sharing them with a nickel mine, remains in place. How the Philnico project at Nonoc fits into this strategy still rests on the ability of the sponsors to deliver, as a partner to the project, a major nickel player and the necessary funding for the balance of the project. Until that stage, the project remains on hold. In the meantime, the feasibility study was completed on time and within budget.

Two Rivers Project		
Purchase price	R248 million (45%)	
Resource	Resource 50 million tons – UG2	
Capital expenditure	R760 million over 20 years	
Expected output 100 000 Pt oz pa		
Anticipated production date	Anticipated production date 2004	
Life-of-mine	20 years	

Johannes Mashilo monitoring surface vibrations during an exploration seismic survey. Implats is pursuing exploration opportunities both in South Africa and internationally.

**OCUSEC** 

strateo

exploration

St,

# **Exploration**

The surge in pgm prices from September 1999 onwards has led to a significant increase in global pgm exploration and interest. In North America, in particular, a host of existing copper and nickel projects and mainly palladium projects have come to the fore. Implats has evaluated many of these during the year but has maintained its exploration strategy of pursuing projects and joint ventures in South Africa and internationally, focussed on primary pgm projects which have the potential to generate quality deposits. Part of this strategy is Implats' support of junior exploration companies, providing funding, expertise and access to smelting and refining infrastructure.

A joint venture agreement was signed with international group Falconbridge Inc during the year and exploration continued at the Kennedy's Vale, Birch Lake and River Valley projects in North America.

The Insizwa joint venture project was terminated during the year.

#### **Bushveld Complex exploration**

#### Kennedy's Vale

The Kennedy's Vale project, located on the Eastern Limb of the Bushveld Complex, is 100% held by JSE-listed Barplats Investments Limited, which in turn is 83% held by Implats. This mothballed operation has an existing vertical, but unequipped shaft system to a depth of some 900 metres. The original plans allow for a decline shaft system to access deeper reserves. Infill drilling was undertaken during the year to confirm grades and geological structures, with initial results of an indicated resource of some 233 million tons.

A 3-D seismic survey commenced in May 2001 and the interpretation of information from this survey should be completed by mid-2002. An investigation of adjacent properties and surface drilling of more complex geological areas will be undertaken during the next year and it is likely that a feasibility study will commence by mid 2002.



Global PGE Exploration Activities

#### International exploration

#### **Birch Lake**

Implats has the right to earn a 60% interest in the Birch Lake project, located on the Duluth Complex in Minnesota, USA, for a maximum expenditure of US\$5 million over a period of five years. In collaboration with joint venture partners, Beaver Bay and Lehmann Exploration Inc, 11 boreholes were completed during the year. Of these, five intersected mineralisation and the results were sufficiently encouraging to continue with the evaluation of the deposit against potential mining and processing methods. Limited infill drilling is underway to evaluate the variability and continuity of the ore horizon. A decision on whether or not to proceed with extensive evaluation of this early stage project is expected in 2002.

#### **River Valley**

The River Valley Project is a joint venture with Toronto Stock Exchange-listed Mustang Minerals Corp on the River Valley Complex, some 50 kilometres from Sudbury in Canada's Ontario province. For a maximum expenditure of C\$6 million over five years Implats will be entitled to a 60% interest in the project. The exploration target is primary pgm mineralisation, with associated base metals. The exploration property covers more than 600 mining claim units and 28 kilometres of prospective stratigraphy along the north and south margins of the Complex.

During the year field mapping, ground geophysics and rock chip sampling identified a zone of mineralisation stretching some 5.5 kilometres on the eastern side of the property and some 2.4 kilometres in the south. Diamond drilling commenced in November 2000 and, to date, some 66 shallow boreholes, including stratigraphic holes, have been completed. Although the project is still at a very early stage, preliminary results have been encouraging with two prospective targets having being identified. Detailed fieldwork in these areas of interest is underway prior to the commencement of follow-up drilling. A decision to continue or otherwise will be made by the end of 2001.



North American ventures

#### **Rutledge Lake**

Implats has provided seed capital of C\$0.3 million to another Canadian junior, Platinum Group Metals Limited (PTG), towards exploration in the Great Slave Lake area some 200 kilometres south east of Yellowknife in the Northwest Territories, where encouraging pgm in surface samples were previously identified. Some 10 boreholes were drilled during the year, but failed to intersect significant platinum or palladium mineralisation. The information obtained will be assessed during the latter half of 2001.

#### Alliance with Falconbridge

In February 2001, Implats signed a strategic alliance agreement with international base metals group Falconbridge to explore jointly for pgms. Falconbridge has an extensive global exploration programme with a presence on five continents – Africa, North America, South America, Asia and Australia – and will undertake grassroots exploration in consultation with Implats on potential targets. In terms of this fiveyear agreement, Implats will be offered all pgm projects that Falconbridge's programme identifies, with Implats supporting at least two quality projects each year. Implats will then contribute early stage funding to earn a 50% stake in any project.

A number of projects are already on the table, with Implats having committed to expenditure of C\$250 000 in the first phase of exploration at the Cana Brava project in the Goias state in Brazil, some 300 kilometres north of the Brazilian capital, Brasilia. Fieldwork at the project commenced during July 2001, with mapping, sampling and geophysical surveys on a strike length of some 40 kilometres.

Michael Petoe, seismic monitoring observer at the Kennedy's Vale project. Implats holds lease areas on both the eastern and western limbs of the Bushveld Complex.

HILL MAL

# Reserves and resources Classified according to SAMREC

MIN TRAVIN

### **Reserves** and resources

Through Impala, Barplats and Winnaarshoek Implats is currently evaluating and exploiting the Merensky Reef and UG2 Chromitite Layer horizons of the Bushveld Complex. These narrow tabular horizons form the best known pgm orebodies and are extensively mined for their precious metal content. Impala has over 30 years' experience in mining these deposits and their characteristics are well known.

#### Impala Platinum

Impala Platinum Limited holds mining leases covering 12 085 hectares north-west of Rustenburg in the North West Province. A mining licence covering a further 12 675 hectares was granted during 2001 over the lease extension area. In addition, Impala holds a mineral lease, granted by Rustenburg Platinum Mines, covering 496 hectares over a portion of the farm Boschkoppie 104 JQ, contiguous with Impala's operations.

The tables below list Impala's Mineral Reserves and Mineral Resources. The classification is based on the South African Code for Reporting of Mineral Resources and Reserves (the SAMREC Code).

Impala has undertaken extensive surface drilling, 2D and 3D seismic surveys which have provided

confidence in the areas included in the Mineral Reserve and Mineral Resource statements. Grade estimates are obtained by means of the ordinary kriging geostatistical method. Impala's geostatistical database consists of over 50 000 sample sections (550 000 individual samples) obtained by underground sampling of development faces and stoping panels. In addition, over 800 reef intersections have been obtained by surface drilling (original boreholes and deflections).

The economic channel is generally defined by a marginal grade cut-off which ranges between 1.0 g/t and 1.5 g/t, except in areas where the channel is below the minimum mining width. The channel estimates are determined from a combination of geostatistical estimates and comparisons against historical information. The modifying factors used to determine Mineral Reserves are based primarily on historical tonnage and grade dilutions together with planned improvements. These are derived from an in-house ore accounting system developed and refined over 8 years.

Proved Mineral Reserves refers to material available for mining without further development.

#### Impala lease areas Mineral Reserves as at 30 June 2001 (limited to 1 700 m below surface)

Orebody	Category	Tonnage (millions)	Grade 5 pge& Au	Pt oz millions
Merensky	Proved	17.6	4.88	1.6
	Probable	94.2	4.69	8.1
UG2	Proved	21.9	5.10	1.7
	Probable	122.1	5.16	9.6
Total		255.8	4.96	21.0

#### Impala lease areas Mineral Resources as at 30 June 2001 (limited to 1 700 m below surface)

Orebody	Category	Tonnage (millions)	Grade 5 pge& Au	Pt oz millions
Merensky	Measured	14.2	7.36	1.9
	Indicated	95.9	8.42	14.7
UG2	Measured	12.1	8.99	1.7
	Indicated	75.0	8.98	10.3
Total		197.2	8.59	28.6

Probable Mineral Reserves describes material beyond existing development, which has been evaluated by drilling and seismic surveys and for which appropriate feasibility studies have been completed which confirm economic extraction.

Measured Mineral Resources includes material where geological evaluation has been completed and appropriate feasibility studies are in progress. Indicated Mineral Resources include material where the continuity of mineralisation can be assumed but where additional geological evaluation is required.

#### **Crocodile River Mine**

Barplats Mines Limited holds mining licences and mineral rights over 9 735 hectares in the Brits area of the North West Province. Barplats owns the Crocodile River mine which is exploiting the UG2 Chromitite Layer in the area.

Tabled below are Crocodile River mine's Mineral Reserves and Mineral Resources, classified according to the SAMREC Code. These estimates are derived from a total of 245 reef intersections (original boreholes and deflections). Grade estimates have been verified by kriging utilising Impala's geostatistical system. Proved Mineral Reserves refers to material available for mining at the Maroelabult section open-cast operations. In-pit sampling has been incorporated with surface drilling data. Tonnage and grade dilutions are based on current practice of these operations. Probable Mineral Reserves have incorporated tonnage and grade dilutions based on assumptions for underground pillar and stall operations, which takes cognisance of the size of mining equipment to be utilised. A limit of 1000 metres below surface has been placed on the Mineral Resource calculations.

#### Kennedy's Vale

Rhodium Reefs Limited holds mineral rights in the Burgersfort area of the Mpumalanga Province. Exploration by Barplats is ongoing in the area. Below are the Mineral Resources, classified according to the SAMREC code, for the farms Kennedy's Vale 361 KT and De Goedeverwachting 332 KT, covering 4 570 hectares.

Geological evaluation is ongoing at the properties to enhance and extend the mineral resources. The above estimates are derived from a total of 262 reef intersections (original borehole and deflections).

#### Crocodile River mine Mineral Reserves as at 30 June 2001 (limited to 1 000 m below surface)

Orebody	Category	Tonnage (millions)	Grade 5 pge& Au	Pt oz millions
UG2	Proved	1.37	4.77	0.10
	Probable	8.30	4.90	0.60
Total		9.67	4.88	0.70

Crocodile River mine Mineral Resources as at 30 June 2001 (limited to 1 000 m below surface)

Orebody	Category	Tonnage (millions)	Grade 5 pge& Au	Pt oz millions
UG2	Indicated	16.02	5.53	1.4
Total		16.02	5.53	1.4

#### Kennedy's Vale Mineral Resources as at 30 June 2001 (limited to 1 450 m below surface)

Orebody	Category	Tonnage (millions)	Grade 3 pge& Au	Pt oz millions
Merensky Reef	Indicated	101.96	2.94	Work is currently in progress to
UG2	Indicated	131.11	5.25	determine accurate metal splits
Total		233.07	4.24	

Grade estimates are based on inverse distance calculations for platinum, palladium, rhodium and gold combined (3 PGE + Au).

#### Winnaarshoek

**Trojan Platinum (Pty) Limited** holds mineral rights covering 4223 hectares in the Eastern Bushveld and in addition, has acquired a sublease covering 1273 hectares over a portion of the farm Driekop 253 KT from Rustenburg Platinum Mines Limited in exchange for a royalty.

The table below lists Trojan's mineral resources, classified according to the SAMREC Code.

Extensive geological evaluation is ongoing at the properties to enhance and extend the Mineral Resources. The estimates below are derived from a total of 550 reef intersections (original boreholes and deflections). Grade estimates are based on inverse distance calculations.

All these reserves and resources have been verified by a competent person in terms of Section 4 of the SAMREC code.

Competent Person:
P. Mellowship
Pr.Sci.Nat. B.Sc. (Hon), M.Sc.
Consulting Geologist (Operations): Impala
Platinum Limited.
The competent person has 27 years
experience in a wide range of mineral and
mining projects, of which fifteen years has
been in the evaluation and exploitation of
Bushveld platinum group metal deposits.

# Two Rivers, Zimplats, Mimosa and Aquarius

In addition to its own reserves and resources of 73,4 million platinum ounces, Implats has access to 37 million attributable platinum ounces through its equity participation in Two Rivers, Zimplats, Mimosa and Aquarius. The latter reserves and resources have not been defined in terms of the SAMREC code and have not been verified by the competent person. The extent of this interest is set out in the table below.

Implats group attributable platinum ounces reserves and resources			
Implats	Reserves	21.7	
Implats	Resources	51.7	
Attributable ounces:			
Two Rivers; Zimplats; Aquarius; Mimosa	Reserves and Resources	37.2	
Lonplats (estimated*)	Proven and Probable	11.6	
Total		122.2	
* Based on latest available public information			

#### Winnaarshoek (Trojan) Mineral Resources as at 30 June 2001 (limited to 500 m below surface)

Orebody	Category	Tonnage (millions)	Grade 5 pge& Au	Pt oz millions
Merensky	Indicated	45.4	4.52	3.6
UG2	Indicated	22.9	8.67	2.5
Total		68.3	5.91	6.1

Full time safety representative Siminikwe Manta and Lucas Mokganedi at Impala's 12 shaft. Fresh initiatives are underway to lift Impala's safety performance to best international underground mining practice.

# Committed toworld class standards

# Corporate responsibility

Implats regards safety, health and environment as integral to the way in which it conducts its business. As with all other challenges facing the group, it strives to adhere to world-class norms. Implats' corporate responsibility efforts include:

- Improving the occupational safety and health of employees
- Addressing HIV/AIDS in an imaginative and positive way
- Minimising the impact of the company on its environment and contributing towards conservation in the areas in which it operates
- Contributing in practical and meaningful ways to the communities surrounding its operations.

#### Health

Noise-induced hearing loss remains the primary occupational health challenge for underground employees. Implats' extensive hearing conservation programme includes:

- · Monitoring and measuring noise levels
- Engineering noise out where possible
- Providing hearing protection devices to employees
- Providing employee training into the effects of noise and
- Providing regular screening audiograms to identify hearing loss at an early stage.

As part of an R8 million two-year programme, the company is providing all high-risk employees with custom-made hearing protection devices, which exclude highfrequency noise and allow for normal speech.

At Mineral Processes, a major occupational health risk is potential exposure to sulphur dioxide (SO<sub>2</sub>), which is an upper respiratory tract irritant. The facility has achieved a significant reduction in SO<sub>2</sub> gas emissions in recent years.

At the Refineries, the major occupational health risk lies in potential exposure to platinum salts. Impala has successfully managed this by implementing strict hygiene measures and "hands-off" systems for all employees exposed to this hazard. No incident of an allergy to the complex salts of platinum (ACSOP) has been reported since 1998.

#### Addressing HIV/AIDS

The management of HIV/AIDS remains a vital challenge for Implats, along with the rest of South Africa and the South African industry.

Efforts are directed at two areas:

- Prevention of HIV transmission amongst new and existing employees; and
- Managing the impact of HIV/AIDS on infected employees and on the company.

These programmes are directed by a collaborative union/management HIV/AIDS committee.

Implats has since the early 1990's conducted extensive HIV education programmes amongst its employees. Since recent surveys have indicated that current employees have a high level of awareness and understanding of HIV/AIDS, a major focus during the year has been the education of new employees.

Impala's efforts have also been extended into neighbouring communities in partnership with other companies, the Department of Health, youth and community groups and local churches. In addition to highly effective peer education programmes, the treatment of sexually transmitted diseases (STDs) and homebased care has been extended to local informal settlements for employees and non-employees alike. An ongoing challenge associated with the disease, but particularly with aspects such as home-based care, is the continued stigma of the disease, which obstructs the provision of assistance.

Traditional healers practising around the operation have become an integral part of the education and wellness management programme, as have commercial sex workers who are provided with education, condoms and access to treatment of sexually transmitted diseases.

As far as HIV-positive employees are concerned, Implats' approach is to meet the needs of the infected employee where possible, while balancing this against the needs and capacity of the company. Confidential testing and counselling are available to all employees. Immuno-compromised employees who feel that they are no longer able to work may, with the support of their treating doctor, apply for medical disability benefits to the Impala Workers Provident Fund which is run by appointed NUM Union and Impala trustees.

Infected employees receive care and counselling through Impala's Wellness Programme in an effort to extend their healthy, comfortable and productive lives. Medical care is provided through Impala's Medical Services. Infected employees may also be offered alternative occupations should these become available. The programmes available to infected employees are provided on a completely confidential basis.

