



AllanHochreiter



Comment on the Johnson Matthey Report 2008

Long Term Prospects for PGM Prices

Renê Hochreiter
May 2008

The JM Platinum 2008 report

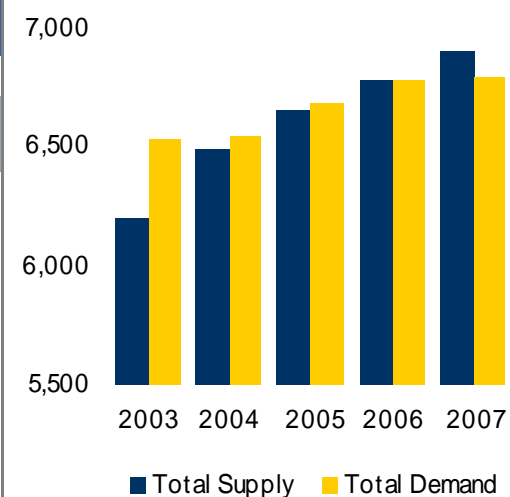
- The most positive I have ever seen JM
- Platinum price forecast \$1775 to \$2500/oz – may be a little light
- Palladium price \$400 to \$575/oz – could go higher
- Rhodium – positive outlook
- Platinum market in supply shortage of 480 000 oz
- Supply shortage due to South African problems

The JM Platinum 2007 report summary

- **JM reported a 480 000 oz supply shortfall**
- **Autocatalyst demand for platinum increased by 320 000 ozs on last year**
- **Platinum jewellery demand in China is up despite high prices**
- **Weak supply from South Africa in 2008 is expected**
- **Booming retail sales of electronic goods – Pt demand increases due to memory discs and flat panel display glass**
- **Palladium surplus second highest in 10 years - large stock sales**
- **Palladium demand down in China**
- **Rhodium market to be tight in 2008**

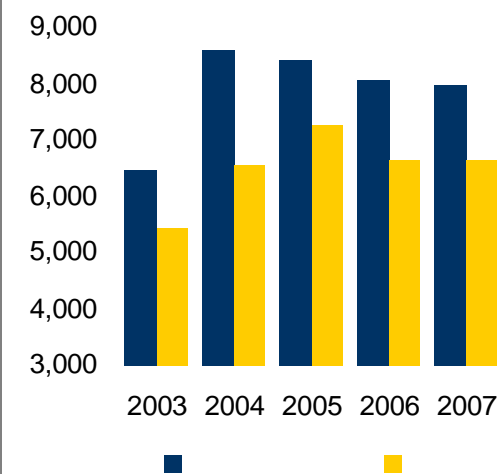
Platinum Supply and Demand

'000 oz	2003	2004	2005	2006	2007
Total Supply	6,200	6,490	6,640	6,830	6,550
<i>of which:</i> South Africa	4,630	5,010	5,115	5,295	5,035
Russia	1,050	845	890	920	910
North America	295	385	365	345	325
Others	225	250	280	270	280
Total Demand	6,530	6,540	6,695	6,475	7,030
<i>of which:</i> Autocatalyst: gross	3,270	3,490	3,395	3,905	4,225
recovery	(645)	(690)	(770)	(860)	-890
Jewellery	2,510	2,160	1,965	1,640	1,585
Movement in Stocks	(330)	(50)	(55)	355	(480)



