

**5 Hollard Street
Johannesburg 2001**

**PO Box 61809
Marshalltown 2107**

Tel: 011 498 7100

Fax: 011 498 7320

Email: info@chamberofmines.org.za

www.chamberofmines.org.za

CONTENTS

INDUSTRY SNAPSHOT	2	Manganese production and sales	18	Cash operating cost data, taxation, capex and dividends	29
OVERVIEW OF THE SA MINING INDUSTRY	3	COAL INDUSTRY DATA		Average unit cash operating costs and profits	30
General exploration expenditures by region	4	Annual South African coal production, sales and exports	19	PGM DATA	
Key mineral industry statistics for SA	6	Analysis of coal sold by member coal producers	20	SA platinum and PGM production	31
SA's role in world mineral reserves, production & exports	8	Employment on coal mines	22	SA share of pgm reserves and production & employment and earnings on sa pgm mines, 2011	32
Provincial overview	9	DIAMOND DATA		Platinum supply and demand	33
GENERAL MINING INDUSTRY DATA		South African diamond production and sales	22	Annual average platinum price, 2011	34
Safety: fatalities and fatality frequency rates	10	Estimated production by country	23	Palladium supply and demand	35
Employment and remuneration in SA mining industry	12	GOLD INDUSTRY DATA		Rhodium supply and demand	36
Income and expenditure of all SA mining	13	Global production and SA's contribution	25	SILVER INDUSTRY DATA	
AGGREGATE AND SAND		South African gold output and sales	26	Annual SA silver production and sales	38
Total sales, employment and total earnings	14	Average grade of Chamber member gold producers, 2002 – 2011	27	URANIUM INDUSTRIAL DATA	
BASE MINERALS		Average number of employees on Chamber gold mines, 2002 – 2011	27	Uranium output, 1970 – 2011	40
Chromite production and sales	15	2011 QUARTERLY SUMMARY OF PRINCIPAL OPERATING RESULTS OF CHAMBER GOLD PRODUCERS		Cumulative uranium output	41
Iron ore and copper production and sales	16	Gold production, average grades, revenue and profit data	28		

THE SOUTH AFRICAN MINING SECTOR IN 2011

Contribution to investment and GDP

In 2011, the mining sector accounted for 8.8% of GDP directly on a nominal basis. If the indirect multiplier and induced effects of mining are included then the overall contribution to GDP is closer to 18%. Real mining GDP of R99.4billion in 2011 was still smaller than peak mining GDP of R105.4billion achieved in 2007 just prior to the global financial crisis.

Mining sector real fixed investment, which rose strongly in 2007 and 2008 (up 31.3% and 27.5% respectively) was hard hit by the global financial crisis and domestic constraints, and consequently only grew by 8.1% in 2011. Not only did the financial crisis hit prices but domestic constraints including regulatory uncertainty, infrastructure constraints and other issues affected investment by mining companies.

However, mining still accounted for 20% of private sector investment and 12.3% of total investment in the economy in 2011. The mining sector continued to be a key component of the Johannesburg Securities Exchange (JSE) and accounted for 29% or R1.4trillion of the All-share index at end 2011.

Total 2011 mining production contracted by 0.2% with platinum group metal (pgm) production up 1.6%, coal contracted by 0.2%, iron ore production decreased 1.4%, manganese production grew by 21% and diamond production contracting by 21%. Gold production fell by 4.2%, a much slower rate of decline versus the 4.9% decline in production recorded in 2010.

SA mineral sales and exports

South African mineral sales rose by 23% to R370.6billion in 2011 (Table 1). This means that the value of mineral sales in nominal terms has exceeded the pre-crisis levels.

The improvement in mineral sales in 2011 was driven by the 13.6% increase in the value of pgm sales to R83.9billion, the 22.3% growth in coal sales to R87.8billion, the 30% rise in gold sales to R68.9billion, the 44% rise in iron ore sales to R62.7billion, and the 30 growth% increase in chrome ore sales to R8.6billion. In 2011, manganese sales contracted by 7% to R9.9billion, from R10.7billion in the previous year. Gold, PGMs, Iron ore and coal accounted for 82% of South Africa's total mineral sales in 2011.

Total primary mineral sales exports increased by 25.8% to a total of R282billion in 2011. This accounted for 38% of South Africa's total merchandise exports.

Contribution of SA mining over the past decade

In the past decade, the mining sector has contributed just over R1.9-trillion to both the country's GDP and export earnings, in real money terms (Figure 1).