One of the problems experienced in South Africa is the lack of reliable data. This is needed not only to indicate the levels of the disease but also to indicate whether education measures are working and whether there is a slowing in infection rates.

During April 2001, Impala conducted an anonymous survey of employees at its 8 shaft in an effort to confirm existing medical statistics that indicated a 16% prevalence level. The Impala survey, involving the collection of anonymous blood samples from more than 500 employees, indicated a prevalence level of 15.6%. This, together with statistics gathered at an operational level over the past 18 months indicates a levelling off of infection levels at 16%. This is much lower than was originally expected.

In addition, Implats commissioned a comprehensive actuarial report to evaluate the potential financial impact on the business. This assessment not only looked at prevalence projections based on a range of scenarios, but also evaluated the scope and efficacy of Implats' intervention programmes, human resources policies, impact on employee benefits, manpower and training costs as well as costs which will be incurred to maintain productivity.

The report indicates that, given the current prevalence rate and expected rate of new infections in South Africa, Implats could incur additional costs of R86 million per year in 2011 which is predicted to be the peak of the epidemic. However, given successful education programmes and interventions, the rate of new infections and consequently the costs can be dramatically reduced. By halving the rate of new infections the cost in 2011 would be reduced to R46 million. This is a highly credible scenario based on the levels of awareness and prevalence levels at Impala, with the latter indicating that the rate of new infections may already have reached a plateau.

Research was conducted during the year by an independent market research company to enable Impala to assess the effectiveness of its education programmes.

This showed some very encouraging results:

- 100% of employees surveyed were aware of HIV/AIDS
- 98% of respondents believe that HIV is a sexually transmitted disease.
- 70% of respondents stated that they had changed their sexual behaviour as a result of HIV/AIDS awareness and education.

The company and its HIV/AIDS committee will continue with the education and intervention programmes in order to limit the spread and impact of the disease

#### Environment

Implats aspires to world-class standards in its environmental management systems and programmes. In line with its long-standing environmental strategy, which is aligned with the international environmental standard ISO 14 001, the company aims to:

Optimise resource usage

- · Decrease wastage at source
- Design all new processes to minimise their environmental impact and
- Reformulate existing processes wherever practicable to reduce their environmental input.

The underlying philosophy of ISO 14 001 is that of continuous improvement.

Extensive changes and extensions were made to the Environmental Management Programme Report (EMPR) on the Impala lease area during the year, with amended documents submitted to the Department of Minerals and Energy for the Merensky open-cast project, the smelter upgrade, No 11 shafts and No 14 shaft. As a result the present value of the rehabilitaion cost was increased by R3.3 million and R2.3 million was spent during the year on ongoing rehabilitaion. The EMPR for Crocodile River mine was finalised during the year and the EMPR compilation process for the Winnaarshoek project commenced in April 2001.

At Impala's Mineral Processes an air quality management policy has been developed and implemented and, together with the upgrade at the smelter, resulted in improved air quality conditions. Implats also played a major role during the year in spearheading the establishment of the Rustenburg Air Quality Forum.

Impala Refineries, which was awarded ISO 14 001 certification in 2000, now undergoes an external audit every six months. The completion of the Enhanced Precious Metals Refinery in 2000 enabled numerous environmental improvements, including reagent regeneration and recovery processes with decreased resource consumptions and gaseous emissions.

The Refineries has also made a concerted effort to reduce water consumption. Recycling initiatives such as the installation of a reverse osmosis water treatment plant have culminated in reduced water consumption despite an increase in production. Major challenges for the year ahead include ISO 14 001 certification for the mining and processing operations at Rustenburg, approval of the EMPR for the Winnaarshoek project, implementation of the company's water management plan (again at Rustenburg) and acceptance of a revised rehabilitation plan for the entire Rustenburg surface area.

#### Corporate social investment

Through the Impala Community Development Trust (ICDT), the company endeavours to be a facilitator rather than a sole sponsor of social projects. The Trust's modus operandi is based on the principle that initiatives should assist communities in becoming self-sufficient and, in this way the long-term sustainability and independence of the project can be encouraged. Each year the ICDT is allocated an amount the equivalent of 2% of the previous year's dividends and focuses on four main areas of activity:

- · Education and training
- Health care, with a specific focus on HIV/AIDS
- · Business development.

Impala has made a significant contribution to education, particularly in upgrading the infrastructure at run-down schools and developing management potential and human resources in primary schools.

Impala is responsible for not only the health care of its workforce, but also considers that it has a duty towards the wellbeing of the communities in the vicinity of its operations. The ICDT works with Impala Medical Services to address health care issues in a holistic manner.

The ICDT is planning to step up its business development initiatives by facilitating the formation of partnerships by several existing small businesses with co-funders and specialists to secure their viability. One example of this is the planned jewellery benefication project that will add downstream value and empower black businesses. Busi Botha, a student at the School of Performing Arts in Daveyton near Springs. This is one of the projects supported by the Impala Community Development Trust.

# Development Trust. Implats the facilitator

#### **Employment equity**

After extensive consultation with stakeholders, Impala submitted to the government the company's Employment Equity Plan in line with the South African Employment Equity Act. Targets have been agreed with line management and union representatives. An Employment Equity Committee, comprising unions and management, oversees the process. Key issues addressed by this committee include barriers to equity and the identification and resolution of discriminatory practices.

The company made 148 appointments during the year, from groups designated by the Act as requiring advancement, far exceeding its target of 51 appointments. A primary challenge remains the retention of these employees as almost 40% subsequently left the company during the year.

As a result of our efficiency successes, Impala's people are targeted for recruitment by the industry. This year alone 470 crew captains left our employ. As a result we have stepped up our training and development effort and focused on the retention of skills. At any one time 50 Learner Officials and 300 crew captains are in training in an effort to increase our talent pool. Mathematics and science classes are also presented to local scholars to increase potential candidates eligible for engineering courses at Impala.

Implats' employment equity targets at management level							
Current				After 5 years			
Total Total		%	Total	Designated	%		
E	mployees	Designated	Designated	Employees	Goal	Designated	
Senior Management	51	4	7.8	51	12	23.5	
Middle Management	375	49	13.1	368	111	30.2	
Skilled	1 815	543	30.0	1 818	808	44.4	
Total	2 241	596	26.6	2 237	931	41.6	

### Corporate governance

Implats supports and has applied the Code of Corporate Practices and Conduct as advocated in the King Report on corporate governance. A summary of compliance is as follows:

#### **Board of Directors**

The board follows the unitary structure and retains full and effective control over the group. It meets at least on a quarterly basis to review the operational performance of the group, strategic issues, the business plan, acquisitions, disposals and other major contracts and commitments, group policies and stakeholder reporting. There are seven non-executive members of whom the chairman is also a director of the major shareholder. There are three executive directors.

The positions of Chairman and Chief Executive Officer are separate. The Chairman of the board is a non-executive director. In addition, the independent directors are of such calibre and number that they carry significant weight in the board's deliberations and resolutions.

A number of standing committees of the board has been established. These committees operate with written terms of reference and are comprised, in the main, of non-executive directors. The chairman of each committee is a non-executive director.

#### Remuneration Committee

The remuneration committee comprises three non-executive directors and is responsible for determining the group policies and structure with regard to executive remuneration, remuneration packages for executive directors and senior executives and the policy and strategy of employment.

#### Audit Committee

The audit committee, which meets on a quarterly basis, is comprised solely of nonexecutive directors. The role of the audit committee is to assist the board by performing an objective and independent review of the functioning of the organisation's finance and accounting control mechanisms. It exercises its functions through close liaison and communication with corporate management and the internal and external auditors.

#### Health, Safety and Environmental Audit Committee.

A Health, Safety and Environmental Audit Committee (HSE Audit committee) is in place to monitor and review health, safety and environmental performance and standards. The primary role of the HSE Audit Committee is to supplement and support and give advice and guidance on the effectiveness or otherwise of management's effort in the HSE arena. The committee consists of not less than four members. Employee representatives are invited to the committee meetings on a regular basis. The chairman is a non-executive director.

#### Internal Control Systems

The group maintains accounting and administrative control systems designed to provide reasonable assurance that the accounting records accurately reflect that transactions are executed and recorded in accordance with sound business practices, that the assets are safeguarded and that protection is provided against serious risk of error or loss in a cost-effective manner.

An internal audit department, which holds regular meetings with management and the audit committee and has direct access to the Chairman of the board, independently monitors these controls.

Nothing has come to the attention of the directors to indicate that any material breakdown in the functioning of these controls has occurred during the year under review.

#### **Employee participation**

Employees throughout the organisation are actively involved on all Fixco committees. A quarterly Leadership Summit facilitates communication between management and employee representatives across the organisation. In addition, representatives of all unions serve on key committees such as the Impala HIV/AIDS committee.

#### **Employment Equity Plan**

The business plan of the organisation includes interventions to support the transformation process, to develop and empower our workforce and to accommodate both anticipated and recently promulgated legislation.

Our commitment to the process of "unlocking the potential" of our employees applies in particular to those who fall within the category of designated groups. All our developmental programmes, succession planning, career path programmes and bursary projects take cognisance of this commitment.

Numerous steering committees have been established and specific numerical targets to be achieved have been set over a five-year period to attain a discrimination free workplace. The planned target levels and the levels of achievement are set out in the table on page 57.

#### Code of values

The group has adopted a code of values governing the manner in which it is committed to do business with its stakeholders and, in particular, covering business integrity and the development and safety of employees. The process whereby employees committed themselves to these values has resulted in the development of the principles of that code into a "Value Statement" which interprets those values in a practical and easily understandable form. All employees and directors are required to adhere to the ethical standards contained in this code.

The group observes a closed period of one month prior to the announcement of interim and year-end results, during which neither directors nor employees can deal, either directly or indirectly, in the shares of Implats or its listed subsidiaries.

# **Glossary** of terms

Aquarius: Aquarius Platinum Limited

Barplats: Barplats Mines Limited

**Concentrating:** A process of splitting the ground ore in two fractions, one containing the valuable minerals, the other waste.

Cost per ton/refined platinum ounce/refined pge ounce: The cost of mining, concentrating, smelting, refining, marketing, corporate office and insurance claim expressed per unit of measure.

**Decline:** A shallow dipping mining excavation used to access the orebody.

Dense Media Separation: A means of separating reef from waste exploiting differences in density.

**Development:** Underground excavation for the purpose of accessing ore reserves.

Falconbridge: Falconbridge Limited

g/t: grammes per tonne. The unit of measurement of grade, equivalent to parts per million.

Headgrade: The value, usually expressed in parts per million or grammes per tonne, of the contained mineralisation of economic interest in material delivered to the mill.

In situ: In its natural position or place.

Inverse distance: A classical estimation technique whereby the influence of each neighbouring data point is inversely proportional to the distance from the point being estimated.

IRS: Impala Refining Services Limited

Kriging: A geostatistical estimation method that gives the best-unbiased linear estimates of point values or of block averages. Laterite: Residual soil, or surface product, developed in situ from the atmospheric weathering of rocks. Especially characteristic of humid tropical and subtropical regions.

Merensky Reef: A horizon in the Critical Zone of the Bushveld Igneous Complex often containing economic grades of PGE. The term "Merensky Reef" as it is generally used refers to that part of the Merensky unit that is economically exploitable, regardless of the rock type.

Mmakau Mining: Mmakau Mining (Pty) Limited

Milling: Grinding of ore into fine particles to expose the valuable minerals.

NOx: Nitrous Oxides contained in exhaust emissions.

Pge: Platinum group elements comprising six elemental metals of the platinum group. The metals are;- platinum, palladium, rhodium, ruthenium, osmium and iridium.

Pgms: Platinum group metals being the metals derived from pges.

**Pillar and stall:** A mining method where the panel length is much greater than the pillar width.

**Price index:** Basket of metals comprising platinum, palladium, rhodium and nickel, expressed per ounce of platinum, multiplied by the individual metal prices, in the production ratio.

Return on assets (ROA): ROA is calculated using current year attributable income expressed as a percentage of fixed assets and investments as at the balance sheet date.

Return on equity (ROE): ROE is calculated using current year attributable income expressed as a percentage of the opening balance of shareholders equity. Seismic surveys: A geophysical exploration method whereby rock layers can be mapped based on the time taken for energy reflected from these layers to return to surface.

**Smelting:** A smelting process to upgrade further the fraction containing the valuable minerals.

Stoping: Underground excavations to effect the removal of ore.

Two Rivers: Two Rivers Platinum (Pty) Limited

**UG2:** A distinct chromitite horizon in the Critical Zone of the Bushveld Igneous Complex often containing economic grades of pge.

Zimplats: Zimbabwe Platinum Limited

#### **Resource Definitions**

Mineral Reserve and Mineral Resource data classification is based on the South African Code for Reporting of Mineral Resources and Mineral Reserves (the SAMREC Code) which sets out the minimum standards recommended and guidelines for public reporting of exploration results, mineral resources and mineral reserves in South Africa.

Data has been compiled by a team of professionals, with the appropriate experience in the evaluation, estimation, exploitation and reporting of mineral resources and mineral reserves relevant to the style of mineralisation and type of deposits under consideration. Where mineral resources and mineral reserves are quoted for the same property, mineral resources are additional to mineral reserves. The mineral reserves quoted reflect the grade delivered to the mill rather than an in situ grade quoted in respect of mineral resources.

A 'Mineral Resource' is a concentration [or occurrence] of material of economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable and realistic prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a mineral resource are known, estimated from specific geological evidence and knowledge, or interpreted from a well-constrained and portrayed geological model. Mineral resources are subdivided, in order of increasing confidence in respect of geoscientific evidence, into inferred, indicated and measured categories.

An 'Inferred Mineral Resource' is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited or of uncertain quality and reliability. Inferred Resources have not been quoted in this report.

An 'Indicated Mineral Resource' is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

A 'Measured Mineral Resource' is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity. A 'Mineral Reserve' is the economically mineable material derived from a measured and/or indicated mineral resource. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction is reasonably justified. Mineral reserves are sub-divided in order of increasing confidence into probable mineral reserves and proved mineral reserves.

A '**Probable Mineral Reserve**' is the economically mineable material derived from a measured and/or indicated mineral resource. It is estimated with a lower level of confidence than a proved mineral reserve. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction is reasonably justified.

A '**Proved Mineral Reserve**' is the economically mineable material derived from a measured mineral resource. It is estimated with a high level of confidence. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, including consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction is reasonably justified.

## Management

#### Senior Management

Keith Rumble (appointed 10 July 2001) Chief Executive Officer John Smithies (retired 31 July 2001) Chief Executive Officer Gert Ackerman Senior Consulting Engineer – Operations David Brown Financial Director Rob Dev Engineering Manager Derek Engelbrecht Senior Manager: Marketing Paul Dunne Consulting Engineer: Metallurgy John Karlson Commercial Manager Cathie Markus **Director Corporate Affairs** Chris McDowell Chief Operating Officer - IRS Humphrey Oliphant Senior Manager: Human Resources Les Paton Senior Consulting Geologist Geoff Skelton Consulting Engineer: Refineries Dirk Theuninck Senior Consulting Engineer: Metallurgy Paul Visser Senior Consulting Engineer: Rustenburg Operations

#### Management Committees Executive Committee

Area of responsibility: Review of operations and the implementation of policies and strategies *Keith Rumble* (Chairman) (appointed 10 July 2001) John Smithies (retired 31 July 2001) Gert Ackerman David Brown Derek Engelbrecht Rob Dey John Karlson Cathie Markus Humphrey Oliphant Les Paton Dirk Theuninck Risk Management Committee Area of responsibility: Minimising risk to assets and income earning capacity Dirk Theuninck (Chairman) Gert Ackerman David Brown Chris McDowell Francois Naudé Johan van Deventer

Hedging Committee Area of responsibility: Hedging metal sales and conversion of foreign exchange proceeds to rands *Keith Rumble* (Chairman) (appointed 10 July 2001) John Smithies (retired 31 July 2001) David Brown Derek Engelbrecht Johan van Deventer

Implats Environmental Management Committee Area of responsibility: Managing and rectifying the impact which mining and processing have on the environment Dirk Theuninck (Chairman) Gert Ackerman Paul Dunne Pierre Lourens Cathie Markus Geoff Skelton Johan van Deventer George Watson

Fixco Process Committee Area of responsibility: Enhancing operational efficiencies Bob Gilmour (Chairman) Les Paton Gert Ackerman Dirk Theuninck

# **Directors**

#### Non executive directors



Michael McMahon\* (Chairman) (54) Pr.Eng. BSc Mech. Eng. Chairman Gencor. Joined the group in 1990 as Managing Director and appointed Chairman in 1993.