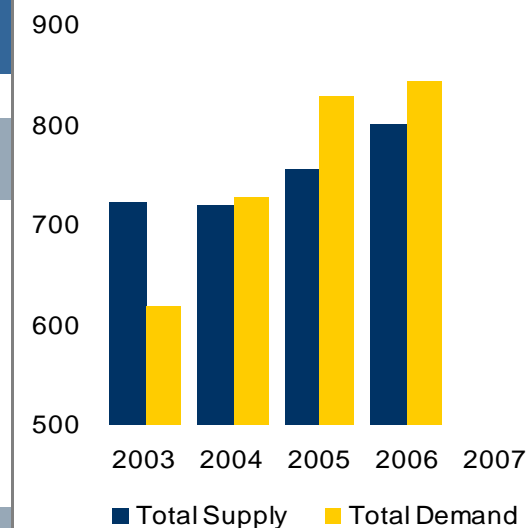
Palladium Supply and Demand

'000 oz	2003	2004	2005	2006	2007
Total Supply	6,450	8,580	8,405	7,095	8,585
<i>of which:</i> South Africa	2,320	2,480	2,605	2,775	2,770
Russia	2,950	4,800	4,620	3,920	4,540
North America	935	1,035	910	985	990
Total Demand	5,430	6,560	7,355	6,605	6,835
<i>of which:</i> Autocatalyst:					
gross	3,450	3,790	3,865	4,015	4,450
recovery	(410)	(530)	(625)	(805)	(1000)
Dental	825	850	815	620	635
Electronics	900	920	970	1,205	1,285
Jewellery	260	930	1,430	995	740
Movement in Stocks	1,020	2,020	1,050	1,345	1,750



Rhodium Supply and Demand

'000 oz	2003	2004	2005	2006	2007
Total Supply	724	720	754	802	822
<i>of which:</i> South Africa	544	587	627	666	696
Russia	140	100	90	100	90
North America	26	17	20	17	17
Total Demand	620	729	827	838	856
<i>of which:</i> Autocatalyst: gross	660	758	829	863	879
recovery	(124)	(140)	(137)	(171)	(183)
Movement in Stocks	104	(9)	(73)	(36)	(34)



The JM Platinum 2008 Report

- A far better presentation of the market, more logical, explaining the high Pt and Rh prices

Pt: Outlook for autocats strong, catalysed sub-filters over half of all new cars sold in 2007, Supply disruptions in SA likely, **and the market is to move MORE into deficit**

Pd: Outlook: demand slightly up but large Russian sales create the second largest overhang in 10 years, but the palladium price will be pulled up by Pt and Au

Rh: At last some reference to the rhodium price, because the price is at historic highs, but still no forecast

The JM Platinum 2008 Report

- Autocat demand will again be strong in 2008, despite thrifting, with half of all diesels now sold having Particulate Filters (which use Pt)
- JM believe that there are NO substitutes for platinum in catalysts – alternatives fall down on sulphur poisoning and sintering at high temps
- Silver catalysts are no good – off road only (tiny market), easily poisoned and they sinter at high temps.
- To balance the Platinum market, jewellery demand is going to have to decrease by 33% - it's NOT going to happen
- Rhodium market will go higher, there are NO stocks, NOx legislation becoming more stringent
- Recovery of secondary metal (Pt and Rh) suddenly has SLOWED

The JM Platinum 2008 Report

- JM have the good market intelligence in some sectors.
- High platinum and rhodium prices indicate big market shortages
- JM have indicated good outlook for platinum consumption
- Pd outlook flat
- Very tight rhodium market, ruthenium a small market

Taking cognisance of this, my forecasts are as follows:

Platinum Demand/Supply Outlook

(000 oz)		2007	2008	2010	2015	2020
Demand Total		7,030	7,250	9,736	11,964	12,879
<i>of which:</i>	Autocats	4,225	4,600	5,063	6,087	7,052
	Jewellery	1,585	1,600	3,200	4,350	4,400
Supply Total		6,550	6,100	9,015	10,002	10,009
<i>of which:</i>	AngloPlat	2,400	2,000	3,288	4,040	3,930
	Implats	1,600	1,700	2,153	2,127	2,240
Supply shortfall/surplus		-480	-1,150	-721	-1,962	-2,870

Palladium Demand/Supply Outlook

(000 oz)	2007	2008	2010	2015	2020
Demand Total	6,835	7,050	8,501	8,300	8,000
<i>of which:</i> Autocats	4,450	4,800	5,500	5,500	5,500
Jewellery	740	800	2,100	2,500	2,500
Secondary Recovery	-1000	-1200	-1,600	-2,200	-2,500
Supply Total	8,585	8,350	8,427	8,380	8,370
<i>of which:</i> South Africa	2,770	2,020	3,427	3,880	3,870
Russia	4,540	4,000	3,800	3,300	3,305
Supply shortfall /surplus	1,750	1,300	-74	80	370

