Makwiro Platinum Mines

Implats Analyst Mine Visit
July 2003

Welcome to Makwiro
# Programme

**8 July 2003**
- **16:00** Collected from Harare - Transported to Chengeta Lodge (1.5 hours)
- **18:30** Presentation on Zimplats and Makwiro Platinum Mines
- **19:30** Dinner

**9 July 2003**
- **07:30** Depart for Ngezi Mine  
  Overview of mining operations
  Site visit / Ngezi
- **11:00** Depart for SMC  
  Overview of SMC operations
- **15:00** Depart for Harare
- **16:30** Depart for South Africa

# People you will meet

**Selous Metallurgical Complex (SMC)**
- **Roy Pitchford** : Chairman Makwiro / CEO Zimplats
- **Mike Houston** : CEO Makwiro
- **Patrick Maseva** : Chief Financial Officer
- **Wally Channon** : General Manager Processing  
  -Shayawabaya
- **Stan Frost** : Chief Engineer
- **Jack Murehwa** : Executive Manager Commercial
- **Enock Gwarisa** : Concentrator Manager
- **Louis Mabiza** : Smelter Manager
People you will meet – cont.

NGEZI MINE

Adrian Hutchings: Mine Manager Ngezi
Sydney Simango: Manager - Geology
Augustine Simbanegavi: Manager - Production
Andy Fussell: Manager - Planning / Tech. Services
Jed Langworthy: Manager - Trial Mining

We care about your safety

Please ensure you wear the appropriate safety equipment at each operation

➢ Ngezi Open Cast:
  - Hard hat
  - Luminous vest
  - Protective shoes
  - Safety glasses (where indicated)
  - Ear plugs (where indicated)
We care about your safety – cont.

- **SMC:**
  - Hard hat
  - Long-sleeved jacket/coat
  - Protective shoes
  - Safety glasses (where indicated)
  - Ear plugs (where indicated)

The holding company

**ZIMPLATS**

Chief Executive Officer : Roy Pitchford  
Chief Finance Officer  : Greg Sebborn  
Project Manager  : Dave Reeves  
Manager, Government  : Wadi Furusa & Investment Relations

**VISION**

Single focus PGM company exploiting its PGM reserves / resources in Zimbabwe
### Zimplats Structure

- **Absa**
- **Implats**
- **Minorities**

**Zimbabwe Platinum Mines Limited**

- **Makwiro Platinum Mines (Pvt) Limited**
- **Ngezi Platinum Mine**
- **Selous Metallurgical Complex**

- **Zimplats Tenements**

### Platinum in Zimbabwe

- **Hartley Platinum Mine**
- **Selous Metallurgical Complex**
- **Ngezi Platinum Mine**
- **Unki (Anglo American)**
- **Musengezi Complex**

Kilometres:

- Great Dyke: 2,400 m tonnes
- Hartley Geological Complex: 284 m tonnes
- Wedza Complex: 124 m tonnes

- Mimosa (Zimasco)
- Bulawayo
- Harare
Hartley geological complex

Selous Metallurgical Complex
Hartley Platinum Mine

- Zimplats Tenements (Resources)
- Zimplats 100%
- 2,276 m tonnes
- 300 m oz 4E

Selous Metallurgical Complex
Zimplats 70%
Implats 30%
- 168 m tonnes
- 26 m oz 4E

Selous Metallurgical Complex
Ngezi Platinum Mine

- Zimplats 100%
- 38 m tonnes
- 4 m oz 4E

Ngezi Mining Lease Tribute (Reserves)

Zimplats growth strategy

± 10-year target – 1 million oz 4E metal

Investment 1
Makwiro Platinum Mines
2.2mt per annum
Open cast
+ 190,000 oz 4E metal
• SMC Concentrator / Smelter recomisioned
  ➢ Completed March 02