Daryl O'Connor (63) CA (SA). Joined the board in 1995.



#### Peter Joubert (68)

BA DPWM. Chairman, Delta Electrical Industries, Munich Reinsurance Company of Africa, Delta Motor Corporation. Director, Malbak, Murray & Roberts Holdings, Nedcor Old Mutual plc. Joined the board in 1995.



Vivienne Mennell (58) BA MBA FCMA THD. Director, Gencor. Joined the board in 1990 as financial director. Re-joined the board in 1998 as non-executive director.



Mike Pleming (65) Pr. Eng. FIMM. Director, Harmony Gold Mining Company. Joined the board in 1998.



John Roberts (59) FCIS ACMA. Director, Barplats Investments Limited, Senwes Limited Joined the board in 1998.



Leruo Molotlegi (33) B.Arc Joined the board in 2000 as representative of the Royal Bafokeng Nation.

#### **Executive directors**



Keith Rumble (Chief Executive Officer) (47) (appointed 10 July 2001) BSc (Hons) MSc (Geo) Joined the group in 2001 in that capacity.



David Brown (Financial Director) (39) CA (SA). Joined the group as Financial Director and appointed to the board in 1999.



John Smithies\* (Chief Executive Officer) (56) (retired 31 July 2001) BSc (Mining) (Chem.). Joined the group in 1973 as a Mining Engineering graduate appointed to the board in 1999 and Managing Director in 2000.

#### **Board committees**

#### **Remuneration Committee**

Michael McMahon – Chairman Peter Joubert John Roberts

#### Audit Committee

Daryl O'Connor – Chairman Vivienne Mennell John Roberts

# Health, Safety and Environmental Audit Committee

Mike Pleming – Chairman Michael McMahon Tony Scurr Dirk Theuninck



Cathie Markus (Director: Corporate Affairs) (44) BA LLB. Joined the group as legal adviser in 1991 and appointed to the board in 1998.

\* British

# Approval of the annual financial statements

The annual financial statements for the year ended 30 June 2001, which appear on pages 68 to 113 have been approved by the Board of Directors on 23 August 2001.

The directors are responsible for the fair presentation to shareholders of the affairs of the company and of the group as at the end of the financial year, and of the results for the period, as set out in the annual financial statements. The directors are responsible for the overall coordination of the preparation and presentation and for the approval of the financial statements. Responsibility for the initial preparation of these statements has been delegated to the officers of the company and the group.

The auditors are responsible for auditing and reporting on the financial statements in the course of executing their statutory duties. The financial statements have been prepared on a going concern basis, conform with applicable accounting standards and are presented applying consistent accounting policies supported by reasonable and prudent judgements and estimates. To discharge this responsibility, the group maintains accounting and administrative control systems designed to provide reasonable assurance that assets are

## Certificate by the company secretary

I, the undersigned, in my capacity as Group Secretary, do hereby confirm that for the financial year ended 30 June 2001, Implats has lodged with the Registrar of Companies all such returns as are required of a public company in terms of the Companies Act 61 of 1973, as amended, and that all such returns are true, correct and up to date.

A M Snashall Group Secretary

safeguarded and that transactions are executed and recorded in accordance with generally accepted business practices and procedures. The accounting policies of the group are set out on pages 79 to 83 of this report.

The Mahan

J M McMahon

K C Rumble Director

# Report of the independent auditors to the members of Impala Platinum Holdings Limited

We have audited the annual financial statements and group annual financial statements of Impala Platinum Holdings Limited set out on pages 68 to 113 for the year ended 30 June 2001. These financial statements are the responsibility of the directors of the company. Our responsibility is to express an opinion on these financial statements based on our audit.

#### Scope

We conducted our audit in accordance with generally accepted Auditing Standards in South Africa and in accordance with International auditing standards issued by the International Federation of Accountants. Those standards require that we plan and perform the audit to obtain reasonable assurance that the financial statements are free of material misstatements. An audit includes:

- Examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements
- Assessing the accounting principles used and significant estimates made by management
- Evaluating the overall financial statement presentation.

We believe that our audit provides a reasonable basis for our opinion.

#### Audit opinion

In our opinion, the financial statements fairly present, in all material respects, the financial position of the group and of the company at 30 June 2001 and the results of their operations and cash flows for the year then ended in accordance with South African Generally Accepted Accounting Practices, International Accounting Standards and in the manner required by the South African Companies Act.

Pricewaterbouse Coopers Inc.

PricewaterhouseCoopers Inc. Chartered Accountants (SA) Registered Accountants and Auditors Johannesburg 23 August 2001

# **Directors**' report

#### Profile

#### Business of the company

Impala Platinum Holdings Limited ("Implats/the company") is principally in the business of producing and supplying platinum group metals (pgms) to industrial economies. The company's holdings in various mining and exploration activities are described below:

Company	Short name	Effective Interest %	Activity
Impala Platinum Limited	Impala	100	Pgm mining, processing, refining
			and marketing
Impala Refining Services Limited	IRS	100	Purchase of concentrate, smelting,
			refining and sale of resultant pgms
			and base metals, and toll-refining
			precious metal
Trojan Platinum Limited	Trojan	*100	Establishment of platinum mine
Barplats Investments Limited	Barplats	83	Re-opening of Crocodile River mine;
			exploration at Kennedy's Vale mine
Two Rivers Platinum Limited	Two Rivers	45	Pgm mine development
Zimbabwe Platinum Mines Limited	Zimplats	40	Pgm mine development
Mimosa Mining Company (Pty) Limited	Mimosa	35	Pgm mining
Eastern Platinum Limited	EPL	27	Pgm mining, processing, refining
			and marketing
Western Platinum Limited	WPL	27	Pgm mining, processing, refining
			and marketing
Aquarius Platinum (SA) Limited	Aquarius (SA)	25	Development of Marikana and Everest
			South Projects
Aquarius Platinum Limited	Aquarius	10	Pgm mining
Kroondal Platinum Limited	Kroondal	5	Pgm mining
Brandrill Limited	Brandrill	6	Mining technology

\* Subject to 20% participation by empowerment partners

#### Capital

#### Authorised capital

The company's authorised share capital of 100 000 000 ordinary shares of 20 cents each remained unchanged during the year.

#### **Issued** capital

During the year 264 475 new ordinary shares were issued in terms of the Implats share incentive scheme and 17 010 new ordinary shares were issued to individual mineral right owners in terms of an amendment to the mining lease agreements. Following these allotments the issued capital of the company comprises 66 347 625 ordinary shares of 20 cents each (2000: 66 066 140).

#### Unissued share capital

In terms of a resolution passed at the last annual general meeting, the unissued share capital is under the control of the directors until the forthcoming annual general meeting. Shareholders will be asked to consider a resolution renewing this authority. The proposed resolution is set out in the notice convening the annual general meeting.

#### Share incentive scheme

At 30 June 2001 the Implats Share Purchase Trust held 38 700 unallocated shares. No shares were allocated or released during the year.

#### Share option scheme

The directors are authorised to issue, allot or grant options to acquire up to a maximum of 2 177 000 ordinary shares in the unissued share capital of the company in terms of employee share options schemes. Details of participation in the share option scheme are set out in Note 25 of the financial statements.

#### Shareholding in the company

The issued capital of the company is held by public and non-public entities as follows:

	No. of shares	
	(000's)	%
Public	34 639	52.2
Non-public	31 709	47.8
Directors	30	0.1
Trustees of share scheme	73	0.1
Right to appoint a director	1 000	1.5
Holding over 10%	30 606	46.1
Total	66 348	100.0

Gencor Limited holds 30.6 million shares in the company (46.1 per cent). No other shareholder beneficially holds more than five per cent of the issued share capital.

#### **Investments**

#### Winnaarshoek

The company acquired the Winnaarshoek mineral rights from Platexco Inc, a Canadian listed company for a consideration of C\$191million (R950 million). An integral part of the transaction was to acquire the rights to mine the adjacent properties including Clapham and portions of Driekop and Forest Hill.

A 20% participation in the project has been awarded to black empowerment partners as described in post balance sheet events on page 70.

The group is in the process of establishing a 175 000 platinum ounce per annum mine which is expected to commence production in December 2003.

#### **Aquarius Platinum Limited**

The company holds a 10.1% interest in Aquarius Platinum Limited ("Aquarius") purchased for a cash consideration of approximately R29.1 million. Aquarius increased its shareholding in Kroondal from 45% to 94.3% by means of a cash offer of R32 per share to Kroondal minority shareholders. Kroondal shares were delisted from the JSE as a result of the transaction.

#### **Aquarius Platinum SA Limited**

Implats acquired a 25.5% interest in Aquarius Platinum (SA) Limited in exchange for the mineral rights in respect of the Everest South, a portion of Everest North and Chieftains Plain projects. Aquarius SA is currently developing the Marikana platinum project which is expected to come into production in December 2001, producing some 150 000 ounces of pges per annum. Impala has undertaken to refine platinum concentrates from the projects.

#### **Kroondal Platinum Mines Ltd**

The company has acquired an additional 500 000 shares in Kroondal in terms of an underwriting agreement with Aquarius.The

company's direct holdings in Kroondal were diluted to 4.7% (2000: 5.8%) by the conversion of Kroondal options to ordinary shares. Due to the company's direct shareholding in Aquarius the effective interest of the company in Kroondal's operations is 14.2%. Subsequently, Kroondal has been delisted.

#### **Brandrill**

Implats hold a 6.4% interest in Brandrill Limited. Brandrill is developing penetrating cone fracture (PCF) technology which is an effective means of rockbreaking and is suited to continuous mining due to the minimal toxic fumes. Impala has entered into a co-operation agreement with Brandrill governing the use of PCF technology.

#### **Philippines**

Implats entered into an agreement with Philnico Development Limited to conduct a feasibility study on the Nonoc Island Surigo del Norte in the Philippines. The feasibility study has been completed and a leading partner for the project is being sought by the sponsor.

#### **Financial affairs**

#### Results for the year

The results for the year are fully dealt with in the financial statements forming part of the annual report. Refer to pages 74 to 113.

#### **Accounting policies**

During the year certain changes were made to the group's accounting policies, to comply with International Accounting Standards ("IAS"). Details of the new accounting policies and the effect of the changes are set out on pages 79 and 83.

#### **Dividends**

An interim dividend (No 66) of 1 420 cents per share was declared on 8 February 2001, a special dividend of 3 000 cents per share was declared on 7 February 2001 and a final dividend (No 67) of 2 380 cents per share was declared on 23 August 2001, payable on 4 October 2001 a total of 6 800 cents per share (2000: 1 760 cents per share). These dividends amounted to R4 509 million of the year (2000:R1 166.7 million).

#### Capital expenditure

Capital expenditure for the year amounted to R 2 090 million (2000: R783 million).

The estimated R2 billion capital expenditure by Impala envisaged for the 2002 financial year will be funded from internal resources and, if appropriate, borrowings.

#### Going concern

The financial statements have been prepared using the appropriate accounting policies, supported by reasonable and prudent judgements and estimates. The directors have a reasonable expectation that the group has adequate resources to continue as a going concern in the foreseeable future.

#### Associated and subsidiary companies

Information regarding the company's associated companies and subsidiaries are given in note 13 and Annexure A respectively to the financial statements.

#### Property

Details of the freehold and leasehold and buildings of the various companies are contained in registers, which are available for inspection at the registered offices of those companies.

#### Post balance sheet events

#### Zimplats

The company has entered into an agreement with Zimplats in terms of which the company acquires a 30% interest in Zimplats' Hartley Management Company (Pvt) Limited, which comprises the Ngezi open-cast mine and the Hartley joint venture, for an expected consideration of R240 million (US\$30 million). In addition, the company together with ABSA Bank Limited ("ABSA") have purchased a 30% equity stake in Australian-listed Zimplats for a consideration of R131 million (US\$16.3 million). The equity stake is held by Impala Platinum (Zimbabwe) (Pty) Limited in which ABSA holds a 49% interest and the company holds a 51% interest.

The fully diluted interest of the group in Zimplats is 40%. The Ngezi project is situated some 75 kilometres from the Hartley Metallurgical complex and a feasibility study has indicated a 100 000 ounce per annum platinum mine over a 20 year life.

The group advanced a loan of R70.6 million to Hartley Management Company (Pvt) Limited in anticipation of the conversion into share capital. Refer to note 15.

#### Mimosa

The company acquired a 35% interest in ZCE Platinum Limited which wholly owns Mimosa for a consideration of US\$30 million. The contribution will be used to fund an expansion of the mine from 16 000 to approximately 68 000 ounces of platinum per annum.

#### **Two Rivers Platinum**

The company has entered in to a joint venture agreement with Anglovaal Mining Limited ("Avmin") to develop a 100 000 ounce platinum mine of the farm Dwars Rivier in Mpumalanga province. The Dwars Rivier mineral rights on both the UG2 and Merensky reefs will be acquired from Associated Manganese Mines of South Africa Limited for a consideration of R551 million. The joint venture, Two Rivers, to develop, manage and operate the new mine will be held 55% by Avmin and 45% by the company.

#### Winnaarshoek

On 11 July 2001 it was announced that Mmakau Mining would acquire 10% of the Winnaarshoek project, while a further 10% would be taken up by empowerment participants in the Northern Province. Funding for the acquisition by the partners is still under negotiation.

No other material events have occurred since the date of these financial statements and the date of approval thereof, the knowledge of which would affect the ability of the users of these statements to make proper evaluations and decisions.

#### Directorate

#### **Composition of the Board**

During the year Mr SV Kearney resigned as a Chief Executive Officer of the company and Mr JG Smithies was appointed in his stead. Subsequent to the year end Mr JG Smithies retired and Mr KC Rumble was appointed as director and Chief Executive Officer. Members will be asked to confirm this appointment at the forthcoming annual general meeting.

The directors who retire at the next general meeting are Mr DH Brown, Mr PG Joubert, Mr DM O'Connor and Mr MF Pleming; being eligible they offer themselves for re-election.

#### **Interest of directors**

The interests of directors in the shares of the company were as follows and did not individually exceed 1% of the issued share capital or voting control of the company. The board contains seven non-executive directors, of whom one director is also a director of the major shareholder, and three executive directors.

	Direct		Indirect	
30 June	2001	2000	2001	2000
Beneficial	15 845	500	14 600	12 600
Non beneficial	-	1 000	-	-

There were no contracts of significance during or at the end of the financial year in which the directors of the company were materially interested.

No material change in the aforegoing interests has taken place between 30 June and the date of this report.

#### **Directors' fees**

In terms of the Articles of Association the fees for services as directors are determined by the company in general meeting. Director's fees for services as a director are currently R80 000 per director with an additional amount of R40 000 for the Chairman. At the forthcoming annual general meeting, it will be proposed to increase directors' fees to R90 000 per annum with an additional amount of R45 000 for the chairman. The increase takes into account inflation since the last review of directors' fees two years previously. Directors serving on board committees are paid R20 000 per annum as members of a committee and the Chairman of the committee receives R30 000 per annum. These fees have been waived by the executive directors

#### Administration

#### **Special resolution**

At the last annual general meeting the articles of association were amended by special resolution to take cognisance of the electronic settlement and transfer of shares and to allow the company to acquire its own shares.

# Financial, administrative and technical advisers

In terms of a service agreement, Impala Platinum Limited acts as financial, administrative and technical advisors to the Implats group during the year on a fee basis. Messrs D H Brown, P G Joubert, J M McMahon, K C Rumble, J G Smithies and Ms C E Markus had an interest in this contract to the extent that they are directors of Impala and of the company, but they do not beneficially own any shares in Impala.

#### **Secretaries**

Mr. A M Snashall acted as Secretary to Implats and Impala, and Impala acted as Secretaries to other subsidiaries in the Implats group. The business and postal addresses of the Secretaries are set out on page 116.

#### **London Secretaries**

The business and postal addresses of the London Secretaries are set out on page 116.

#### **Public Officer**

Mr J van Deventer acted as public officer for the group for the year under review.