SOUTH AFRICAN MINING INDUSTRY OVERVIEW 2011

TABLE 1: COMMODITY SUMMARY

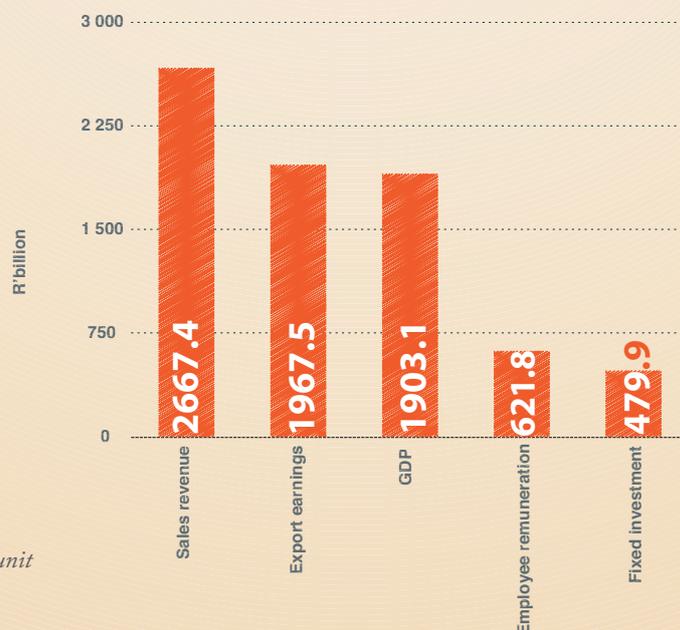
COMMODITY	JANUARY TO DECEMBER 2011			
	Local sales R1000	Total sales R1000	Total exports R1000	% Exports Total sales
Gold	3 633 111	68 891 413	65 258 302	94.7
Platinum group metals	10 619 219	83 853 266	73 234 047	87.3
Silver	80 001	611 933	531 932	86.9
Sub total	14 332 332	153 356 612	139 024 281	
Chrome	5 382 328	8 619 547	3 237 219	37.6
Copper(content)	3 937 749	5 432 849	1 495 100	27.5
Iron ore	4 207 746	62 651 894	58 444 148	93.3
Lead concentrate	0	762 929	762 929	100.0
Manganese	1 325 214	9 895 067	8 569 854	86.6
Nickel	2 326 440	6 402 191	4 075 750	63.7
Other metallic	180 205	527 812	347 606	65.9
Coal	37 285 726	87 834 404	50 548 678	57.5
Feldspar	61 031	61 031	0	0.0
Limestone & lime	2 591 078	2 605 415	14 337	0.6
Other non-metallic	8 598 361	9 100 043	501 682	5.5
Miscellaneous *	8 398 637	23 389 986	14 991 350	64.1
Sub total	74 294 514	217 283 167	142 988 653	65.8
GRAND TOTAL	88 626 846	370 639 780	282 012 934	

*Includes strategic & minor commodities otherwise not enumerated.

Note; totals might not add due to rounding.

Source : Minerals Bureau, Department of Mineral Resources

FIGURE 1: THE CONTRIBUTION OF MINING TO SA OVER THE PAST DECADE EXPRESSED IN 2011 REAL RAND TERMS



Source: CoM statistical unit

GLOBAL EXPLORATION EXPENDITURE

Global exploration expenditures recovered sharply after bottoming in early 2009. According to the Metals Economics Group (MEG), the industry's aggregate exploration total jumped 44% in 2010 and a further 50% in 2011, more than doubling from 2009's recent low of US\$8.4 billion to a high of \$18.2 billion in 2011.

Exploration allocations for all regions increased to record highs in 2011, led by the largest dollar increases in Latin America and Africa (Figure 2). Latin America remained the most popular exploration destination, attracting 25% of global spending in 2011, with the share of allocations targeting gold, while base metals slipped to its smallest share in more than a decade.

Canada has been the industry's second favorite region for the past decade, and continued to take advantage of its large pool of junior explorers and exploration-focused tax incentives to attract 18% of the global total in 2011. Gold remained the leading target in the country, attracting more than two-and-a-half times the base metals budget.

Eurasian countries make up the third largest region, led by allocations for China and Russia, and by four other countries—Kazakhstan, Mongolia, Finland, and Turkey—that each attracted aggregate budgets of more than \$100 million in 2011. Although gold remained the region's top target in 2011, base metals allocations increased at a faster pace due to rapidly growing copper and nickel budgets for Kazakhstan, Russia, China, and Poland.