Rhodium Demand/Supply Outlook

	2007	2008	2010	2015	2020
Demand Total	856	920	1,122	1,332	1,549
<i>of which:</i> Autocats	879	900	1,138	1,368	1,585
Re cycling	-183	-196	-210	-368	-503
Supply Total	822	790	904	1,008	1,008
<i>of which:</i> South Africa	696	664	759	863	863
Supply shortfall/surplus	-34	-130	-218	-324	-541

Price Outlook

- **Dependent mainly on the Rand/Dollar exchange rate, but also demand and supply**
- **With platinum at \$2150/oz, there are serious supply deficits emerging**
- **At least 90% of world resources are in South Africa, 77% of world production**
- **Currently the basket price R530 000/kg**
- **R220 000/kg average basket price is required to keep Platinum supplied to the world, escalating at 10% a year**
- **If the Rand weakens, the platinum price will weaken, this is evidenced almost daily**

Price Outlook - Supply

- **Supply from South Africa in question: Implats, Lonmin, having production difficulties**
- **Producers have stopped talking up production, it's not happening.**
- **Hence the high platinum and rhodium prices**
- **Poor management is mainly to blame**
- **Anglo Platinum is 400 000 ounces Pt behind forecast in 2008**
- **Implats is having grade problems**
- **Lonmin still has face length availability problems**
- **At \$2150/oz, all new projects should be on stream, but they are not**

The Question of Alternatives

- **There are NO alternatives – get over it**

Long Term Prospects

Producers

Most undervalued ranking:

- Aquarius
- Anglo Platinum
- Northam
- Implats
- Eastplats

Consolidators could be:

- Northam/Mvela
- Royal Bafokeng
- Anooraq

Explorers

Most undervalued ranking:

- Nkwe
- AIM Resources
- Sylvania
- Aoonraq
- Ridge

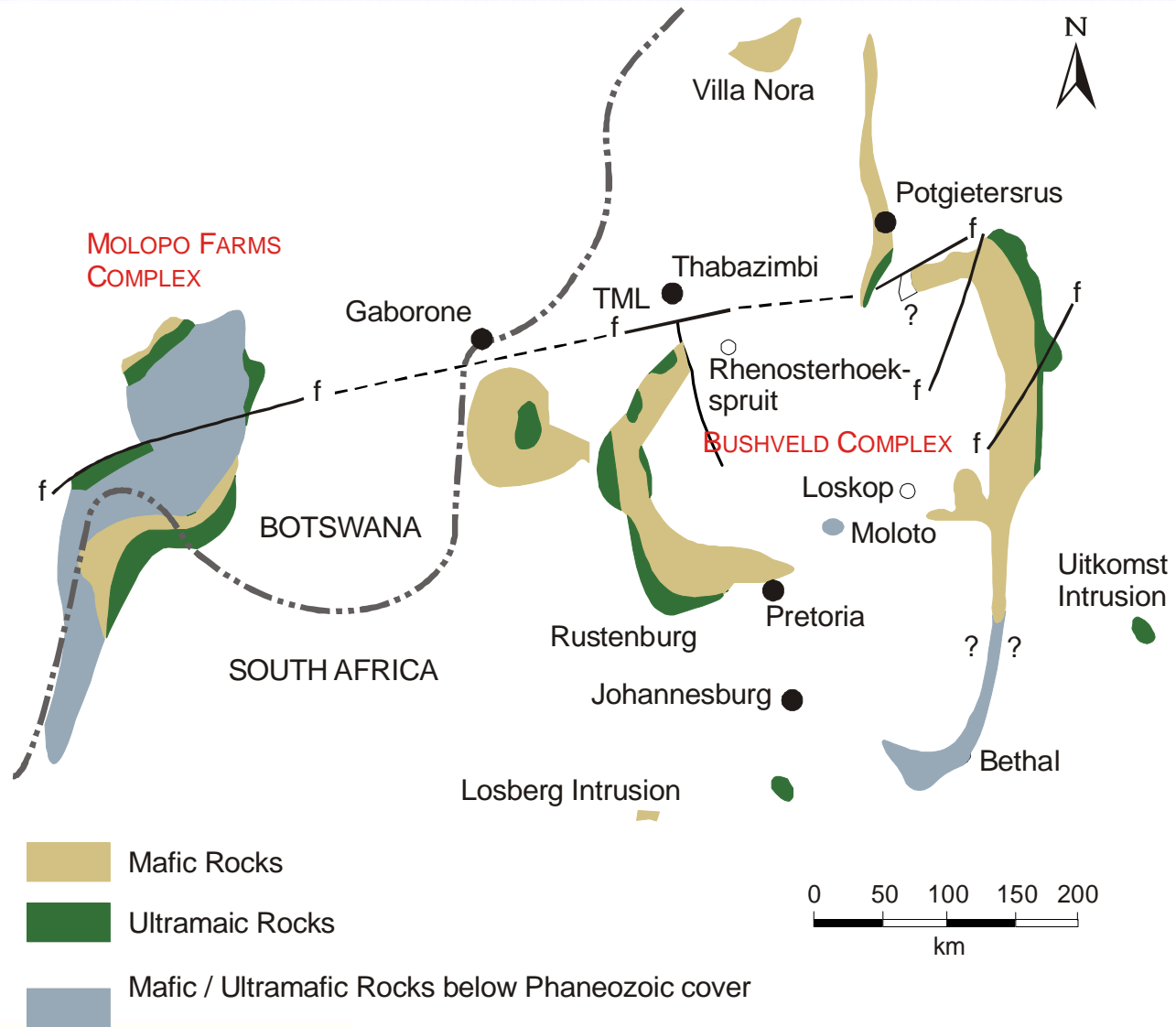
Next Potential Buy Out / Merger

- Nkwe
- Sylvania
- Ridge
- Wesizwe/ PTM

Conclusion – Stay Long in Platinum

- The outlook for Platinum and Rhodium remains exceptionally good
- Supply continues to struggle, Demand continues to mount
- Alternatives are unlikely to be a threat
- Biggest risk facing Investors in PGMs is a global recession involving the US, Europe and China/SE Asia causing a severe slump in the auto industry – unlikely
- **The first ever 1m ounce shortfall in platinum could happen in 2008**
- Only South African producers can potentially reduce this shortfall.
- Expect massive corporate activity in the Explorers
- **Prices should remain high: Pt +\$2400, Pd +\$500, Rh +\$12 000/oz**