#### **Directors' remuneration**

The directors remuneration for the year under review was in aggregate as follows:

30 June 2001	Fees	Package	Retirement	Other benefits	Bonus	Total
(R 000s)						
Executive						
DH Brown	-	912	96	135	199	1 342
SV Kearney	-	1 874	298	249	1 029	3 450
CE Markus	-	990	104	139	419	1 652
JG Smithies	-	1 221	194	173	214	1 802
Non-executive						
PG Joubert	100					100
JM McMahon	170					170
MV Mennell	100					100
L Molotlegi	80					80
DM O'Connor	110					110
MF Pleming	110					110
JV Roberts	120					120
	790	4 997	692	696	1 861	9 036

Note: Other benefits comprise medical aid contributions and provision for annual leave entitlements
# Share options

Details of share options outstanding and exercised by executive directors are as follows:

Outstanding at 30 June 2001

	Number of shares	Option	Date of grant	Date from which	Expiry
	under option	price		first excercisable	Date
DH Brown	7 500	57.50	11 January 1999	5 December 1999	5 December 2010
	6 200	146.00	30 June 1999	30 June 2001	30 June 2011
	4 700	200.00	14 March 2000	14 March 2002	14 March 2012
	4 525	344,00	11 January 2001	11 January 2003	11 January 2013
SV Kearney	2 650	52.50	28 July 1997	28 July 1999	28 July 2009
	6 050	56.00	10 March 1997	10 March 1999	10 March 2009
	12 300	57,50	12 May 1998	12 May1999	12 May 2010
	13 000	146.00	30 June 1999	30 June 2001	30 June 2011
	17 000	200.00	14 March 2000	14 March 2002	14 March 2012
CE Markus	900	52.50	28 July1997	28 July 1999	28 July 2009
	8 025	57.50	12 May 1998	12 May 1999	12 May 2010
	5 500	146.00	30 June 1999	30 June 2001	30 June 2011
	7 200	200.00	14 March 2000	14 March 2002	14 March 2012
	4 075	344.00	11 January 2001	11 January 2003	11 January 2013
JG Smithies	nil				

Vesting of options first occurs two years after the granting of the options, limited to a maximum of 25% of the total options granted. In subsequent years an additional 25% per year vests and can be varied by the Remuneration Committee.

### Exercised during the year

	Number of options	Option	Average
	exercised	price	Excercise price
DH Brown	10 000	57.50	383.34
SV Kearney	4 000	40.00	300.86
	1 375	52.50	305.45
	4 525	56.00	352.97
	36 900	57.50	352.96
	250	75.00	421.46
CE Markus	900	52.50	400.20
	14 575	57.50	391.37
	750	75.00	400.20
JG Smithies	3 300	52.50	359.62
	18 100	57.50	410.66
	725	75.00	389.00
	3 000	146.00	389.00
	5 700	200.00	387.07

# **Income** statements

	npany				oup
2000	2001	for the year ended 30 June (R million)	Notes	2001	200
		Turnover	1	11 969.1	7 003.
		Cost of sales		5 120.3	3 900.
		On-mine operations	2	2 330.1	1 997
		Concentrating and smelting operations	3	492.5	440
		Refining operations	4	333.3	307
		Amortisation of mining assets		212.2	139
		Metals purchased		1 968.8	698
		Other costs	5	117.1	96
		(Increase)/decrease in metal inventories		(333.7)	219
		Operating income		6 848.8	3 102
(33.3)	(62.9)	Other income/(expense)	6	94.5	62
763.3	4 111.1	Net financial income	7	383.3	228
		Share of pre-taxation income from associates		1 031.4	332
		Royalty expense		(890.3)	(406
730.0	4 048.2	Income before taxation	8	7 467.7	3 319
(0.2)	7.6	Taxation	9	2 815.2	1 061
730.2	4 040.6	Income after taxation		4 652.5	2 257
		Outside shareholders' interest		5.4	2
730.2	4 040.6	Attributable income		4 647.1	2 255
		Earnings per share (cents)	10		
		– basic		7 024	3 42
		- diluted		6 970	3 38
		Headline earnings per share (cents)			
		– basic		7 024	3 38
		- diluted		6 970	3 34
		Cash earnings per share (cents)			
		– basic		10 030	4 5
		- diluted		9 953	4 4
		Dividends proposed and dealered	11		
		Dividends proposed and declared Dividends proposed basis	11		
				1 420	34
		- interim dividend 2001 per share (cents)		1 420	
		– final dividend 2001 per share (cents)		2 380	1 42
		– special dividend per share (cents)		3 000	1 7/
		Dividends declared basis		6 800	176
		– final dividend 2000 per share (cents)		1 420	7'
		• 2 2			
		<ul> <li>interim dividend 2001 per share (cents)</li> <li>special dividend per share (cents)</li> </ul>		1 420 3 000	34

The accounting policies on pages 79 to 83 and the notes

on pages 84 to 113 form an integral part of these financial statements.

# **Balance** sheets

Com	npany			Gro	oup
2000	2001	as at 30 June (R million)	Notes	2001	2000
		ASSETS			
591.4	824.5	Non-current assets		6 547.8	4 230.3
5.5	5.6	Property, plant and equipment	12	5 230.6	3 357.3
527.9	423.5	Investments in associates and subsidiaries	13	791.6	694.0
58.0	162.2	Other investments	14	213.8	95.5
-	233.2	Receivables	15	233.2	-
		Prepayments	16	78.6	83.5
37.5	9.4	Current assets		5 162.3	4 504.3
		Inventories	17	779.3	439.6
37.5	9.4	Receivables	18	1 345.4	958.0
-	-	Cash and cash equivalents	19	3 037.6	3 106.7
628.9	833.9	Total assets		11 710.1	8 734.6
		EQUITY AND LIABILITIES			
612.5	810.5	Capital and reserves		6 430.0	5 625.6
13.2	13.3	Ordinary shares	20	13.3	13.2
537.8	562.8	Share premium	20	562.8	537.8
		Translation reserve		(0.5)	(0.4)
61.5	234.4	Retained earnings before proposed final dividend		5 854.4	5 075.0
61.5	234.4	Retained earnings after proposed final dividend		4 275.3	4 136.9
938.1	1 579.1	Proposed final dividend		1 579.1	938.1
(938.1)	(1 579.1)	Proposed final dividend payable by subsidiaries			
		Outside shareholders' interest	21	19.2	13.8
		Non-current liabilities		1 465.2	1 195.1
		Borrowings	22	113.1	137.6
		Deferred taxation	23	1 156.1	889.7
		Pension and other post-retirement obligations	24	66.0	66.0
		Provision for environmental obligations	26	130.0	101.8
16.4	23.4	Current liabilities		3 795.7	1 900.1
15.4	15.3	Trade and other payables	27	2 282.3	1 211.3
1.0	8.1	Current taxation liabilities	~~	1 488.9	663.5
		Borrowings	22	24.5	25.3
100.0					0 =0 + 4
628.9	833.9	Total equity and liabilities		11 710.1	8 734.6

The accounting policies on pages 79 to 83 and the notes

on pages 84 to 113 form an integral part of these financial statements.

# **Consolidated** statement of changes in equity

# for the year ended 30 June (R million)

		Share	Share	Translation	Retained	
	Notes	capital	premium	reserves	earnings	Total
Balance previously reported at 30 June 1999		13.1	517.3	1.6	2 989.7	3 521.7
Change in accounting policy (refer note 20						
of accounting policies) in respect of:						
Proposal for dividend					466.6	466.6
Provision for secondary tax on companies					55.6	55.6
Restated balance at 30 June 1999		13.1	517.3	1.6	3 511.9	4 043.9
Dividends paid	11				(691.9)	(691.9)
Net profit attributable to ordinary						
shareholders					2 255.0	2 255.0
Translation differences on foreign subsidiary				(2.0)		(2.0)
Issue of share capital	20	0.1	20.5			20.6
		10.0	507.0	(0,4)	5.075.0	F (0F (
Balance at 30 June 2000		13.2	537.8	(0.4)	5 075.0	5 625.6
Dividends paid	11				(3 867.7)	(3 867.7)
Net profit attributable to ordinary						
shareholders					4 647.1	4 647.1
Translation differences on foreign subsidiary				(0.1)		(0.1)
Issue of share capital	20	0.1	25.0			25.1
Balance at 30 June 2001		13.3	562.8	(0.5)	5 854.4	6 430.0

The accounting policies on pages 79 to 83 and the notes on pages 84 to 113 form an integral part of these financial statements.

# **Company** statement of changes in equity

### for the year ended 30 June (R million)

Balance at 30 June 2001		13.3	562.8	234.4	810.5
Issue of share capital	20	0.1	25.0		25.1
Net profit attributable to ordinary shareholders				4 040.6	4 040.6
Dividends paid	11			(3 867.7)	(3 867.7)
Balance at 30 June 2000		13.2	537.8	61.5	612.5
Issue of share capital	20	0.1	20.5		20.6
Net profit attributable to ordinary shareholders				730.2	730.2
Dividends paid	11			(691.9)	(691.9)
		13.1	517.5	20.2	333.0
Restated balance at 30 June 1999		13.1	517.3	23.2	553.6
Adopting IAS (10) revised				22.4	22.4
of accounting policies) in respect of:					
Change in accounting policy (refer note 20					
Balance previously reported at 30 June 1999		13.1	517.3	0.8	531.2
	Notes	capital	premium	earnings	Total
		Share	Share	Retained	

The accounting policies on pages 79 to 83 and the notes on pages 84 to 113 form anintegral part of these financial statements.

# Cash flow statements

Company				Group		
2000	2001	for the year ended 30 June (R million)	Notes	2001	2000	
		Operating activities				
(58.2)	(34.9)	Cash generated from/(used in) operations	31	6 635.7	2 976.4	
763.3	4 111.1	Financial income	7	400.6	253.4	
		Interest paid	7	(14.4)	(22.1	
(1.8)	(0.5)	Taxation paid	32	(1 339.3)	(608.3	
703.3	4 075.7	Net cash from operating activities		5 682.6	2 599.4	
		Investing activities				
(5.3)	(0.1)	Purchase of property, plant and equipment	12	(2 075.5)	(789.2	
()	<u> </u>	Proceeds from fixed assets disposed	12	4.6	7.4	
23.5	109.9	Repayment of non-current investments	13	542.3	147.3	
(50.3)	(94.1)	Purchase of listed investments	14	(94.1)	(50.3	
(0010)	(10.1)	Purchase of unlisted investments	14	(10.1)	(0010	
_	(233.2)	Loans to related and other undertakings	15	(233.2)	-	
	(200.2)	Payments made for post-retirement benefits	24	(2.9)	(2.9	
		Payments made to environmental trust	26	(9.4)	(5.0	
		Cash effect of sale of subsidiaries	33	-	5.4	
(32.1)	(227.6)	Net cash used in investing activities		(1 878.3)	(686.9	
(32.1)	(227.0)	Net easil used in investing activities		(1070.3)	(000.	
		Financing activities				
20.6	19.6	Issue of ordinary shares	20	19.6	20.6	
		Payments on short-term borrowings	22	(0.8)	(23.1	
		Payments on long-term borrowings	22	(24.5)	(24.	
(691.9)	(3 867.7)	Dividends paid to group shareholders		(3 867.7)	(691.9	
(671.3)	(3 848.1)	Net cash used in financing activities		(3 873.4)	(719.	
(0.1)	0.0	(DECREASE)/INCREASE IN CASH AND CASH EQUIV	ALENTS	(69.1)	1 193.4	
		Movement in cash and cash equivalents				
0.1	0.0	At start of year		3 106.7	1 913.3	
(0.1)	0.0	(Decrease)/increase		(69.1)	1 193.4	
0.0	0.0	At end of year		3 037.6	3 106.	
		The accounting policies on pages 79 to 83 and the no	ntes on			
		pages 84 to 113 form an integral part of these financia				

# **Accounting** policies

#### 1 Basis of preparation

The financial statements are prepared on the historical cost basis. The following are the principal accounting policies used by the group which are in accordance with International Accounting Standards, South African Generally Accepted Accounting Practice, the South African Companies Act and are consistent with those of the previous year, except as set out in paragraph 20.

#### 2 Consolidation

The consolidated financial statements include those of the holding company and its subsidiaries. Subsidiary undertaking, are those companies in which the group, directly or indirectly, has an interest of more than one half of the voting rights or otherwise has power to exercise control over the operations. Subsidiaries are consolidated from the date on which effective control is transferred to the group and are no longer consolidated from date of disposal. Internal profits and sales are eliminated on consolidation and all sales revenue and profit figures relate to external transactions only.

Any excess or shortfall of the purchase price over the fair value of the attributable net assets of subsidiaries at the date of acquisition is capitalised and amortised over the useful lives of the applicable underlying assets. (Refer paragraph 8).

#### 3 Investments in associates

Investments in associated undertakings are accounted for by the equity method of accounting. These are undertakings in which the group has a long term interest and over which it exercises significant influence but not control. Provisions are recorded for long term impairment in values.

Equity accounting involves recognising in the income statement the group's share of the associates' post acquisition profit or loss for the year. The group's interest in the associate is carried in the balance sheet at an amount that reflects its share of the net assets of the associate and includes any excess or deficit of the purchase price over the fair value of attributable assets of the associate at date of acquisition. Any excess or deficit of the purchase price over the attributable net assets of the associate is amortised over the useful lives of underlying assets. (Refer paragraph 8).

#### 4 Foreign currencies

Income statements of foreign entities and associated undertakings are translated to rand at average exchange rates for the year and the balance sheets are translated at rates ruling at the balance sheet date. The exchange difference arising on translation of assets and liabilities, including the excess or shortfall of the purchase price over a fair value of attributable net assets at date of acquisition, of foreign subsidiaries and associates are transferred directly to equity. On disposal of the foreign entity such translation differences are recognised in the income statement as part of the gain or loss on sale.

Foreign currency transactions are accounted for at the rates of exchange ruling at the date of the transaction. Monetary assets and liabilities are translated at year end exchange rates unless hedged by forward exchange contracts, in which case the rates specified in such forward contracts are used. Gains and losses arising on settlement of such transactions and from the translation of foreign currency monetary assets and liabilities arising from such transactions are recognised in the income statement.

Forward exchange contracts are entered into to hedge anticipated future transactions. These instruments are not recognised in the financial statements until the settlement date of these transactions as the purpose of these contracts is to reduce exposure to fluctuation in foreign currency exchange rates. No provision is made for potential gains and losses on open contracts.

#### 5 Commodity hedging transaction

Metal futures, options and lease contracts are entered into to preserve and enhance future revenue streams. Hedging contracts are not recognised in the financial statements until settlement date, at which time they are included in the determination of revenue. No provision is made for potential gains or losses on open contracts. Non-hedging contracts are initially recorded at cost with any subsequent changes in their fair value recorded as a market-tomarket adjustment in the income statement.

### 6 Financial Instruments

Financial instruments carried on the balance sheet include cash and bank balances, money market instruments, investments, receivables, trade creditors, leases and borrowings.

The group is also party to financial instruments that reduce risk to foreign currency and future metal price fluctuations which are not recognised in the financial statements at inception. The particular recognition methods adopted are disclosed in the individual policy statements associated with each item.

#### 7 Investments

Investments are stated at cost and are only written down where the directors are of the opinion that there has been a permanent diminution in value. Where there has been a permanent diminution in value of an investment, it is recognised as an expense in the period in which the diminution is recognised.

On disposal of an investment, the difference between the net disposal proceeds and the carrying amount is charged or credited to the income statement.

#### 8 Property, plant and equipment

#### · Mining assets:

Mining assets are recorded at cost. Expenditure, including evaluation costs, incurred to establish or expand productive capacity, to support and maintain that productive capacity and net working costs incurred on mines prior to the commencement of commercial levels of production, are capitalised to mining assets. Interest on borrowings, specifically to finance establishment of mining assets, is capitalised until commercial levels of production are achieved.

· Mothballed mining operations:

The net assets of mothballed operations are written down to net realisable value. Expenditure on the care and maintenance of these operations is charged against income, as incurred.

Amortisation:

Mining assets are amortised using the units-ofproduction method based on estimated economically recoverable proven and probable ore reserves, limited to a maximum period of 25 years.

Impairment:

The recoverability of the long-term assets is reviewed by management on a continuous basis, based on estimates of future net cash flows. These estimates are subject to risks and uncertainties including future metal prices and exchange rates. It is therefore reasonably possible that changes could occur which may affect the recoverability of the mining assets. Where the value in use is less than the estimated net book value, the impairment is charged against income to reduce the carrying value to the recoverable amount of the asset. • Mining exploration:

Expenditure on mining exploration in new areas of interest is charged against income as incurred. Costs related to property acquisitions, surface and mineral rights are capitalised. Where the directors consider that there is little likelihood of the properties or rights being exploited, or the value of the exploration rights have diminished below cost, a write down is effected against exploration expenditure. • Other fixed assets:

Other fixed non-mining assets are recorded at cost. Depreciation is calculated using rates and bases which are designed to write off the assets over their expected useful lives. Freehold properties are not depreciated.