Africa saw the biggest year-on-year percentage increase of all regions in 2011, claiming 15% of the world total and widening its lead over fifth-place Australia. After slipping to second place in 2010 behind the Democratic Republic of Congo, South Africa regained the top spot for planned spending in Africa in 2011. Burkina Faso rose from twelfth in 2009 to third in 2011, leading the rapid rise in gold exploration in West Africa in recent years. The increased efforts in West Africa translated into gold receiving more than half the African exploration total in each of the last two years; in contrast, since accounting for about a third of African budgets in 2004, diamond allocations dropped to an all-time low of 6% in 2011, primarily due to waning diamond spending in Sub-Saharan Africa, as many companies focus more in countries such as Russia and India.

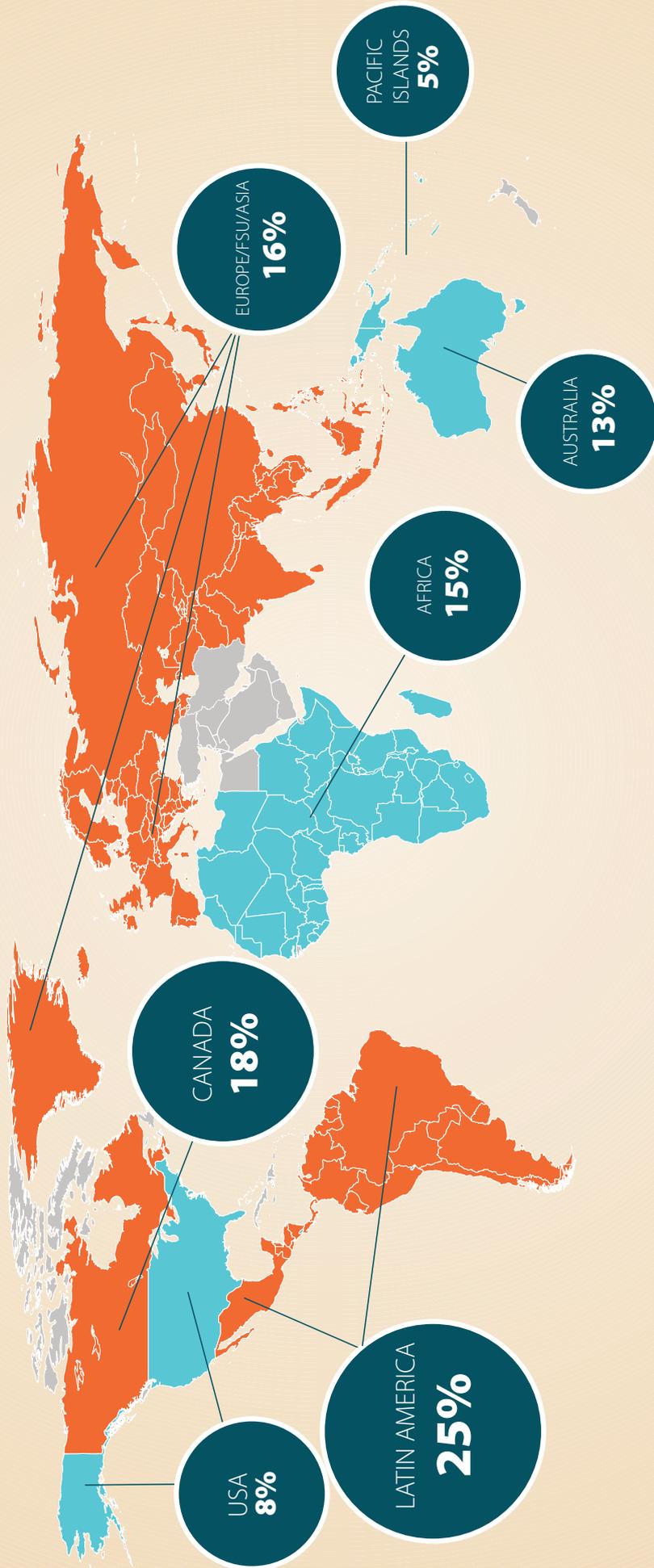
Exploration spending in Australia accounted for 13% of the total, despite mining reform at both the national and state levels dominating the country's headlines for much of the year. Gold and base metals accounted for the bulk of Australia's 2011 exploration total, with allocations for diamonds, uranium, platinum group metals, and other targets trailing by wide margins.