Investment 2
Ngezi Underground Mine / concentrator
• 2.2mt Underground Mine
• 3.0mt Concentrator
  (Majority of Infrastructure, power etc. for 10mt per annum Ngezi operation)
• Increased Smelter capacity
  ➢ UG / Trial Mine
  ➢ Bankable feasibility
    ➢ In operation
    ➢ September 2003
    ➢ Target completion 2005

Investment 3 Onwards
Additional 6mt with timing dependant on market forces
## Operations to date

**Covering the period July 2002 to June 2003**

- Safety, health and environment
- Production statistics  
  - **Key issues**
- Financial statistics  
  - **Key issues**
- Other information
- 3-year forecast

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## Safety, health, environment & security

- Risk analyses completed on all operations
- All employees inducted in SHE-ongoing training
- Standards are in the process of being implemented
- Internal and external audits
- Compliance with all local environmental legal requirements and those associated with an Australian listed company. ISO 14001 by end 2004
- 3 fatalities and 9 LTAs in the year ended June 2003
- The SMC premises were considered a high security risk area. A modern security system has been installed
Production statistics

<table>
<thead>
<tr>
<th></th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>Forecast 4th Quarter</th>
<th>2002 / 2003 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total BCMs</td>
<td>2,114,983</td>
<td>2,342,613</td>
<td>2,090,444</td>
<td>2,070,664</td>
<td>8,718,704</td>
</tr>
<tr>
<td>Tonnes Mined</td>
<td>511,165</td>
<td>544,877</td>
<td>455,063</td>
<td>473,753</td>
<td>1,984,858</td>
</tr>
<tr>
<td>Grade g/t</td>
<td>3.14</td>
<td>3.19</td>
<td>3.23</td>
<td>3.25</td>
<td>3.20</td>
</tr>
<tr>
<td>Tonnes Milled</td>
<td>495,034</td>
<td>461,710</td>
<td>463,971</td>
<td>516,404</td>
<td>1,937,119</td>
</tr>
<tr>
<td>Availability %</td>
<td>86.5</td>
<td>84.9</td>
<td>82.9</td>
<td>92.2</td>
<td>86.2</td>
</tr>
<tr>
<td>Recovery %</td>
<td>79.7</td>
<td>82.5</td>
<td>82.7</td>
<td>82.3</td>
<td>81.6</td>
</tr>
<tr>
<td>4E oz in Conc. g/t</td>
<td>39,989</td>
<td>39,122</td>
<td>39,674</td>
<td>43,726</td>
<td>162,511</td>
</tr>
<tr>
<td>Smelter recovery %</td>
<td>99.2</td>
<td>98.4</td>
<td>99.7</td>
<td>99.5</td>
<td>99.2</td>
</tr>
<tr>
<td>Pt oz</td>
<td>18,769</td>
<td>19,373</td>
<td>17,693</td>
<td>24,788</td>
<td>80,623</td>
</tr>
<tr>
<td>Pd oz</td>
<td>16,744</td>
<td>16,870</td>
<td>15,142</td>
<td>21,771</td>
<td>70,527</td>
</tr>
<tr>
<td>Au oz</td>
<td>1,943</td>
<td>2,131</td>
<td>1,961</td>
<td>2,748</td>
<td>8,783</td>
</tr>
<tr>
<td>Rd oz</td>
<td>1,715</td>
<td>1,831</td>
<td>1,656</td>
<td>2,361</td>
<td>7,563</td>
</tr>
<tr>
<td>4E</td>
<td>39,171</td>
<td>40,205</td>
<td>36,452</td>
<td>51,668</td>
<td>167,496</td>
</tr>
<tr>
<td>Ni (t)</td>
<td>307</td>
<td>335</td>
<td>306</td>
<td>449</td>
<td>1,397</td>
</tr>
<tr>
<td>Cu (t)</td>
<td>212</td>
<td>233</td>
<td>221</td>
<td>315</td>
<td>981</td>
</tr>
</tbody>
</table>