#### 9 Accounting for leases

Leases of property, plant and equipment where the group assumes substantially all of the benefits and risks of ownership are classified as finance leases. Finance leases are capitalised at the estimated present value of the underlying lease payments. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the balance outstanding. The corresponding rental obligations, net of finance charges, are included in other long-term payables. The interest element is expensed to the income statement, as a finance charge, over the lease period.

The property, plant and equipment acquired under finance leasing contracts is amortised in terms of the group accounting policy. (Refer to paragraph 8).

Leases of assets under which all the risks and benefits of ownership are effectively retained by the lessor are classified as operating leases. Payments made under operating leases are charged to the income statement in the period in which they occur.

When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognised as an expense in the period in which termination takes place.

#### 10 Inventories

#### Metal inventories:

Platinum, palladium and rhodium are treated as main products and other platinum group- and base metals produced as by-products. Metals mined by the company, including in-process metal contained in matte produced by the smelter and precious metal concentrate in the base and precious metal refineries, are valued at the lower of average cost of production and estimated net realisable value. Quantities of inprocess metals are based on latest available assays. The average cost of production is taken as total costs incurred on mining and refining, including amortisation, less net revenue from by-products. Costs are allocated to main products on a units produced basis. Refined byproducts are valued at their estimated net realisable value. Stocks of platinum group metals purchased or recycled by the company are valued at the lower of cost and estimated net realisable value.

Stores and materials:

Stores and materials are valued at the lower of cost and net realisable value, on a first-in-firstout basis. Obsolete, redundant and slow moving stores are identified and written down to economic or realisable values.

### 11 Trade receivables

Trade receivables are carried at anticipated realisable value. An estimate is made for doubtful receivables based on a review of all outstanding amounts at year end. Bad debts are written off during the year in which they are identified.

#### 12 Cash and cash equivalents

For the purposes of the cash flow statement, cash and cash equivalents comprise cash in hand, deposits held at call with banks, investments in money market instruments and short term unlisted investments, net of bank overdrafts. In the balance sheet, bank overdrafts are included in borrowings under current liabilities.

#### 13 Provisions

Provisions are recognised when the group has a present legal or constructive obligation as a result of past events where it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

#### 14 Segmental reporting

The group is an integrated pgm and associated base metals producer. On a primary basis, the business segments are:

- mine-to-market primary pgm producer, including marketing of metals produced by the group;
- mine-to-concentrate primary pgm producer;
- toll refiner of third party material.

### 15 Pension and other post-retirement obligations

The group operates or participates in a number of defined benefit and defined contribution retirement plans for the group's employees. The pension plans are funded by payments from the employees and by the relevant group companies taking account of the recommendations of independent qualified actuaries. The assets of the different plans are held by independently managed trust funds.

These funds are governed by the Pension Fund Act of 1956. Defined benefit plans such as the Mine Officials Pension Fund and the Mine Employees Pension Fund are subject to actuarial valuations at intervals of no more than three years.

These plans are, in substance, accounted for as defined contribution plans. Contributions to the defined benefit and contribution plans are therefore charged to income as incurred.

The group provides post-retirement health care benefits to qualifying retirees. The expected costs of these benefits are accrued over the period of employment. Valuations of these obligations are carried out by independent qualified actuaries at intervals of no more than three years.

#### 16 Deferred income taxation

Deferred taxation is calculated on a comprehensive basis using the balance sheet approach. Deferred tax liabilities or assets are recognised by applying expected corporate tax rates to the temporary differences existing at each balance sheet date between the tax values of assets and liabilities and their carrying amounts where such temporary differences are expected to result in taxable or deductible amounts in determining taxable profits for future periods when the carrying amount of the assets or liability is recovered or settled. The principal temporary differences arise from amortisation and depreciation on property, plant and equipment, provisions, post-retirement benefits and tax losses carried forward. Deferred tax assets relating to the carry forward of unused tax losses are recognised to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilised.

#### 17 Environmental obligations

Rehabilitation costs:

The net present value of future rehabilitation cost estimates are recognised and provided for in full in the financial statements. The estimates are reviewed annually to take into account the effects of inflation and changes in the estimates are discounted using rates that reflect the time value of money.

Annual increases in the provision are charged to income and are split between finance costs relating to the change in the present value of the provision, inflationary increases in the provision and changes in the estimates. The present value of additional environmental disturbances created are capitalised to mining assets along with a corresponding increase in the rehabilitation provision. The rehabilitation asset is amortised in terms of the group's accounting policy (Refer paragraph 8). Rehabilitation projects undertaken, included in the estimates, are charged to the provision as incurred.

Ongoing rehabilitation cost:

The cost of the ongoing current programmes to prevent and control pollution is charged against income as incurred.

• Impala Pollution, Rehabilitation and Closure Trust Fund:

Annual contributions are made to the group's trust fund, created in accordance with statutory requirements, to provide for the estimated cost of rehabilitation during and at the end of the life of the group's mines. Income earned on monies paid to the trust is accounted for as investment income. The funds contributed to the trust are included under investments.

#### 18 Revenue recognition

*Turnover* comprises the rand amount received and receivable from customers in respect of the supply of metals mined, metals purchased and toll income received by the group and the net profit and losses arising from hedging transactions to the extent that they relate to that metal and have been matched at the date of the financial statements. Revenue is recognised at the date of dispatch of metal from the refinery, net of sales taxes and discounts. Toll refining income is recognised at date of declaration or dispatch of metal from the refinery in accordance with the relevant agreements with customers and after eliminating sales within the group.

*Other revenues* earned by the group are recognised on the following bases:

- Interest income as it accrues (taking into account the effective yield on the asset) unless collectibility is in doubt.
- Dividend income when the shareholder's right to receive payment is established, recognised at the last date of registration.

#### 19 Comparatives

Where necessary, comparative figures have been adjusted to conform with changes in presentation in the current year.

#### 20 Changes in accounting policies

During the year, the group adopted the provisions of International Accounting Standards (IAS) 10 (revised) (Events after the balance sheet date).

Under the revised accounting policy dividends and related secondary tax on companies (STC) will only be brought to account once dividends have been declared. The effect of the change is a R50.0 million increase in attributable earnings for the year ended 30 June 2000. Opening retained earnings have been adjusted in the consolidated- and company statements of changes in equity.

# Notes to the financial statements

### For the year ended 30 June (R million)

SEGMENTAL REPORTING					
	Summary	of business seg	gments for th	e year ended 30	June 200
	Impala	Barplats	Impala	Inter	Tota
	Platinum		Refining	Segmental	
			Services	Adjustment	
Sales revenue from:	11 532.8	116.9	1 871.6	(1 552.2)	11 969.
Metals mined	9 578.1				9 578.
Metals purchased	1 954.7		1 737.0	(1 435.3)	2 256.
Toll income			134.6		134.
Inter-company concentrate sales		116.9		(116.9)	0.
Segmental cost of sales	5 054.2	57.9	1 509.1	(1 500.9)	5 120
Metals mined	3 371.1	57.9			3 429
Other cost			56.2		56
Metals purchased	1 721.0		1 800.0	(1 552.2)	1 968
Gross cost	5 092.1	57.9	1 856.2	(1 552.2)	5 454
Increase/(decrease) in metal inventories	37.9		347.1	(51.3)	333.
Operating income	6 478.6	59.0	362.5	(51.3)	6 848.
	Impala	Barplats	Impala	Other	Tot
	Platinum		Refining		

	riadinarii		Ronning		
			Services		
Segmental assets	5 355.4	302.8	463.3	5 588.6	11 710.1
Segmental liabilities	2 041.7	188.6	520.4	2 529.4	5 280.1
Other information					
Capital expenditure	978.4	132.7		979.1	2 090.2
Depreciation	5.1		0.9		6.0
Amortisation	192.0	20.2			212.2

### Statistical information:

Inter-company concentrate sales

Total metals produced					
Platinum	('000 oz)	1 002		289	1 291
Palladium	('000 oz)	481		200	681
Rhodium	('000 oz)	128		36	164
Nickel	('000 tons)	7.0		7.0	14.0
Pge in concentrate produced	(kg)		960		960
Gross margin analysis	(%)	56.2	50.5	19.4	57.2
Metals mined		65.2			65.2
Metals purchased – Impala		12.0			12.0
Metals purchased – Impala Refinir	ig Services			19.4	19.4

50.5

50.5

# For the year ended 30 June (R million)

SEGMENTAL REPORTING (continue	d)					
		-			e year ended 30	
		Impala	Barplats	Impala	Inter	Тс
		Platinum		Refining	Segmental	
	-			Services	Adjustment	
Sales revenue		6 609.9		835.4	(441.7)	7 00
Metals mined		6 053.9				6 05
Metals purchased		556.0		742.5	(441.7)	85
Toll income				92.9		9
Inter-company concentrate sales	ļ		-			
Segmental cost of sales		3 649.5		693.0	(441.7)	3 90
Metals mined		2 932.5				2 93
Other cost				50.2		5
Metals purchased		497.7		642.8	(441.7)	69
Gross cost		3 430.2		693.0	(441.7)	3 68
Decrease in metal inventories	l	219.3				21
Operating income		2 960.4		142.4		3 10
		line in a la	Dorolata	مامعهام	Other	т
		Impala Platinum	Barplats	Impala	Other	Тс
		Platinum		Refining		
Commental accests		4 220 4		Services	4.040.0	0 7 2
Segmental assets		4 329.4		335.3	4 069.9	8 73
Segmental liabilities		1 321.2		317.9	1 469.9	3 10
Other information						
Capital expenditure		732.5			50.4	78
Depreciation		2.4		0.9		
Amortisation		139.9				13
Statistical information:						
Total metals produced						
Platinum	('000 oz)	1 020		179		11
Palladium	('000 oz)	493		143		é
Rhodium	('000 oz)	131		24		1
Nickel	('000 tons)	7.2		6.6		1
Pge in concentrate produced	(kg)					
Gross margin analysis	(%)	44.8		17.0		4
Metals mined	(	47.9				4
Metals purchased – Impala		10.5				1
Metals purchased – Impala Refining S	Services			17.0		1
Inter-company concentrate sales						•

### For the year ended 30 June (R million)

1 SEGMENTAL REPORTING (continued)

### Notes to business segment analysis:

Sales revenue
Metals mined
Reflect the mine-to-market sales from the Impala lease area.
Metals purchased
Revenue from metals purchased is recognised within two separate legal entities:
- for Impala Platinum Limited this incorporates sales of metals purchased, principally from Impala Refining Services.
- for Impala Refining Services Limited this includes sales of metals purchased from third party refining customers. The majority of
sales are to Impala Platinum Limited, and a portion directly to the market.
Toll income
Fees earned by Impala Refining Services for treatment of metals from third party refining customers.
Inter-company concentrate sales
Sale of concentrate from Barplats mining activities to Impala Refining Services.
Segmental cost of sales
Gross cost
Comprises total costs associated with the mining, refining and purchase of metals.
Inter segmental adjustments
Elimination of inter-segment sales, purchases and unrealised profit in the group.
Segmental assets
The operating assets, fixed, current and non-current, employed to generate segmental revenue.
Impala Refining Services uses the Impala Platinum Limited processing assets for which it is charged a market related fee.
Segmental liabilities
The operating liabilities, current and non-current, resulting from segmental operating activities.

r the year ended 30 June (R million)	Gr 2001	oup 2000
1 SEGMENTAL REPORTING (continued)		
The following is a summary of the geographical		
segments for the year ended 30 June:		
Sales		
Main products	10 581.3	5 888.4
North America	3 593.3	2 185.
Asia	3 270.9	2 125.4
Europe	1 571.2	979.0
South Africa	2 145.9	598.
By-products	1 253.3	1 022.
North America	208.6	174.
Asia	219.3	151.
Europe	206.8	130.
South Africa	618.6	565.
Toll income	134.5	92.
North America	12.9	9.
Asia	5.0	1.1
Europe	27.8	19.
Australia	15.5	5.
South Africa	73.3	56.
	11 969.1	7 003.0
The sales revenue and toll income segments are determined by the country in wh	nich	
the customer is located.		
No geographical allocation of assets and liabilities is made, given the concentratio	n	
within the Republic of South Africa.		

Comp 2000	oany <b>2001</b>	fo	r the year ended 30 June (R million)	Gr <b>2001</b>	oup 2000
		2	ON-MINE OPERATIONS		
		_			
			On-mine costs exclude amortisation and comprise		
			the following principal categories:		
			Labour	1 495.0	1 319.2
			Materials and other mining costs	685.4	567.2
			Utilities	130.1	111.2
			Contract mining	19.6	-
				2 330.1	1 997.6
		3	CONCENTRATING AND SMELTING OPERATIONS		
			Concentration and empliting costs avaluate empetiation		
			Concentrating and smelting costs exclude amortisation		
			and comprise the following principal categories:		
			Labour	109.0	98.1
			Materials and other costs	240.1	214.7
			Utilities	128.8	127.9
			Contract concentrating	14.6	-
			oonnaet concentrating	14.0	
				492.5	440.7
		4	REFINING OPERATIONS		
			Refining costs exclude amortisation and comprise		
			the following principal categories:		
			Labour	130.7	117.0
			Materials and other costs	173.8	165.4
			Utilities	28.8	25.5
				333.3	307.9

Company 2000 <b>20</b> 0	<b>01</b> fo	or the year ended 30 June (R million)	Gro <b>2001</b>	up 2000
	5	OTHER COSTS		
		Other costs comprise the following principal categories:		
		Corporate office	57.8	40.0
		Selling and promotional expenses	45.0	37.0
		Rehabilitation provision – inflation adjustment	4.7	4.0
		Other costs	9.6	14.
			117.1	96.0
				70.
	6	OTHER INCOME/(EXPENSE)		
		Currency exchange gains	157.7	20.
(11.1) (27	7.1)	Exploration expenditure	(49.0)	(11.1
(22.2) (35	5.8)	Other	(29.5)	(0.9
		Insurance claim	15.3	27.9
		Disposal of subsidiary	-	26.7
(33.3) (62	2.9)		94.5	62.
	_			
	7	NET FINANCIAL INCOME		
		Net financial income consists of the following principal categories:		
- 7	7.8	Interest received	387.4	246.
763.3 <b>4 10</b> 3	3.3	Dividends received	13.2	7.
		Interest expense	(14.4)	(22.
		Rehabilitation provision – present value adjustment	(2.9)	(3.
763.3 <b>4 11</b> 2			383.3	228.

for the year ended 30 June (R million)  8 INCOME BEFORE TAXATION  The following items have been charged in arriving at income before trustion	2001	2000
The following items have been charged in arriving at		
income la fore toution.		
income before taxation:		
Auditors' remuneration	1.4	1.
Fees	1.4	1
Other services	-	0
Amortisation of goodwill in associates (Refer note 13)	7.4	7
Provision for post-retirement medical benefits (Refer note 24)	2.9	2
Amortisation of fixed assets (Refer note 12)	212.2	139
Mining assets	209.5	137
Leased assets	2.7	2
Depreciation of property, plant and equipment (Refer note 12)	6.0	3
Professional fees	30.1	22
Employment costs (Refer notes: 2, 3 and 4)	1 734.7	1 534
Wages and salaries	1 619.2	1 428
Pension costs – defined contribution plans (Refer note 24)	107.8	61
Pension costs – defined benefit plans (Refer note 24)	7.7	44
Average weekly number of employees in the group (thousand)	28.0	28
9 TAXATION		
Current taxation	2 164.7	804
Deferred taxation – current period (Refer note 23)	266.4	144
Share of taxation of associates	384.1	112
Taxation for the period	2 815.2	1 061
Comprising:		
South African normal taxation	2 374.9	985
Mining	2 025.7	859
Non-mining	349.2	148
Prior years mining overprovision	-	21
Secondary taxation on companies	440.3	76
	2 815.2	1 061
	Non-mining Prior years mining overprovision	Non-mining     349.2       Prior years mining overprovision