Gold and copper exploration in the United States kept it in sixth place, with 8% of total exploration expenditure. Although gold continued to attract more than half of all spending in the United States, base metals reached its second-highest percentage share in the past decade, based in part on increased copper exploration in Arizona and Utah.

Among the Pacific Islands, allocations for Papua New Guinea, Indonesia, and the Philippines accounted for the bulk of the region's 5% of the world exploration total, with budgets fairly evenly split between gold and base metals. Despite the region's high prospectivity for gold, copper, and nickel, investors continued to be wary of the political and social unrest, uncertainty of tenure, and periodic anti-mining violence that have plagued the region for years. As a result, we have not seen a lot of new entrants into these countries in recent years, with most exploration conducted by larger producers in and around their existing assets.

WORLDWIDE EXPLORATION BUDGETS BY REGION, 2011

FIGURE 2: WORLDWIDE NONFERROUS EXPLORATION BUDGETS BY REGION, 2011



DESCRIPTION	UNITS OF MEASURE	2002	2003	2004
GROSS DOMESTIC PRODUCT				
Direct contribution of mining to GDP	R'millions nominal terms	92 730	85 770	91 198
Direct contribution of mining to GDP (REAL MINING GDP)	R'millions constant 2005 prices	99 960	103 355	104 915
Direct contribution of mining to GDP	R'millions 2011 money terms	149 920	130 977	137 596
Mining GDP growth rate	% YoY	1.0	3.4	1.5
Direct contribution of mining to GDP	US\$ equivalent	8 818	11 338	14 139
South African GDP	R'millions nominal terms	1 171 086	1 272 537	1 415 273
South African GDP	R'millions constant 2005 prices	1 386 435	1 427 322	1 492 330
Mining's contribution as % of total GDP nominal terms	%	7.9	6.7	6.4
Mining's contribution as % of total GDP real terms	%	7.2	7.2	7.0
FIXED INVESTMENT				
Direct contribution of mining to fixed investment (GFCF)	R'millions nominal terms	19 802	21 706	17 917
Direct contribution of mining to fixed investment (GFCF)	R'millions constant 2005 prices	22 354	23 461	18 950
Direct contribution of mining to fixed investment (GFCF)	R'millions 2011 money terms	32 015	33 147	27 033
Total private sector fixed investment (private GFCF)	R'millions nominal terms	126 122	142 386	165 866
Total SA fixed investment (GFCF)	R'millions nominal terms	172 151	196 999	226 180
Mining fixed investment growth rate	% YoY	13.6	5.0	-19.2
Direct contribution to fixed investment (GFCF)	US\$ equivalent	1 883	2 869	2 778
Mining's contribution to private sector fixed investment (GFCF)	%	15.7	15.2	10.8
Minings contribution as % of total investment	%	11.5	11.0	7.9
SALES AND EXPORTS				
Total primary mineral sales	R'millions nominal terms	139 452	117 759	125 307
Total primary mineral sales	US\$ equivalent	13 260	15 567	19 428
Total primary mineral sales	R'millions 2011 money terms	225 458	179 827	189 058
Mining industry primary exports	R'millions nominal terms	109 363	86 911	89 673
Mining industry primary exports	US\$ equivalent	10 399	11 489	13 903
Mining industry primary exports	R'millions 2011 money terms	176 812	132 719	135 295
Total SA merchandise exports	R'millions nominal terms	333 251	291 434	310 525
Total SA exports (goods and services)	R'millions nominal terms	408 271	376 158	394 923
Primary mineral exports as % of total SA merchandise exports	%	32.8	29.8	28.9
Primary mineral exports as % of total SA exports	%	26.8	23.1	22.7
Mining export earnings per unit of GDP created	ratio	1.2	1.0	1.0
EMPLOYMENT				
Mining industry direct employment	numbers	415 988	435 628	448 909
Total private non-agricultural employment	numbers	4 026 326	4 852 159	5 095 234
Total SA formal non-agricultural employment	numbers	5 576 838	6 395 848	6 660 960
Mining as % of total private non-agricultural employment	%	10.3	9.0	8.8
Mining as % of total non-agricultural formal employment	%	7.5	6.8	6.7
Remuneration paid to employees in mining	R'millions current	26 228	30 827	33 656
Remuneration paid to employees in mining	R'millions 2011 money terms	42 405	47 076	50 779
Average annual remuneration per mineworker	Rand	63 051	70 765	74 973
EXCHANGE RATES				
Rand per US\$ exchange rate	R/US\$	10.52	7.56	6.45
Rand per Euro	R/Euro	9.90	8.53	8.01
Rand real effective exchange rate	Rand index	82.55	103.23	110.13
COMMODITY PRICES				
Gold price	Rand per kilogram	104 242	88 092	84 785
Gold price	Rand/kg real 2011 money terms	168 533	134 523	127 920
Gold price	US\$/oz	310	364	409
Platinum price	Rand per kg	182 476	168 268	175 382
Platinum price	Rand/kg real 2011 money terms	295 016	256 957	264 610
Platinum price	US\$/oz	540	692	846
Palladium price	Rand per kg	114 022	48 791	47 701
Palladium price	Rand/kg real 2011 money terms	184 344	74 507	71 970
Palladium price	US\$/oz	337	201	230
Rhodium price	Rand per kg	283 356	128 967	203 580
Rhodium price	US\$/oz	838	530	982
PGM production weighted average basket price	Rand per 3E kg produced	168 613	128 427	138 228
PGM production weighted average basket price	Rand/3E kg 2011 real money terms	272 603	196 117	208 553
PGM production weighted average basket price	US\$ per 3E oz produced	499	528	667
Coal price - average for local sales (received price)	R/tonne (FOR)	75	78	76
Coal price - average for export sales (received price)	R/tonne (FOB)	269	189	213