Resources



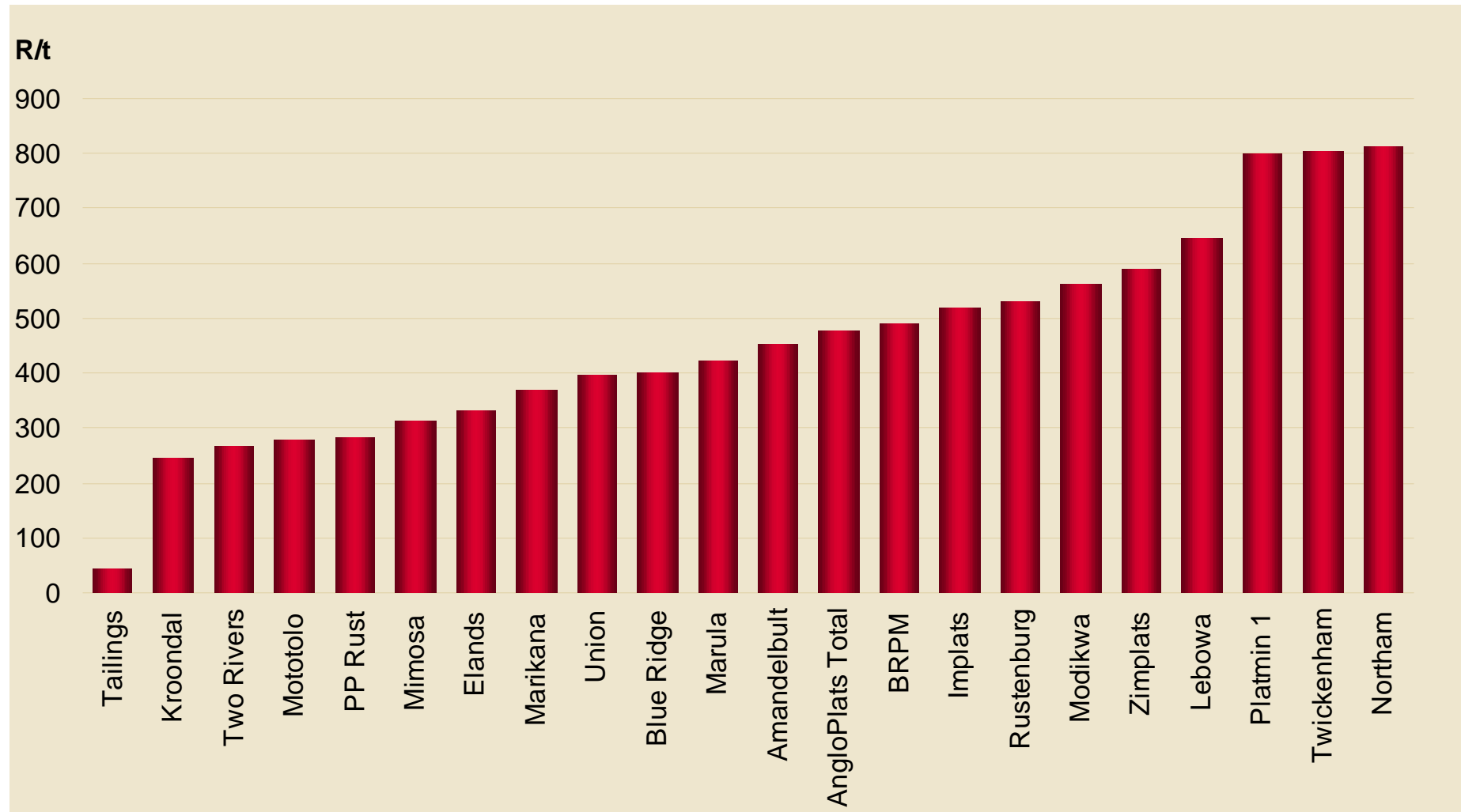
Resources Summary - Producers

Producers	Resources Mt	Grade 4 Element g/t	Ounces millions 4E pgm	Market Capitalisation per Ounce - US\$ (ZAR/\$ 7.75)
Anglo Platinum	6,288	4.9	821	43
Implats (*300m oz in Zim)	3,392	4.8	*458	48
Aquarius	98	4.2	13	53
Northam	98	6.1	19	39
Lonmin	1,227	4.5	178	55
Barplats	448	4.3	61	35
Others (Explorers)	1,243	3.5	298	26
TOTAL Bushveld Complex	12,902		1,838	

