







THE IRS MODEL

The IRS model uses Impala's excess smelting and refining capacity.

Typical IRS products include:

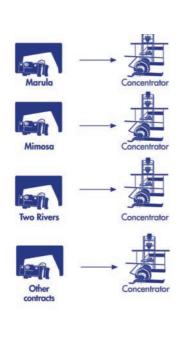
- flotation concentrates from Marula,
 Mimosa, Two Rivers and other small mining contracts;
- furnace matte from Zimplats; and
- selected base metal residues and other secondary materials.

IRS enters into either metal purchase agreements or toll refining agreements, or a combination of the two.

In metal purchase agreements a percentage of the contained value (allowing for Impala's cost and a profit margin) is paid after an agreed processing period. In toll refining agreements, IRS charges the client a smelting, refining and handling fee and returns the metal to the client after an agreed processing period. Impala, in turn, charges IRS a market-related fee for its expertise and the use of its processing facilities.

With the exception of mine-to-market operations, IRS has little or no control over volumes received from either third party or toll treatment contracts.

METAL SOURCES





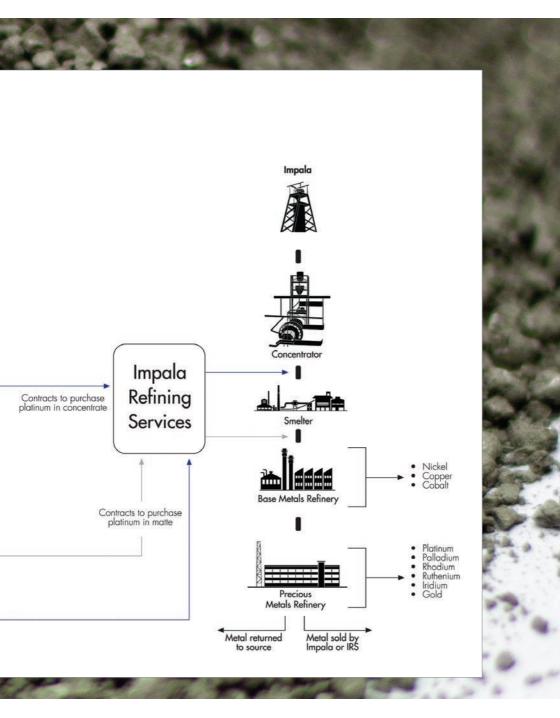




Concentrator



Contracts to toll refine



OUTLOOK

Access to spare smelting and refining capacity from Impala positions IRS well to process additional material from new customers. Opportunities in this regard are continuously evaluated and persued if value-accretive for Implats.

| IRS Platinum Production 000 oz | FY2016 | FY2015 | FY2014 | FY2013 | FY2012 |
|---|--------|--------|--------|--------|--------|
| Zimplats | 251 | 216 | 226 | 180 | 185 |
| Marula | 77 | 71 | 77 | 71 | 63 |
| Mimosa | 117 | 113 | 103 | 97 | 100 |
| Two Rivers | 183 | 168 | 168 | 157 | 145 |
| Mine-to-market operations | 629 | 568 | 575 | 505 | 493 |
| Third-party purchases, recycling and toll | 183 | 133 | 192 | 368 | 205 |
| Total | 812 | 701 | 767 | 873 | 698 |



IMPALA REFINING SERVICES - KEY STATISTICS

| IMPALA REFINING SERVICES - | | E)/00/46 | EV (00.4 E | E)/004 | ED/0045 | E10046 | | | | |
|---|-----------|----------|------------|----------|----------|----------|--|--|--|--|
| KEY STATISTICS | | FY2016 | FY2015 | FY2014 | FY2013 | FY2012 | | | | |
| Refined production | | | | | | | | | | |
| Platinum | (000 oz) | 811.5 | 700.7 | 767.0 | 872.3 | 697.5 | | | | |
| Palladium | (000 oz) | 585.8 | 511.3 | 513.0 | 669.8 | 541.1 | | | | |
| Rhodium | (000 oz) | 104.0 | 94.7 | 107.3 | 118.4 | 111.1 | | | | |
| Nickel | (t) | 13 670 | 12 320 | 11 939 | 11 983 | 10 582 | | | | |
| PGM refined production | (000 oz) | 1 687.9 | 1 480.8 | 1 604.5 | 1 854.9 | 1 527.9 | | | | |
| Metal returned | | | | | | | | | | |
| Platinum | ('000oz) | 0.1 | - | 94.5 | 188.6 | 120.7 | | | | |
| Palladium | ('000oz) | 1.5 | 0.5 | 28.2 | 190.0 | 147.5 | | | | |
| Rhodium | ('000oz) | - | - | 9.0 | 35.5 | 24.8 | | | | |
| Nickel | ('000t) | 3 509 | 3 344 | 3 186 | 3 193 | 3 093 | | | | |
| Cost | | | | | | | | | | |
| Cost of sales | (Rm) | (19 053) | (17 303) | (16 794) | (13 287) | (12 730) | | | | |
| Metals purchased | (Rm) | (18 989) | (15 840) | (16 665) | (12 926) | (12 147) | | | | |
| Smelting | (Rm) | (419) | (327) | (308) | (297) | (225) | | | | |
| Refining and marketing | (Rm) | (723) | (471) | (450) | (399) | (378) | | | | |
| Corporate cost | (Rm) | (74) | (34) | (31) | (37) | (37) | | | | |
| Increase/(decrease) in metal inventories | (Rm) | 1 152 | (631) | 660 | 372 | 57 | | | | |
| Financial ratios | | | | | | | | | | |
| Gross margin | (%) | 7.2 | 8.1 | 9.2 | 9.6 | 9.5 | | | | |
| Total sales volumes | | | | | | | | | | |
| Platinum | ('000oz) | 817.2 | 696.4 | 707.1 | 629.8 | 638.2 | | | | |
| Palladium | ('000oz) | 575.3 | 493.9 | 527.1 | 460.5 | 468.3 | | | | |
| Rhodium | ('000oz) | 104.7 | 90.6 | 94.4 | 82.5 | 94.1 | | | | |
| Nickel | (t) | 10 377 | 8 756 | 9 195 | 8 095 | 8 209 | | | | |
| Prices achieved | | | | | | | | | | |
| Platinum | (US\$/oz) | 960 | 1 278 | 1 427 | 1 532 | 1 634 | | | | |
| Palladium | (US\$/oz) | 591 | 807 | 742 | 659 | 689 | | | | |
| Rhodium | (US\$/oz) | 708 | 1 145 | 982 | 1 099 | 1 549 | | | | |
| Nickel | (US\$/t) | 9 561 | 15 884 | 14 702 | 16 314 | 19 723 | | | | |
| Exchange rate achieved | (R/US\$) | 14.23 | 11.26 | 10.30 | 8.79 | 7.65 | | | | |