Com 2000	pany <b>2001</b>	for the year ended 30 June (R million)	Gr <b>2001</b>	oup 2000
		9 TAXATION (continued)		
		The taxation of the group's profit differs as follows from the		
		theoretical charge that would arise using the basic taxation rate:		
%	%		%	%
30.0	30.0	Normal taxation rate for companies	30.0	30.0
		Adjusted for:		
1.4	0.6	Disallowable expenditure	0.9	0.7
		Share of taxation of associates	1.0	0.4
(31.4)	(30.4)	Exempt income	(0.1)	(0.4)
		Prior year overprovision	-	(0.7)
		Secondary taxation on companies	5.9	2.3
		Deferred taxation – prior year adjustment	-	(0.3)
0.0	0.2	Effective taxation rate	37.7	32.0
		10 EARNINGS PER SHARE		
		Basic earnings per share is calculated by dividing the net income		
		attributable to shareholders by the weighted number of ordinary		
		shares in issue during the year.		
		Net income attributable to shareholders (R million)	4 647.1	2 255.0
		Weighted average number of ordinary shares in issue (millions)	66.158	65.891
			00.100	03.071
		Basic earnings per share (cents)	7 024	3 422
		For the diluted earnings per share the weighted average number		
		of ordinary shares in issue is adjusted to assume conversion of all		
		share options granted to employees.		
		Weighted average number of ordinary shares in issue (millions)	66.158	65.891
		Adjustments for share options (millions)	0.515	0.675
		Weighted average number of ordinary shares for diluted earnings		
		per share (millions)	66.673	66.566
		Diluted earnings per share (cents)	6 970	3 388

Com 2000	pany <b>2001</b>	for the year ended 30 June (R million)		Gr <b>2001</b>	oup 2000
		-			
		10 EARNINGS PER SHARE (continued)			
		The calculation for headline earnings per	share is based on the		
		basic earnings per share calculation adjus			
		Net income attributable to shareholders		4 647.1	2 255.0
		Less: profit on sale of Messina Limited		-	26.1
		Headline earnings		4 647.1	2 228.9
		5			
		Headline earnings per share (cents)	– basic	7 024	3 383
			- diluted	6 970	3 348
		The calculation for cash earnings per sha	re is based on net		
		operating cashflow (Refer note 31)		6 635.7	2 976.4
		Cash earnings per share (cents)	– basic	10 030	4 517
			- diluted	9 953	4 471
		11 DIVIDENDS DECLARED			
		As a result of adopting IAS 10 (revised), d			
		those declared in the current financial ye			
		proposed for this financial year will only b	be approved after the		
		balance sheet date.			
		Dividends declared			
466.6	938.1	Final dividend No. 65 of 1 420 cents per s		938.1	466.6
225.3	941.4	Interim dividend No. 66 of 1 420 cents pe	er share (2000: 340 cents)	941.4	225.3
691.9	1 879.5			1 879.5	691.9
-	1 988.2	Special dividend of 3 000 cents per share		1 988.2	-
691.9	3 867.7			3 867.7	691.9
		Dividend cover (excluding special dividend)			
		Based on attributable income		2.5	3.3
		Based on headline earnings (Refer note 1	•	2.5	3.2
		Dividend cover (including special dividend)			
		Based on attributable income		1.2	3.2

Con 2000	npany <b>2001</b>	for the year ended 30 June (R million)	Gr 2001	oup 2000
2000	2001	• • • •	2001	2000
		11 DIVIDENDS DECLARED (continued)		
		Dividends proposed		
		Under the previous accounting policy, and excluding the special		
		dividend, the dividends proposed would have been as follows:		
225.3	941.4	Interim dividend No. 66 of 1 420 cents per share (2000: 340 cents)	941.4	225.3
938.1	1 579.1	Final dividend proposed: No. 67 of 2 380 cents per share (2000: 340 cents)	1 579.1	938.1
930.1	1 37 7.1	That dividend proposed. No. 07 of 2 360 cents per share (2000. 1 420)	1 37 7.1	930.1
1 163.4	2 520.5		2 520.5	1 163.4
1 103.1	2 020.0	Dividend cover	2 020.0	1 100.1
		Based on attributable income	1.9	1.9
		Based on headline earnings (Refer note 10)	1.9	1.9
		,		
		The final dividend in respect of the 2001 financial year of 2 380 cents		
		per share amounting to a total of R1 579.1 million, was approved on		
		23rd August 2001.		
		These financial statements do not reflect this dividend payable, which		
		will be accounted for in the year ended 30 June 2002.		
		12 PROPERTY, PLANT AND EQUIPMENT		
		Mining assets, at cost		
		These comprise expenditure on shafts, plant and equipment, mining		
		development and general capital expenditure.		
		Cost	6 761.1	4 674.1
		Opening balance	4 674.1	3 912.0
		Additions (including rehabilitation asset – refer note 26)	2 090.2	782.9
		Less: disposals	3.2	20.8
		Accumulated amortisation	1 562.7	1 350.5
		Opening balance	1 350.5	1 210.6
		Charge for the year	212.2	139.9
		Net book value	5 198.4	3 323.6

2000	2001	for the year ended 30 June (R million)	Gro 2001	2000
		12 PROPERTY, PLANT AND EQUIPMENT (continued)		
		Other assets		
		These comprise expenditure on freehold land and buildings,		
		motor vehicles, furniture, plant and equipment, leased equipment.		
5.5	5.6	Cost	40.0	39.5
0.2	5.5	Opening balance	39.5	37.3
5.3	0.1	Additions	5.9	6.3
		Less: disposals	5.4	4.1
		Accumulated depreciation	7.8	5.8
		Opening balance	5.8	4.9
		Charge for the year	6.0	3.3
		Less: disposals	4.0	2.4
5.5	5.6	Net book value	32.2	33.7
5.5	5.6	Total net book value of fixed assets	5 230.6	3 357.3
		Associates		
			130 8	130.6
		Shares at cost	430.8 (88 1)	
		Shares at cost Amortisation of goodwill arising on acquisition	(88.1)	(80.7
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received	(88.1) (765.5)	(80.7 (223.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income	(88.1) (765.5) 1 214.4	(80.7 (223.2 567.1
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation	(88.1) (765.5) 1 214.4 1 871.7	(80.7 (223.2 567.1 840.3
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income	(88.1) (765.5) 1 214.4	(80.7 (223.2 567.1 840.3
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation	(88.1) (765.5) 1 214.4 1 871.7	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation Closing net book amount	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation Closing net book amount Valued by the directors at book value.	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation Closing net book amount Valued by the directors at book value.	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation Closing net book amount Valued by the directors at book value.	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation <b>Closing net book amount</b> Valued by the directors at book value. A loan facility of R174.1 million (2000: R147.2 million) has been guaranteed in favour of banking institutions, available for	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		Shares at cost Amortisation of goodwill arising on acquisition Dividends received Share of post acquisition retained income Share of results before taxation Less: share of taxation <b>Closing net book amount</b> Valued by the directors at book value. A loan facility of R174.1 million (2000: R147.2 million) has been guaranteed in favour of banking institutions, available for	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2
		<ul> <li>Shares at cost</li> <li>Amortisation of goodwill arising on acquisition</li> <li>Dividends received</li> <li>Share of post acquisition retained income</li> <li>Share of results before taxation</li> <li>Less: share of taxation</li> </ul> Closing net book amount Valued by the directors at book value. A loan facility of R174.1 million (2000: R147.2 million) has been guaranteed in favour of banking institutions, available for utilisation by the associates.	(88.1) (765.5) 1 214.4 1 871.7 657.3	(80.7 (223.2 567.1 840.3 273.2 694.0
		<ul> <li>Shares at cost</li> <li>Amortisation of goodwill arising on acquisition</li> <li>Dividends received</li> <li>Share of post acquisition retained income</li> <li>Share of results before taxation</li> <li>Less: share of taxation</li> <li>Closing net book amount</li> <li>Valued by the directors at book value.</li> <li>A loan facility of R174.1 million (2000: R147.2 million) has been guaranteed in favour of banking institutions, available for utilisation by the associates.</li> <li>Goodwill included in carrying value:</li> </ul>	(88.1) (765.5) 1 214.4 1 871.7 657.3 791.6	430.8 (80.7 (223.2 567.1 840.3 273.2 694.0 694.0 185.0 80.7

Com 2000	pany 2001	for the year ended 30 June (R million)			Group 2001 200
		13 INVESTMENTS IN ASSOCIATES AND SU	BSIDIARIES (continu	ued)	
		Shares beneficially owned in the underm	entioned companies	involved	
		in the business of mining, refining and ma			
		metals.		group	
			Num	ber of Shares	
			2001	2000	
		Western Platinum Limited			
		Ordinary shares	6 779 924	6 779 924	
		Participating preference shares	540 000	540 000	
		Effective holding: 27.1%			
		Eastern Platinum Limited			
		Ordinary shares	134 444	134 444	
		Participating preference shares	14 666	14 666	
		Effective holding: 27.1%			
		Summarised balance sheet (R million)			
		Summarised balance sheet (R million)	31 March	31 March	
			2001	2000	
		Capital and reserves	2 569.4	2 180.8	
		Non-current liabilities	1 172.4	898.0	
			3 741.8	3 078.8	
		– Fixed assets	3 839.9	3 095.2	
		Net current (liabilities)	(98.1)		
			3 741.8	(16.4)	
		-	3 /41.8	3 078.8	
		The associated companies prepare their f	inancial statements t	o 30 Septembe	er
		to conform to the financial year of their h	olding company. Onl	ly publicly	
		available information for these associate of	companies has been	used for equity	y
		accounting purposes. Consequently, resul	ts for the twelve mo	nths to 31 Marc	ch
		have been included in the equity accoun	ted earnings for the	period, of whicl	h
		the results for the last six months are una	udited. There were n	o changes in	
		the percentage ownership interests in the	e associates during th	ne year ended	
		30 June 2001.			
		Subsidiaries			
527.9	423.5	Investments in subsidiaries (Annexure A)			
JZ1.7	723.3				

Com 2000	pany <b>2001</b>	for the year ended 30 June (R million)	Gro <b>2001</b>	oup 2000
		14 OTHER INVESTMENTS		
		Investments in listed shares		
		Comprise shares in the following listed companies:		
28.9	29.4	Kroondal Platinum Mines Ltd	29.4	28.9
29.1	29.1	Aquarius Platinum Ltd	29.1	29.1
-	66.0	Zimbabwe Platinum Mines Ltd	66.0	-
-	27.6	Brandrill Ltd	27.6	-
		During the period under review, the strategic shareholding in Kroondal		
		Platinum Mines Ltd ("Kroondal") increased by an additional 500 000		
		shares to a total holding of 2 591 700 shares (2000: 2 091 700), which		
		represents approximately 4.7% (2000: 5.8%) of the issued share capital of		
		that company. During the year, Kroondal undertook a capital reduction		
		which resulted in a R15.5 million decrease in the value of the investment.		
		The additional shares received were in exchange for Impala Platinum		
		Holdings Ltd providing a guarantee to Investec Bank Limited on behalf		
		of Aquarius Platinum (South Africa) (Pty) Ltd (refer to note 29). The shares		
		are listed on the JSE Securities Exchange (JSE). The market value at the		
		close of business on 30 June by reference to JSE quoted prices was		
		R73.7 million (2000: R31.4 million).		
		During the period under review, the group maintained its strategic		
		shareholding in Aquarius Platinum Ltd, holding 7 141 966 shares		
		(2000: 7 141 966) which amounts to approximately 10.1% (2000: 14.8%)		
		of the issued share capital of that company. The shares are currently listed		
		on the Australian Stock Exchange and the London based Alternate		
		Investment Market. The market value of these shares as at the close of		
		business on 30 June by reference to Stock Exchange quoted prices and		
		the closing exchange rates was R253.9 million (2000: R117.4 million).		
		During the last quarter, the group purchased 13 280 782 shares in		
		Zimbabwe Platinum Mines Limited, which is approximately 15.1% of the		
		issued share capital of that company. The shares are listed on the		
		Australian Stock Exchange. The market value of these shares as at the		
		close of business on 30 June by reference to Stock Exchange quoted		
		prices was R49.9 million. The directors did not consider the diminution		
		to be permanent and have therefore valued the investment at cost.		

Company 2000 <b>2</b> 0	001	for the year ended 30 June (R million)	Gro 2001	up 2000
		14 OTHER INVESTMENTS (continued)		
		The group purchased 6 000 000 shares, in Brandrill Limited, which		
	represents approximately 6.4% of the issued share capital. The investment			
	in Brandrill Ltd is part of an agreement with the company to further			
	penetrating cone fracturing technology mining research and develop-			
	ment. The shares are listed on the Australian Stock Exchange. The market			
	value of these shares as at the close of business on 30 June by reference			
		to Stock Exchange quoted prices was R44.1 million.		
		Investment in unlisted shares		
		Shares beneficially owned in the undermentioned concerns:		
		Unlisted shares at cost – Guardrisk Insurance Company Ltd	3.8	3.8
- '	10.1	– Aquarius Platinum SA	10.1	-
		Valued by the directors at book value		
		In addition the group holds various unlisted industry related investments		
		which have been written down to a nominal value of R1 each.		
		Non-equity investments		
		Investment in Impala Pollution, Rehabilitation and Closure Trust Fund		
		(Refer note 26). The fund is an irrevocable trust under the group's control.		
		The monies in the fund are invested primarily in interest bearing securities		
		and approximate their fair value.	47.8	33.7
58.0 <b>1</b>	62.2		213.8	95.5

Com 2000	pany <b>2001</b>	for the year ended 30 June (R million)	Gro <b>2001</b>	up 2000
		15 NON-CURRENT RECEIVABLES		
		Loans		
	<b>7</b> 0 /	Related undertakings	<b>70</b> (	
-	70.6	Hartley Management Company (Private) Limited	70.6	-
		The agreement provides Impala Platinum Holdings Ltd with the option		
		to convert this loan into issued share capital of Hartley Management		
		Company (Private) Limited during August 2001. The loan bears interest		
		at LIBOR plus 5%, payable monthly.		
		Other		
-	126.2	Aquarius Platinum (South Africa) (Pty) Ltd	126.2	-
		Impala Platinum Holdings Ltd can elect, by the end of August 2001,		
		either to convert the loan into shares within the Aquarius group, or to		
		be repaid the loan. The loan bears interest at the Johannesburg Interbank		
		Acceptance Rate (JIBAR) plus 3%, payable monthly.		
_	36.4	Messina Platinum Mines Ltd	36.4	_
		The loan is repayable by no later than 30 June 2003. The loan bears		
		interest at JIBAR plus 6%, payable monthly.		
-	233.2		233.2	-
		16 PREPAYMENTS		
		Royalty prepayment	88.4	93.3
		Charged to the income statement during the year	4.9	4.9
			83.5	88.4
		Less: current portion of prepayment	4.9	4.9
			78.6	83.5
		Royalty prepayment represents the payment of royalties		
		settled by the issue of shares.		

2000	pany <b>2001</b>	for the year ended 30 June (R million)	Gr 2001	oup 200
		17 INVENTORIES		
		Refined metal	300.8	155
		At cost	234.0	109
		At net realisable value	66.8	46
		In-process metal	418.1	229
		Metal inventories	718.9	385
		Stores and materials inventories	60.4	54
			779.3	439
		18 CURRENT RECEIVABLES		
		Trade and other foreign receivables (Refer note 28)	1 041.8	654
		Interest receivable	17.8	85
10.9	9.3	Implats Share Incentive Trust	9.3	10
26.6	0.1	Other receivables	271.6	202
		Prepayments (Refer note 16)	4.9	4
37.5	9.4		1 345.4	958
		Trade and other foreign receivables include advances of R263.2 million		
		(2000: R102.7 million) to customers which are secured by metal held		
		as collateral against these advances.		
		19 CASH AND CASH EQUIVALENTS		
		Cash at bank and on hand	223.7	302
		Short term bank deposits	2 813.9	2 804
			3 037.6	3 106
		The weighted average effective interest rate on short term bank		
		deposits was 10.4% (2000: 11.9%).		