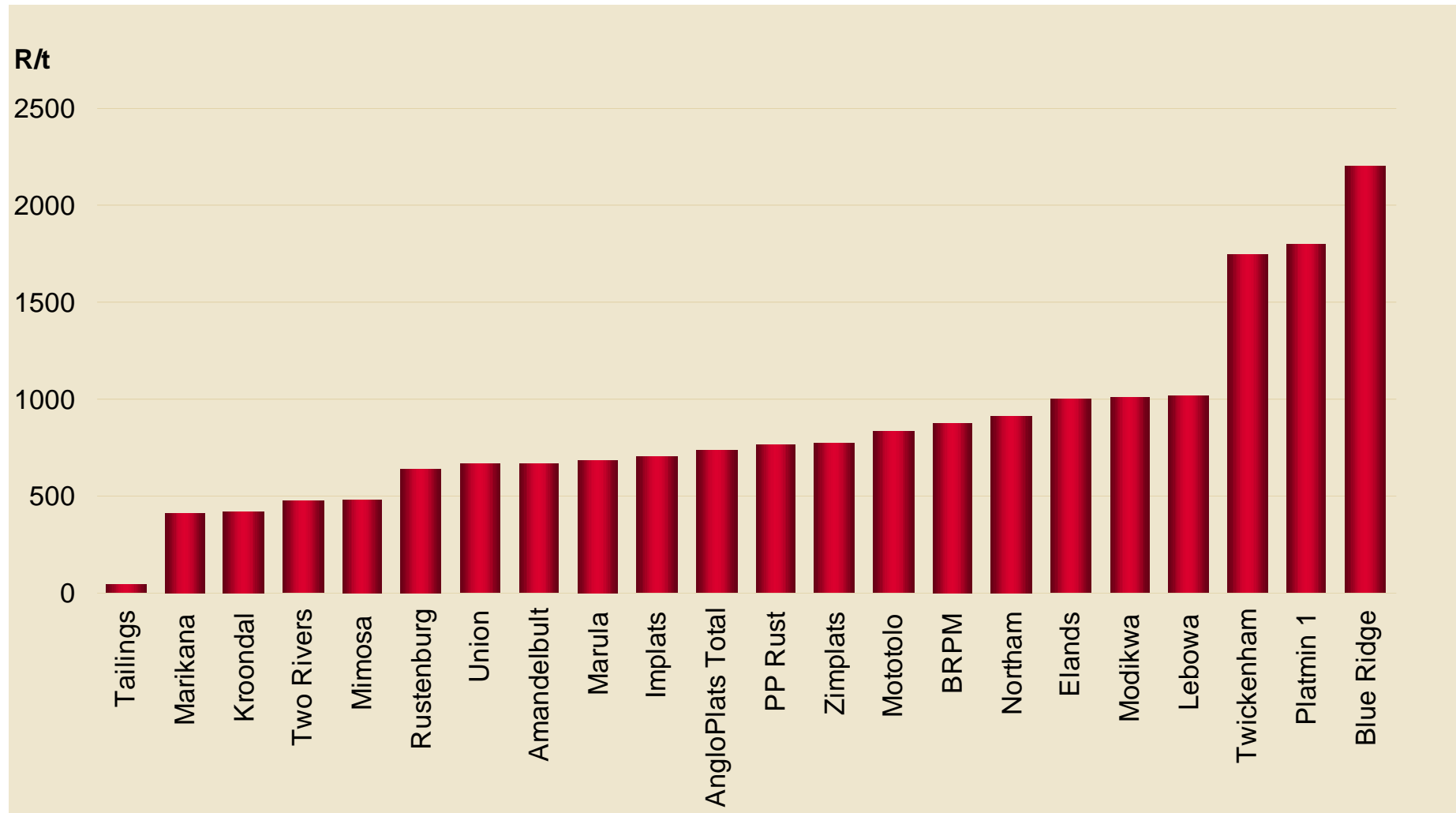
Resources Summary - Explorers

Producers	Grade 4 Element g/t	Ounces millions 4E pgm	Market Capitalisation per Ounce - US\$ (ZAR/\$ 7.00)
Afplats	4.5	54	8
Ridge	2.5	39	5
Eastern Plats	3.8	37	35
Anooraq	3.8	32	10
AfriOre	3.8	26	17
Elands	4.5	23	45
Jubilee	3.8	23	8
Platmin	4.2	17	40
Platinum Australia	3.6	16	17
Nkwe	3.8	15	5
Wesizwe	5.5	11	79
PTM Platinum Group Metals	5.5	5	46
TOTAL Bushveld Complex		298	26