2005	2006	2007	2008	2009	2010	2011	Total / average past decade	yoy % chg
105 992	132 301	156 970	196 525	196 521	227 117	260 381	1 545 505	14.6
105 992	105 364	105 336	99 396	94 057	99 223	99 415	1 017 013	0.2
154 834	184 736	204 500	229 496	213 679	237 051	260 381	1 903 170	9.8
1.0	-0.6	-0.0	-5.3	-10.3	-6.4	-5.6	-2.1	
16 661	19 550	22 251	23 816	23 292	31 018	35 899	206 783	15.7
1 571 082	1 767 422	2 016 185	2 262 502	2 398 155	2 661 434	2 964 261	19 499 937	11.4
1 571 082	1 659 121	1 751 165	1 814 532	1 786 637	1 838 263	1 895 668	16 622 555	3.1
6.7	7.5	7.8	8.7	8.2	8.5	8.8	7.9	2.9
6.7	6.4	6.0	5.5	5.3	5.4	5.2	6.1	-2.8
16 743	27 715	40 206	58 645	64 140	62 431	68 800	398 105	10.2
16 743	24 904	32 705	41 690	44 124	41 709	45 097	311 737	8.1
24 458	38 699	52 380	68 484	69 740	65 162	68 800	479 917	5.6
196 267	236 118	281 869	343 399	323 467	324 189	348 802	2 488 485	7.6
263 754	324 083	406 257	520 717	521 707	520 434	559 888	3 712 170	7.6
-11.6	48.7	31.3	27.5	5.8	-5.5	8.1	10.37	
2 632	4 096	5 699	7 107	7 602	8 526	9 486	52 678	11.3
8.5	11.7	14.3	17.1	19.8	19.3	19.7	16.0	2.4
6.3	8.6	9.9	11.3	12.3	12.0	12.3	10.7	2.4
143 448	194 358	224 325	302 633	241 345	300 292	370 640	2 159 560	23.4
22 548	28 721	31 799	36 675	28 605	41 011	51 101	288 716	24.6
209 550	271 388	292 250	353 406	262 417	313 427	370 640	2 667 420	18.3
102 487	138 879	162 203	221 926	176 390	224 956	282 013	1 594 800	25.4
16 110	20 522	22 993	26 895	20 906	30 722	38 882	212 821	26.6
149 714	193 921	211 318	259 158	191 790	234 795	282 013	1 967 534	20.1
358 361	447 690	537 516	704 293	556 432	625 359	746 518	4 911 379	19.4
459 719	571 540	683 074	857 898	691 267	761 820	892 461	6 097 131	17.1
28.6	31.0	30.2	31.5	31.7	36.0	37.8	32.5	5.0
22.3	24.3	23.7	25.9	25.5	29.5	31.6	26.2	7.0
1.0	1.1	1.0	1.1	0.9	1.0	1.1	1.0	9.3
444 132	456 337	495 150	518 729	491 794	498 906	513 211	4 718 784	2.9
5 506 592	6 235 818	6 575 501	6 644 060	6 335 542	6 235 818	6 323 076	57 830 126	1.4
7 110 705	7 910 778	8 322 650	8 469 409	8 218 498	8 156 954	8 332 118	75 154 758	2.1
8.1	7.3	7.5	7.8	7.8	8.0	8.1	8.2	1.4
6.2	5.8	5.9	6.1	6.0	6.1	6.2	6.3	0.7
36 683	39 448	50 073	60 886	66 092	74 319	87 081	505 293	17.2
53 587	55 082	65 235	71 101	71 862	77 569	87 081	621 776	12.3
82 595	86 445	101 127	117 376	134 389	148 963	169 679	1 049 362	13.9
6.36	6.77	7.05	8.25	8.44	7.32	7.25	7.60	-0.9
7.91	8.52	9.66	12.05	11.70	9.71	10.08	9.61	3.8
112.50	108.88	105.05	94.09	101.41	113.85	110.89	104.26	-2.6
90 822	131 323	157 241	229 417	260 644	286 402	367 978	180 095	28.5
132 673	183 369	204 854	267 906	283 401	298 929	367 978	217 009	23.1
445	605	697	872	971	1 225	1 569	747	28.1
183 488	248 431	295 684	418 164	326 977	379 171	401 374	277 942	5.9
268 041	346 891	385 217	488 319	355 525	395 755	401 374	345 771	1.4
897	1 142	1 304	1 576	1 205	1 611	1 721	1 153	6.9
41 211	69 703	80 481	93 359	71 531	123 926	170 976	86 170	38.0
60 202	97 328	104 851	109 021	77 777	129 346	170 976	108 032	32.2
202	320	355	352	264	526	733	352	39.3
420 597	990 292	1 404 040	1 741 395	431 741	578 594	471 502	665 406	-18.5
2 056	4 552	6 191	6 564	1 592	2 458	2 022	2 778	-17.7
156 896	248 214	316 359	414 208	257 083	309 889	333 739	247 166	7.7
229 195	346 589	412 152	483 700	279 529	323 443	333 739	308 562	3.2
767	1 141	1 395	1 561	948	1 316	1 431	1 025	8.7
86	92	108	153	187	194	210	126	8.4
296	314	361	737	512	553	735	418	32.8