Company 2000 <b>2001</b>	for the year ended 30 June (R millior	ו)		G 2001	roup 2000
	20 ORDINARY SHARES AND SHARE PRE	EMIUM			
		Number of	Ordinary	Share	Tota
		shares	Ordinary shares	premium	Tota
		(millions)	R million	R million	R millior
	Balance at 30 June 1999	65.712	13.1	517.3	530.4
		03.712	13.1	517.5	550
	Issued in terms of the share option				
	scheme	0.354	0.1	20.5	20.
	Balance at 30 June 2000	66.066	13.2	537.8	551.0
	Issued in terms of the share option				
	scheme	0.265	0.1	19.5	19.
	Issued to minority royalty holders	0.017	0.0	5.5	5.
	Balance at 30 June 2001	66.348	13.3	562.8	576.
	The total authorised number of ordina	ary			
	shares is 100 million shares	5			
20.0 <b>20.0</b>	(2000: 100 million shares) of 20 cents e	each.		20.0	20.
	The unissued shares may be issued by	' the			
	directors at their discretion until the ne	ext			
	annual general meeting. The directors'	,			
	report and note 25 set out details in				
	respect of the share option scheme.				
	21 OUTSIDE SHAREHOLDERS' INTERES	т			
	At the beginning of the year			13.8	46.
	Change of interest in subsidiary			_	(35.
	Share of net profit of subsidiaries			5.4	2.
	At the end of the year			19.2	13.

Comj 2000	oany <b>2001</b>	for the year ended 30 June (R mi	llion)		Grc <b>2001</b>	oup 200
		22 BORROWINGS				
		Current				
		Lease liabilities			0.6	4
		Debentures			23.9	21
					24.5	25
		Non-current				
		Debentures			112.6	136
		Lease liabilities			-	C
		Interest-free loans			0.5	0
					113.1	137
		Total borrowings			137.6	162
		The debentures are secured by a	pledge of freehold prope	erties		
		included in mining assets with a b	book value of R178.0 mill	ion		
		(2000: R178.0 million). Half of the c	lebentures bear interest	at a		
		fixed rate of 18.90% per annum, w	ith the other half bearin	g current		
		interest at 12.48% (2000: 12.40%) p	per annum. All are repaya	able		
		before 30 June 2004.				
		Weighted average effective intere	st rates:			
		Debentures			15.3%	16.6
		Lease liabilities			18.0%	19.0
		Interest-free loans have no fixed te	erms of repayment.			
		The carrying amounts and fair valu	ues of debentures			
		are as follows:	Carrying	amounts	Fair	values
			2001	2000	2001	200
			136.5	157.5	158.6	170
		The fair values are based on disco	unted cash flows using a	a discount		
		rate based on the borrowing rate				
		be available to the group at the ba				
		amounts of short-term borrowing				
		their fair value.				
			( ) ) ( )	11 1 10 1 X		
		Maturity of non-current borrowing	gs (excluding finance lea	ise liabilities):		
		Between 1 and 2 years			26.8	23
		Between 2 and 5 years			85.8	112
					112.6	136

Company 2000 <b>2001</b>	for the year ended 30 June (R million)		Gr <b>2001</b>	oup 2000
2000 2001	22 BORROWINGS (continued)			
	Finance lease liabilities – minimum lease payments:			
	Not later than 1 year		0.5	4.8
	Later than 1 year and not later than 5 years			0.7
			0.5	5.5
	Future finance charges on finance leases		0.1	0.6
	Present value of finance lease liabilities		0.6	4.9
	Other assets with a book value of R0.5 million (2000:	R11.4 million) have		
	been encumbered as security for the capitalised leas	se agreements.		
	Borrowing powers			
	In terms of the articles of association of the compan	ies in the group,		
	the borrowing powers of the group are determined	by the directors		
	but are limited to ordinary shareholders' interest.		6 430.0	5 625.6
	Currently utilised		137.6	162.9
	23 DEFERRED TAXATION			
	The movement on the deferred taxation account is a	as follows:		
	At the beginning of the year		889.7	745.0
	Income statement charge (Refer note 9)		266.4	144.7
	At the end of the year		1 156.1	889.7
	Deferred taxation assets and liabilities are offset whe	n the income		
	taxes relate to the same fiscal authority.			
	Deferred taxation assets and liabilities and deferred t	axation charge/		
	(credit) in the income statement are attributable to t	he following items:		
			Charged/	
		2001	(credited)	2000
	Deferred taxation liabilities			
	Capital expenditure	1 205.7	241.4	964.3
	Prepaid expenses	9.2	9.2	-
	Other	29.1	19.0	10.1
		1 244.0	269.6	974.4
	Deferred taxation assets			
	Substantially long term provisions	(84.6)	(6.0)	(78.6)
	Other	(3.3)	2.8	(6.1)
		(87.9)	(3.2)	(84.7)

Company 2000 <b>2001</b>	for the year ended 30 June (R million)	Gro 2001	200 200
	24 PENSION AND OTHER POST-RETIREMENT OBLIGATIONS		
	Pension and provident plans		
	Defined contribution plans		
	, Independent funds provide pension and other benefits to all permanent		
	employees and their dependants. At the end of the financial year the		
	following funds were in existence:		
	– Impala Provident Fund		
	– Impala Platinum Refineries Provident Fund		
	– Impala Workers Provident Fund		
	– Impala Supplementary Pension Fund		
	– Sentinel Pension Fund		
	Defined benefit plans		
	The Mine Officials Pension Fund and the Mine Employees Pension Fund		
	are mining industry defined benefit pension plans. Accordingly, the group		
	is unable to determine the portion of assets and liabilities of the funds		
	which relate to group employees. During the year the Mine Officials		
	Pension Fund converted from a defined benefit to a defined contribution		
	fund and changed its name to the Sentinel Pension Fund.		
	The fund was actuarially valued at 30 June 1999 and reflected that the		
	fund was financially sound.		
	Membership of the pension and provident plans are as follows:		
	Defined contribution plans	97.4	9(
	Defined benefit plans	2.6	Ç
		100.0	100
	Post-retirement medical benefits		
	Opening belonge	(( 0	
	Opening balance	66.0	60
	Less: utilised during the year	2.9	2
	Add: provided during the year	2.9 66.0	2 2
	Closing balance	00.0	66
	The group provides certain post-retirement medical benefits to		
	qualifying pensioners. An estimate of the pre-tax obligation based on		
	the latest calculations of independent actuaries, assuming estimated		
	long-term medical cost increases and appropriate discount rates,		
	indicates that the provision is adequate to cover the group's current		
	obligations.		
	The principal actuarial assumptions were as follows:		
	- Medical cost inflation	12.5% pa	

Company 2000 <b>2001</b>	for the year ended 30 Jun	ne (R million)			2001	Group	2000
	25 EMPLOYEE BENEFITS						
	employees who are able market price on the tradi	plan authorises the granting to purchase shares at a price ng day preceding the date up approved the granting of th	equal to the con which t	e middle			
	(Refer note 18). Shares are entitled to exercise their o	ted through the Impala Share issued to the trust as require options at the option price (R issued to the Share Incenti 76.6 million)	ed. Employee lefer note 20	es are )).			
	Movement in the numbe follows (′000):	r of share options outstandin	g was as				
	At the beginning of the y Granted	ear			761.9 62.2		924.7 143.3
	Less: exercised Less: forfeited				290.5 18.6		306.1
	At the end of the year	ort for details on share optior	a hald by di	iraatara	515.0		761.9
		ld by the Trust at year-end an n a fair value of R26.6 million		million).			
	Share options outstandin	g at the end of the year have	the followir	ng terms:			
	Exercise date	Option price Rand	2001 ('000)	2000 ('000)			
	Prior to June 2000 June 2001	52.50-75.00 52.50-146.00	4.4 39.6	86.6 226.3			
	June 2002 June 2003 June 2004	52.50-200.00 52.50-344.00 146.00-344.00	231.4 94.3 81.3	254.2 88.3 70.7			
	June 2005 June 2006	200.00-344.00 344.00-344.00	48.4 15.6	35.8			
	Vesting of options first oc	curs two years after the gran	515.0 ting of the	761.9			
	In subsequent years an ac	mum of 25% of the total opti dditional 25% per year vests. years from the date of grantir	All outstand	ing			

Company 2000		r the year ended 30 June (R million)	Gr 2001	oup 200
	26	PROVISION FOR ENVIRONMENTAL OBLIGATIONS		
		Provision raised for future rehabilitation		
		Opening balance	101.8	95
		Disposal of subsidiary	-	(1
		Present value of additional rehabilitation obligations (Refer note 12)	20.5	
		Charge to income statement	7.7	8
		Closing balance	130.0	101
		The movement of the investment in the Impala Pollution,		
		Rehabilitation and Closure Trust Fund, is as follows:		
		Opening balance	33.7	25
		Interest accrued	4.7	3
		Contributions	9.4	5
		Closing balance	47.8	33
		Future value of rehabilitation obligation	1 320.9	1 125
		Future value of rehabilitation trust investment	812.7	764
		Future net environmental rehabilitation obligation	508.2	360
		The future value of rehabilitation obligation has been calculated		
		-		
		by inflating the current rehabilitation cost over 25 years to an		
		estimated future rehabilitation cost.		
		The future value of the rehabilitation trust investment has been		
		calculated by assuming that the present balance in the rehabilitation		
		trust will be invested at a risk free rate over 25 years, after which the		
		capital and growth will be used to fund the gross rehabilitation		
		obligation.		
		The shortfall will be funded by ongoing contributions.		
	27	7 TRADE AND OTHER PAYABLES		
	21			
1.7	1.6	Trade payables	1 065.9	521
		Leave liability	115.8	104
		Royalties payable	925.2	428
		Forward commitments (Refer note 30)	94.7	76
13.7	13.7	Other payables	80.7	80
15.4	15.3		2 282.3	1 211
10.4	13.5		2 202.3	ΙΖΙ

Royalties p 001 8.2 5.2 8.2 5.2 5.2 ne holders income an n African R	2000 236.0 426.8 234.6 428.2 of mineral d is only	Leave 2001 104.2 169.2 157.6 115.8	liability 2000 95.3 162.8 153.9 104.2
001 8.2 5.2 8.2 5.2 5.2 he holders ncome an	2000 236.0 426.8 234.6 428.2 of mineral d is only	2001 104.2 169.2 157.6	2000 95.3 162.8 153.9
001 8.2 5.2 8.2 5.2 5.2 he holders ncome an	2000 236.0 426.8 234.6 428.2 of mineral d is only	2001 104.2 169.2 157.6	2000 95.3 162.8 153.9
001 8.2 5.2 8.2 5.2 5.2 he holders ncome an	2000 236.0 426.8 234.6 428.2 of mineral d is only	2001 104.2 169.2 157.6	2000 95.3 162.8 153.9
001 8.2 5.2 8.2 5.2 5.2 he holders ncome an	2000 236.0 426.8 234.6 428.2 of mineral d is only	2001 104.2 169.2 157.6	2000 95.3 162.8 153.9
5.2 8.2 5.2 he holders ncome an	426.8 234.6 428.2 of mineral d is only	169.2 157.6	162.8 153.9
8.2 5.2 ne holders ncome an	234.6 428.2 of mineral d is only	157.6	153.
5.2 ne holders ncome an	428.2 of mineral d is only		
ne holders income an	of mineral d is only	115.8	104.
ncome an	d is only		
ncome an	d is only		
ncome an	d is only		
n African R	evenue		
nised on ar	nongoing		
es			
d cash equ	ivalents,		
	Ũ		
exchange a	and currency		
-			
	-		
	y for annua he balance es d cash equ rm borrow m maturiti exchange a nd to limit minated in ms of polic	exchange and currency minated in foreign ns of policy approved arly reviewed by the	y for annual leave as he balance sheet date.

2000	any 2001	for the year	ended 30	June (R mill	ion)			Gro 2001	oup 2000
		28 FINANCI	AL RISK MA	NAGEMENT	(continued)				
		The unco	vered foreig	an currency de	nominated b	alances as at			
		30 June v	vere as follo	WS:					
		Trade and	d other rece	ivables (US\$ m	nillion)		_	110.1	78
		Forward	foreign curre	ancy sales					
		TUIWalu	Foreign	,	Rand	Fair value	Settlement		
				Foreign					
		-	currency	amount	amount	rand	dates Within		
		2001	US\$	5.0	40.7	40.6			
		2000	US\$ Nil	5.0	41.3	40.7	3 months		
		2000	INII						
		The net u	Inrecognise	d gains at 30 J	une on open	contracts wh	ich hedge		
				eign commoc					
		(2000: nil)		5	5				
		,							
		The fair v	alues of forv	vard exchange	e contracts ha	ve been calcu	ulated using		
		rates quo	ted by the g	group's banker	s to take out a	a similar conti	ract at balance		
		sheet da	te with the s	same settleme	ent date as the	e existing con	tracts.		
		Metal pr	ice risk maı	nagement					
				d to fluctuatior	ns in metal pri	ces. From tim	e to time,		
		Ũ		o metal futures					
		- · ·		metal prices t					
		revenues	streams. At 3	30 June 2001, t	he group had	no metal fut	ures, options		
				place (2000: Ni			·		
		Our dit of							
			sk manager		lit siels eensiet	, maalah u af aa	ala aqqa		
				ntration of cred		s mainly of ca	sn, casn		
		equivaler	its, trade dei	btors and othe	er receivables.				
		The grou	p limits its c	ounter party e	exposures from	n its money n	narket		
		investme	nt operatior	ns by only deal	ling with well	established f	inancial		
		institutio	ns of high q	uality credit st	anding. The cr	edit exposure	e to any		
		one cour	nter party is	managed by s	etting exposu	re limits whic	h are		
		reviewed	regularly by	y the board of	directors.				
		The arou	p is exposed	d to credit-rela	ted losses in t	he event of n	on-		
		Ũ		nter parties to					
				racts are major					
		purites te		-					
		continua	ly monitors	its positions a	nd the credit	ratings of its d	Counter		

for the year ended 30 June (R million)	2001	Group 2	2000
28 FINANCIAL RISK MANAGEMENT (continued)			
Trade debtors comprise a number of customers, dispersed across different			
geographical areas. Ongoing credit evaluations are performed on the			
financial condition of these and other receivables. Trade debtors are			
presented net of the allowance for doubtful debts.			
The credit exposures by country are as follows:			
Receivables:			
North America	670.8		324.9
Asia	103.1		152.0
Europe	173.1		60.1
South Africa	94.8		117.1
(Refer note 18)	1 041.8		654.1
Cash and cash equivalents :			
Asia	1.6		0.3
South Africa	3 036.0	3	106.4
(Refer note 19)	3 037.6	3	106.7
Other receivables represent primarily a South African exposure.			
Interest rate risk management			
-			
to be any significant concentration of interest rate risk.			
29 CONTINGENCIES			
	10.1		11.9
outflows cannot be quantified.			
Guarantee to Investec Bank Limited on behalf of Aquarius Platinum			
(South Africa) (Pty) Ltd for a loan facility granted.	525.5		_
This guarantee is set to expire by 31 December 2001.			
	535.6		11.9
	28 FINANCIAL RISK MANAGEMENT (continued)         Trade debtors comprise a number of customers, dispersed across different geographical areas. Ongoing credit evaluations are performed on the financial condition of these and other receivables. Trade debtors are presented net of the allowance for doubtful debts.         The credit exposures by country are as follows:         Receivables:         North America         Asia         Europe         South Africa         (Refer note 18)         Cash and cash equivalents :         Asia         South Africa         (Refer note 19)         Other receivables represent primarily a South African exposure.         Interest rate risk management         The group monitors its exposure to fluctuating interest rates. Cash and cash equivalents are primarily invested with short term maturity dates.         The groups primary exposure in respect of long term borrowings is detailed in note 22. At 30 June 2001, the group did not consider there to be any significant concentration of interest rate risk.         29 CONTINGENCIES         Collateral security for employee housing         Due to the uncertainties regarding the timing and amounts, potential outflows cannot be quantified.         Guarantee to Investec Bank Limited on behalf of Aquarius Platinum (South Africa) (Pty) Ltd for a loan facility granted.	28 FINANCIAL RISK MANAGEMENT (continued)         Trade debtors comprise a number of customers, dispersed across different geographical areas. Ongoing credit evaluations are performed on the financial condition of these and other receivables. Trade debtors are presented net of the allowance for doubtful debts.         The credit exposures by country are as follows:         Receivables:         North America         Asia         Liorope         173.1         South Africa         94.8         (Refer note 18)         Cash and cash equivalents :         Asia         Asia         Custh Africa         90.0000         (Refer note 18)         Other recelvables represent primarily a South African exposure.         Interest rate risk management         The group monitors its exposure to fluctuating interest rates. Cash and cash equivalents are primarily invested with short term maturity dates.         The groups primary exposure in respect of long term borrowings is detailed in note 22. At 30 June 2001, the group did not consider there to be any significant concentration of interest rate risk.         29 CONTINGENCIES         Collateral security for employee housing         0.10.1         Due to the uncertainties regarding the timing and amounts, potential outflow: cannot be quantified.         Culateral security for employee housing      <	for the year ended 30 June (R million)       2001         28 FINANCIAL RISK MANAGEMENT (continued)         Trade debtors comprise a number of customers, dispersed across different geographical areas. Ongoing credit evaluations are performed on the financial condition of these and other receivables. Trade debtors are presented net of the allowance for doubtful debts.         The credit exposures by country are as follows: Receivables: North America       670.8         North America       670.8         Asia       103.1         Europe       173.1         South Africa       94.8         (Refer note 18)       1041.8         Cash and cash equivalents :       Asia         Asia       1.6         South Africa       3036.0         (Refer note 19)       3037.6         Other receivables represent primarily a South African exposure.       7         Interest rate risk management       7         The group monitors its exposure to fluctuating interest rates. Cash and cash equivalents are primarily invested with short term maturity dates.       7         The group primary exposure in respect of long term borrowings is detailed in note 22. At 30 June 2001, the group did not consider there to be any significant concentration of interest rate risk.       7         29 CONTINGENCIES       7       7         Collateral security for employee housing       10.1