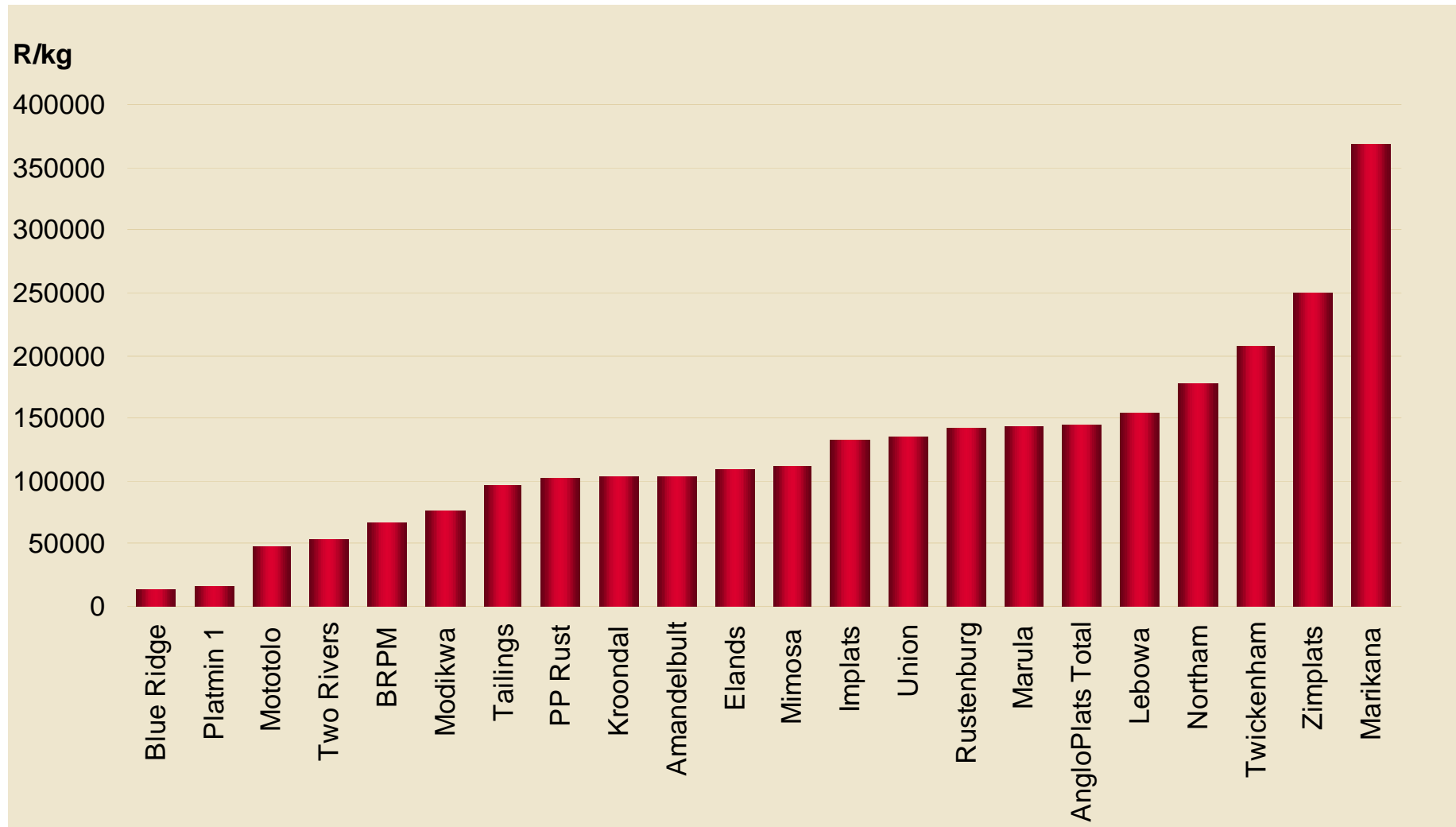
R/t Cash Cost – Recent price R2200/t



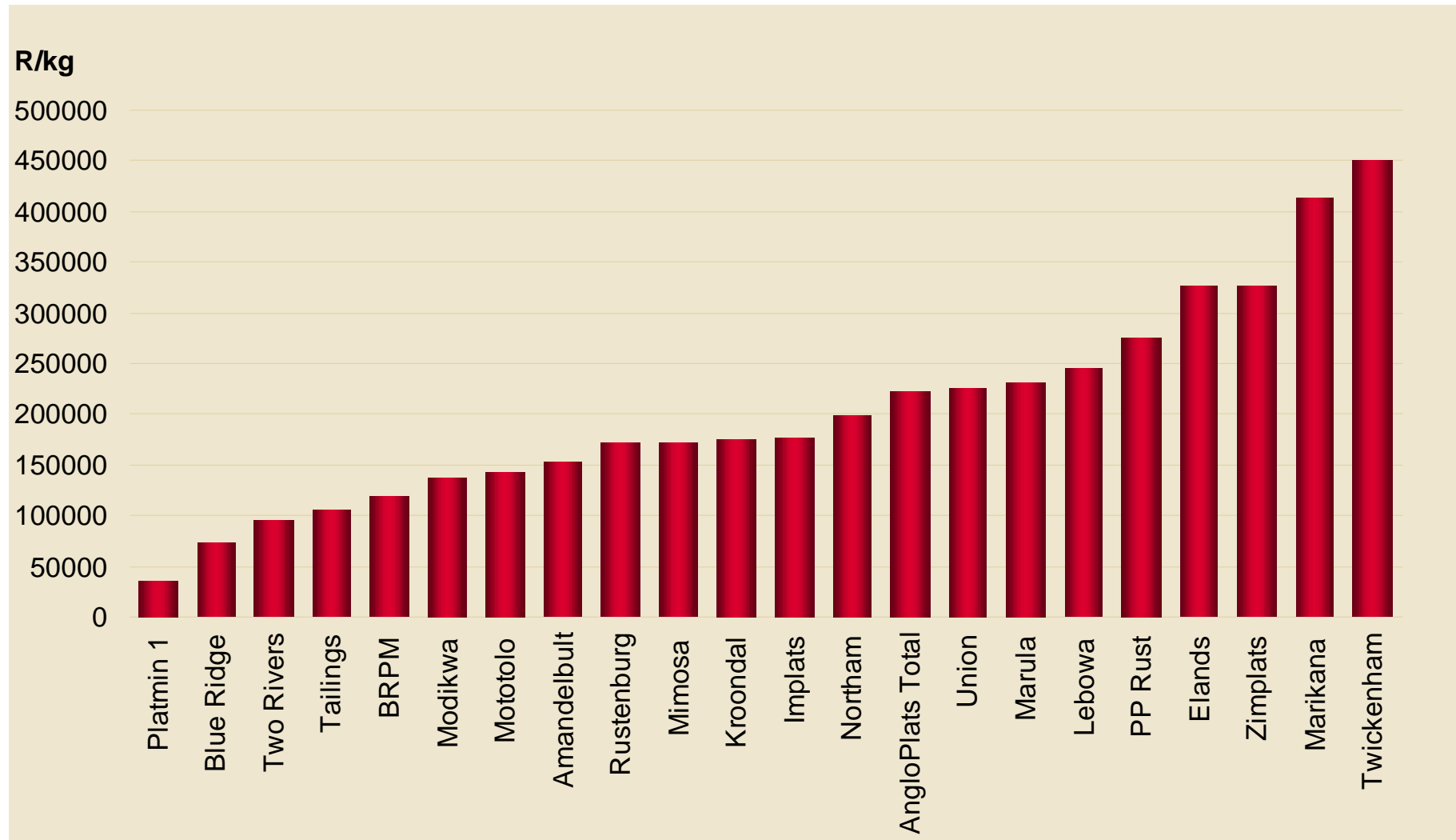
R/t Cost Including Capex - Recent price R2200/t



R/kg Cash Cost – Recent price R550 000/kg



R/kg Cost Including Capex – Recent price R550 000/kg





AllanHochreiter



Thank you – Questions?

**Allan Hochreiter (Pty) Ltd
Corporate Finance and Advisory**

René Hochreiter

rene@allanhochreiter.co.za

www.allanhochreiter.co.za

+27 11 325 5457 (office)

+27 83 633 6677 (mobile)