Operations to date

- **Operating costs**

  - Total forecast operating costs for the financial year 03 together with the costs for the year to May 03 are detailed below

<table>
<thead>
<tr>
<th>$ / t Milled</th>
<th>Budget 2002 / 2003</th>
<th>Actual to March 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>12.17</td>
<td>11.07</td>
</tr>
<tr>
<td>Haulage</td>
<td>2.83</td>
<td>3.00</td>
</tr>
<tr>
<td>Concentrator</td>
<td>5.33</td>
<td>3.46</td>
</tr>
<tr>
<td>Smelting</td>
<td>3.11</td>
<td>1.58</td>
</tr>
<tr>
<td>Total</td>
<td>23.44</td>
<td>19.11</td>
</tr>
</tbody>
</table>

- Net Cash Cost / 4E oz 281.10 212.81
Issues / challenges

- Equipment availability at the mine – ore is very abrasive – positive drill / blast developments

- Grade control:
  steady improvement over past 12 months: 3.00g/t in Jan 02 to 3.25g/t Jan 03 onwards.

Further upside possible through ongoing skills development and improvements in the definition of the ore body plus in the drill / blast operation.

Issues / challenges – cont.

- The commissioning of SMC has had its difficulties as the plant was never run at capacity by its previous owners. Most issues have been engineered out, but further work will be needed over the next 12 months.
  - SAG mill liners – resolved May 03.
  - New press installed – commissioned January 03
  - Abrasiveness of ore on piping etc. – ongoing.
Issues / challenges – cont.

- Retention / development of people
- AIDS – Strategy: Education / Medication / Training
- Infrastructure / service sector support
  - Importation of power / fuel
- Exchange rate and pressure on higher level of US$ payments for local expenses. Power / Fuel / Spares.

Direct procurement from outside of Zimbabwe (in particular SA) should result in significant cost savings. Company has set up a buying facility in SA.

General information

- The Company employs 600 people directly with an additional 400 contract workers.
- The Company is fully insured offshore for loss of assets and profits.
- The project / operation to date has been fully supported by all relevant authorities (Ministries of Mines, Finance and Trade).
- Zimbabwe has a well-established legal framework with regard to mining and a long history of private sector investment.
Commitment to the community

- The Chairman’s Fund allocates resources to local communities with a focus on:
  - Health
  - Education
  - Sport
  - Self-Help Projects a focus area

The way forward - opportunities

- SMC has capacity in smelter operation / increased milling capacity being investigated
- Underground Mining at Ngezi – Trial Mine
- Phase 1 of growth – Zimplats
## Forecast results to June 2006 vs feasibility