Company	1							Gr	oup
2000 2	2001	for the year	ended 30	June (R mi	llion)			2001	2000
		30 COMMIT	MENTS						
		Capital e	vnenditure	ecommitme	nts				
		•	•			nce sheet date			
						s is as follows:			
			•	respect of ar				523.0	529.
		Amou	unts approv	ed by directo	ors not yet co	ontracted		2 859.2	2 580.
		Appro	oved expen	diture outstar	nding at 30.	June	-	3 382.2	3 110.
		borrowing	-	nmitments					
		•			nco third na	rty refining, Im	nala		
						ehalf of third p	•		
		Ũ				at a later date			
				ments were a					
			Foreign	Foreign	Rand	Fair value	Settlement		
			currency	amount	amount	rand	dates		
		2001	US\$	11.8	94.7	86.2	Between 1		
							and 3 months		
		2000	US\$	11.2	76.5	83.1	Between 1		
							and 3 months		
		The net u	nrecognise	d profits/(loss	ses) at 30 Jur	ne on open co	ntracts a		
			•	•		These will be re			
			ntracts mat				500 gi 1150 d		

Com 2000	npany <b>2001</b>	for the year ended 30 June (R million)	Gro 2001	oup 2000
		31 CASH GENERATED FROM OPERATIONS		
		Reconciliation of profit before taxation to cash generated from/		
		(utilised in) operations:		
730.0	4 048.2	Income before taxation	7 467.7	3 319.4
(763.3)	(4 111.1)	Adjustments for:	(81.5)	132.9
		Amortisation and depreciation (Refer note 12)	218.2	143.2
		Amortisation of goodwill (Refer note 13)	7.4	7.4
		Provision for environmental rehabilitation (Refer note 26)	7.7	8.0
(763.3)	(4 111.1)	Financial income (Refer note 7)	(400.6)	(253.4)
		Interest expense (Refer note 7)	14.4	22.1
		Share of pre-taxation income of associates (Refer note 13)	(1 031.4)	(332.8)
		Provisions (Refer note 24 and note 27)	1 097.3	564.3
		Other non cash transactions	5.5	(25.9)
		Changes in working capital (excluding the effects of		
(24.9)	28.0	acquisitions and disposals):	(750.5)	(475.9)
(24.3)	28.1	Trade and other receivables (Refer note 18)	(387.4)	(359.2)
		Inventories (Refer note 17)	(339.7)	216.6
(0.6)	(0.1)	Payables (Refer note 27)	(23.4)	(333.3)
(58.2)	(34.9)	Cash generated from/(used in) operations	6 635.7	2 976.4
		Other non-cash transactions		
		The non-cash transactions comprise mainly provisions, amortisation of		
		prepayments and share capital not issued for cash (2000: as well as an		
		adjustment in outside shareholders interest on disposal of subsidiaries)		
		32 TAXATION PAID		
3.0	1.0	Owing at the beginning of the year	663.5	467.4
(0.2)	7.6	Current charges per income statement	2 815.2	1 061.9
		Share of taxation of associates	(384.1)	(112.8)
		Net provision for deferred taxation	(266.4)	(144.7)
(1.0)	(8.1)	Owing at the end of the year	(1 488.9)	(663.5)
1.8	0.5		1 339.3	608.3

Comj 2000	oany <b>2001</b>	for the year ended 30 June (R million)	Gro 2001	up 2000
		33 CASH EFFECT OF SALE OF SUBSIDIARIES		
		During the previous financial year, the following subsidiaries were sold:		
		Messina Limited		
		Messina Platinum Mines Limited		
		The effect on the cash flow statement was as follows:		
		Book value of subsidiaries sold	_	39.1
		Profit – group	-	26.1
		Proceeds from sale of investment	_	65.2
		Cash balance sold	-	(59.8)
		Net cash effect	-	5.4
		34 POST BALANCE SHEET EVENTS		
		Post balance sheets event have been dealt with in the directors' report.		
		(Refer pages 70 and 71).		

### Annexure A

# Investment in subsidiary companies

	Issued	Effec	tive	Bool	k value in ho	olding compa	ny
	share	group i	nterest	Sha	res	Loa	ins
	capital	2001	2000	2001	2000	2001	2000
Company and description	R'm	%	%	R'm	R'm	R'm	R'm
Impala Holdings Limited	*	100	100			(950.5)	105.5
Investment holding company							
Impala Platinum Limited	*	100	100				
Mines, refines and markets pgms							
Impala Platinum Investments (Pty) Ltd	*	100	100				
Impala Platinum Properties (Rustenburg) (Pty) Ltd	*	100	100				
Impala Platinum Properties (North West) (Pty) Ltd	*	100	100				
Impala Platinum Properties (Springs) (Pty) Ltd	*	100	100				
Own properties							
Messina Holdings Limited	*	100	100			-	-
Investment holding company							
Barplats Holdings (Pty) Ltd	*	100	100	68.0	68.0	29.4	29.4
Investment holding company							
Barplats Investments Limited #	2.2	83	83				
Investment holding company							
Barplats Mines Limited	0.9	83	83				
Owns platinum mineral rights and							
certain associated infrastructure							
Barplats Mines (North West) (Pty) Ltd	*	83	83				
Rhodium Reefs Limited	*	83	83				
Owns platinum mineral rights							
Gazelle Platinum Limited	*	100	100			324.5	324.5
Investment holding company							
Impala Refining Services Limited	*	100	100				
Provides toll refining services							
Impala Platinum Japan Limited	¥ 10m	100	100	1.5	1.5	(0.8)	(1.0)
Marketing representative							

### Annexure A

Investment in subsidiary companies (continued)

	Issued	Effec	ctive	Boo	k value in ho	olding compa	ny
	share	group i	nterest	Sha	ares	Loa	ans
	capital	2001	2000	2001	2000	2001	2000
Company and description	R'm	%	%	R'm	R'm	R'm	R'm
Implats Canada Inc.	C\$1	100				951.0	
Investment holding company							
Platexco Inc.	C\$18.9 m	100					
Investment holding company							
Platexco Ltd.	C\$7.9 m	100					
Investment holding company							
Trojan Platinum (Pty) Ltd	*	100					
Owns platinum mineral rights							
Atlantic Exploration Ltd	*	100					
Investment holding company							
Platexco (South Africa) (Pty) Ltd	*	100					
Exploration company							
Sundry dormant companies	*	100	100	0.6	0.6	(0.2)	(0.6)
Total				70.1	70.1	353.4	457.8
Total investment						423.5	527.9

### Valued by the directors at book value

The interest of Impala Platinum Holdings Limited in the aggregate amount of the after-taxation profits of its subsidiaries is R4 584.4 million (2000: R2 171.9 million).

\* Share capital less than R50 000

# Listed on JSE Securities Exchange

# Notice to shareholders

### Implats

The 45th annual general meeting of members will be held in the Boardroom, 3rd Floor, Old Trafford 4, Isle of Houghton, Boundary Road, Houghton on Wednesday, 24 October 2001 at 10:00 for the following purposes:

- 1. To receive and consider the financial statements for the year ended 30 June 2001.
- 2. To confirm the appointment of Mr K C Rumble as a director of the company.
- To elect directors in place of those retiring in terms of the article of association. The following directors are eligible and offer themselves for re-election: DH Brown, PG Joubert, DM O'Connor, and MF Pleming
- 4. To determine the remuneration of the directors' at R90 000 per director per annum with an additional amount of R45 000 for the Chairman.
- 5. To consider, and if deemed fit, to pass with or without modification the undermentioned resolution as an ordinary resolution:

"That the authorised but unissued share in the capital of the company be place at the disposal and under the control of the directors of the company and the directors are hereby authorised and empowered to allot, issue and otherwise dispose thereof to such person or persons and on such terms and conditions at their discretion subject to the provisions of the Companies Act".

By order of the board

A M SNASHALL Group Secretary 23 August 2001

### Registered Office

3rd Floor Old Trafford 4 Isle of Houghton Boundary Road Houghton 2198

### Notes

- A member entitled to attend and vote is entitled to appoint one or more proxies to attend and speak and vote in his stead. A proxy need not be a member.
- (2) In accordance with the requirement of the International Stock Exchange, London, it is stated that no directors' service contracts exist or are proposed between the company or any subsidiary of the company and any director which is not terminable within one year without payment of compensation (other than statutory compensation). The interest of the directors of the company and their families do not, in the aggregate, in respect of either share capital or voting control, exceed 5% of the capital of the company.

# Shareholder information

# Shareholders' diary

Annual general meeting	Wednesday, 24 October 2001
Final dividend declared August 2000. Paid –	4 October 2001
Interim report release	February 2002
Interim dividend declared February 2001. Paid –	April 2002
Financial year end	30 June 2002
Annual report release	August 2002

# Analysis of shareholdings

	Number of Number of		Number of		
	shareholders	%	shares ('000s)	%	
1 – 5 000	1 472	96.8	376	0.6	
5 001 - 10 000	10	0.6	73	0.1	
10 001 – 50 000	20	1.3	455	0.7	
50 001 - 100 000	4	0.3	275	0.4	
100 001 - 1 000 000	7	0.5	2 283	3.4	
Over 1 000 000	8	0.5	62 886	94.8	
	1 521	100.0	66 348	100.0	

# Analysis of shareholdings

	Number of Number of			
	shareholders	%	shares ('000s)	%
Other companies	38	2.5	1 064	1.6
Trust funds and investment companies	157	10.3	54 935	82.8
Insurance companies	5	0.3	10	-
Pension funds	3	0.2	36	0.1
Individuals	1 317	86.6	440	0.7
Central Securities depository	1	0.1	9 863	14.8
	1 521	100.0	66 348	100.0

# Administration Implats subsidiary companies

Registered office and Secretary 3rd Floor, Old Trafford 4 Isle of Houghton, Boundary Road Houghton 2198 P.O. Box 61386, Marshalltown 2107 Telephone: +27(11) 481 3900 Telefax: +27(11) 484 0254 email: alan.snashall@implats.co.za investor@implats.co.za

#### Secretary

Alan Snashall

### London Secretaries

Project Consultants Limited Walnut House, Walnut Gardens Claydon, Banbury Oxon, OX17 1NA Telephone: +44 (1295) 69 0180 Telefax: +44 (1295) 69 0182 email: ckennedy@projectconsultants.co.uk

### Public Officer

Johan van Deventer

### **Transfer Secretaries**

South Africa Mercantile Registrars, 8th Floor 11 Diagonal Street PO Box 1053, Johannesburg 2000 Telephone: +27(11)370 5000

United Kingdom Lloyds Bank TSB Registrars The Causeway, Worthing West Sussex, BN99 6DA

### Auditors

PricewaterhouseCoopers Inc 2 Eglin Road, Sunninghill Johannesburg, 2157

Website: http://www.implats.co.za

#### Impala, Impala Refining Services and Barplats

Head office 3rd Floor, Old Trafford 4 Isle of Houghton Boundary Road, Houghton 2198 P.O. Box 61386, Marshalltown, 2107 Telephone: +27(11) 481 3900 Telefax: +27(11) 484 0254

Impala Operations

P.O. Box 5683, Rustenburg 0300 Telephone: +27 (14) 569 0000 Telefax: +27 (14) 569 6548

Impala Refineries P.O. Box 222, Springs 1560 Telephone: +27 (11) 360 3111 Telefax: +27 (11) 360 3680

Crocodile River Mine P.O. Box 513, Brits 0250 Telephone: +27 (12) 381 1800 Telefax: +27 (12) 258 0087

Representative in Japan Impala Platinum Japan Limited Uchisaiwaicho Daibiru, Room No. 702 303 Uchisaiwaicho 1-Chome, Chiyoda-ku Tokyo , Japan Telephone: +81 (3) 3504 0712 Telefax: +81 (3) 3508 9199

### Associated companies

Eastern Platinum Limited and Western Platinum Limited P.O. Box 98811 Sloane Park, 2152 Telephone: +27(11) 516 1300 Telefax: +27(11) 516 1310

# Impala Platinum Holdings Limited Incorporated in the Republic of South Africa. Registration No. 1957/001979/06 (the company)

### Form of Proxy

For use at the annual general meeting of the company to be held on Wednesday, 24 October 2001 at 10:00 (the annual general meeting)

I/We	
of	
appoint (See Note 1):	
1	or, failing him,
2.	or, failing him,

3. the chairman of the annual general meeting.

As my/our proxy to act for me/us at the annual general meeting of the company which will be held in the Boardroom, 3rd Floor, Old Trafford 4, Isle of Houghton, Boundary Road, Houghton, Johannesburg at 10:00 on Wednesday, 24 October 2001, and at each adjournment or postponement thereof, and to vote for and/or against the resolutions and/or abstain from voting in respect of the shares in the issued capital of the company registered in my/our name/s (see Note 2).

		Number of ordinary shares	
Resolutions	For	Against	Abstain
Confirmation of appointment of director			
Re-election of directors			
Directors' remuneration			
Unissued shares			
Insert in the relevant space above the number of	of shares held.		
Signed at	on		2001
Signature			
Assisted by (where applicable)			

Each ordinary shareholder is entitled to appoint one or more proxies (who need not be a shareholder/s of the company) to attend, speak and vote in place of that shareholder at the annual general meeting.

# Notes

- 1. A shareholder may insert the name of a proxy or the names of two alternative proxies of the shareholder's choice in the space's provided, with or without deleting "the chairman of the annual general meeting". Any such deletion must be initialled by the shareholder. The person present at the meeting whose name appears first on the form of proxy and has not been deleted will be entitled to act as proxy to the exclusion of those whose names follow.
- 2. A shareholder's instructions to the proxy must be indicated by the insertion of the relevant number of votes exercisable by that shareholder in the appropriate space provided. Failure to comply with the above will be deemed to authorise the proxy to vote or to abstain from voting at the annual general meeting as he deems fit in respect of all the shareholder's votes exercisable thereat. A shareholder or his proxy is not obliged to use all the votes exercisable by the shareholder or by his proxy, but the total of the votes cast and in respect whereof abstention is recorded may not exceed the total of the votes exercisable by the shareholder or his proxy.
- 3. Any alteration or correction to this form must be initialled by the signatory/ies.
- 4. Documentary evidence establishing the authority of a person signing this form of proxy in a representative capacity must be attached to this form unless previously recorded by the transfer secretaries of the company or waived by the chairman of the annual general meeting.
- 5. The completion and lodging of this form will not preclude the relevant shareholder from attending the annual general meeting and speaking and voting in person thereat to the exclusion of any proxy appointed in terms hereof, should such shareholder wish to do so.

- 6. Forms of proxy must be lodged with or posted to the company's transfer secretaries to be received not later than 24 hours (excluding Saturdays, Sundays and public holidays) before the time of the meeting.
- This form of proxy expires after the conclusion of the meeting stated herein except at an adjournment of that meeting or at a poll demanded at such meeting.

#### Transfer Secretaries

Mercantile Registrars Limited 8th Floor 11 Diagonal Johannesburg 2001 PO Box 1053 Johannesburg 2000

#### London transfer secretaries

Lloyds Bank TSB Registrars The Causeway StreetWorthing West Sussex BN99 6DA