<table>
<thead>
<tr>
<th></th>
<th>Budget June 03</th>
<th>Forecast June 03</th>
<th>% Var</th>
<th>Forecast June 04</th>
<th>Forecast June 05</th>
<th>Forecast June 06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ore Milled (t)</td>
<td>2,086,450</td>
<td>1,937,119</td>
<td>(7)</td>
<td>2,097,190</td>
<td>2,255,868</td>
<td>2,202,008</td>
</tr>
<tr>
<td>Grade (g/t)</td>
<td>3.10</td>
<td>3.20</td>
<td>3</td>
<td>3.25</td>
<td>3.25</td>
<td>3.25</td>
</tr>
<tr>
<td>Cash Recovery (%)</td>
<td>84.0</td>
<td>81.8</td>
<td>(3)</td>
<td>83.5</td>
<td>83.5</td>
<td>83.5</td>
</tr>
<tr>
<td>4E in Cons (oz)</td>
<td>174,680</td>
<td>162,511</td>
<td>(7)</td>
<td>162,450</td>
<td>186,352</td>
<td>183,800</td>
</tr>
<tr>
<td>Smelter rec (%)</td>
<td>99.4</td>
<td>99.2</td>
<td>(0.2)</td>
<td>99.2</td>
<td>99.2</td>
<td>99.2</td>
</tr>
<tr>
<td>4E in Matte (oz)</td>
<td>173,670</td>
<td>169,260</td>
<td>(3)</td>
<td>162,413</td>
<td>186,344</td>
<td>182,250</td>
</tr>
<tr>
<td>Ounces 4E Despatched</td>
<td>173,750</td>
<td>167,496</td>
<td>(4)</td>
<td>160,943</td>
<td>186,758</td>
<td>182,250</td>
</tr>
<tr>
<td>Capital / $m</td>
<td>4.5</td>
<td>4.0</td>
<td>11</td>
<td>6.1</td>
<td>6.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Cash balance / $m</td>
<td>8.0</td>
<td>14.2</td>
<td>78</td>
<td>11.0</td>
<td>19.7</td>
<td>34.1</td>
</tr>
<tr>
<td>Cash Cost $</td>
<td>281</td>
<td>220</td>
<td>22</td>
<td>236</td>
<td>225</td>
<td>252</td>
</tr>
<tr>
<td>Loan Repayment $ / m</td>
<td>8</td>
<td>8</td>
<td>-</td>
<td>17</td>
<td>8.6</td>
<td>-</td>
</tr>
<tr>
<td>Dividend</td>
<td>-</td>
<td>6.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

## Zimplats underground reserves

- Recently converted 31 Moz to reserve at Ngezi (284 mt)
- Restricted to “easy to mine” areas of:
  - Geotechnically competent
  - Less than 12 degrees
  - Greater than 1.6m width
Reserve statement – Zimplats

### Previous Ore Reserves

<table>
<thead>
<tr>
<th>Ore Reserves</th>
<th>Tonnes millions</th>
<th>Platinum g/t</th>
<th>Palladium g/t</th>
<th>4E g/t</th>
<th>4E mozs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proved</td>
<td>14.1</td>
<td>1.62</td>
<td>1.32</td>
<td>3.31</td>
<td>1.50</td>
</tr>
<tr>
<td>Probable</td>
<td>14.8</td>
<td>1.64</td>
<td>1.33</td>
<td>3.33</td>
<td>1.59</td>
</tr>
<tr>
<td>Total</td>
<td>28.9</td>
<td>1.63</td>
<td>1.33</td>
<td>3.32</td>
<td>3.08</td>
</tr>
</tbody>
</table>

### New Ore Reserves

<table>
<thead>
<tr>
<th>Ore Reserves</th>
<th>Tonnes millions</th>
<th>Platinum g/t</th>
<th>Palladium g/t</th>
<th>4E g/t</th>
<th>4E mozs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proved</td>
<td>30.8</td>
<td>1.58</td>
<td>1.33</td>
<td>3.27</td>
<td>3.24</td>
</tr>
<tr>
<td>Probable</td>
<td>282.4</td>
<td>1.66</td>
<td>1.36</td>
<td>3.38</td>
<td>30.73</td>
</tr>
<tr>
<td>Total</td>
<td>313.2</td>
<td>1.65</td>
<td>1.36</td>
<td>3.37</td>
<td>33.97</td>
</tr>
</tbody>
</table>

Zimplats expansion project

- Scoping study on exploiting these reserves completed Jan 2003. Envisages incremental growth to approx 10 mtpa (400,000 oz Pt).
- Bankable study for Phase 1 of this growth due for completion end of 2003.
- Project commencement after following complete:
  - Bankable study approved and third party review complete.
  - Acceptable period of steady state operation in trial mine.
Zimplats – phase 1 growth physicals

- Combined operation with open cut producing 4.4 mtpa.
- 3 mtpa concentrator at Ngezi.
- SMC concentrator FAG milling 1.4 mtpa.
- Current smelter upgraded to 19 MW.
- Possible BMR re-opening.
- Produces +200,000 Pt ozs and +400,000 4E ozs
- First metal 18 months after project commencement.