SA'S ROLE IN WORLD MINERAL RESERVES, PRODUCTION AND EXPORTS, 2009 (LATEST AVAILABLE DATA)

TABLE 3

Commodity	Reserves				Production				Exports			
	Unit	Mass	%	Rank	Unit	Mass	%	Rank	Unit	Mass	%	Rank
Aluminium+		*	*	*	kt	1,025.00			kt	538.00	3.1	7
Alumino-silicates	Mt	51.00	*	*	kt	265.00	60.2	1	kt	109.00		*
Antimony	kt	350.00	16.7	3	t	3 000.00	1.6	3	t	*	*	*
Chrome ore	Mt	5 500.00	72.4	1	kt	6 762.00			kt	1 035.00		
Coal	Mt	30 408	7.4	6	Mt	250.60	3.6	7	Mt	60.50	6.4	5
Copper	Mt	13.00	2.4	14	kt	89.00	*	*	kt	27.00	*	*
Ferro chrome		*	*	*	kt	2 346.00	39.2	1	kt	2 621.00	56.5	1
Ferro -Mn/Fe-Si-Mn		*	*	*	kt	392.00	*	*	kt	411.00	*	*
Ferro-silicon		*	*	*	kt	148.90	2.9	6	kt	82.00	2.1	1
Fluorspar	Mt	80.00	17	2	kt	180.00	3.5	5	kt	*	*	*
Gold	t	6 000.00	12.7	1	t	197.00	7.8	5	t	180.00	*	*
Iron Ore	Mt	1 500.00	0.8	13	Mt	55.40	3.5	6	Mt	44.60	4.7	5
Lead	kt	3 000.00	2.1	6	kt	49.00	1.2	10	kt	47.00	1.9	14
Manganese Ore	Mt	4 000.00	80	1	kt	4 576.00	17.1	2	kt	3 978.00	26.6	2
Nickel	Mt	3.70	5.2	8	kt	34.60	2.4	12	kt	27.30	*	*
PGMs	t	70 000.00	87.7	1	t	271.00	58.7	1	t	251.00	*	*
Phosphate Rock	Mt	2 500.00	5.3	4	kt	2 237.00	1.4	11	kt	0.00	*	*
Silicon Metal		*	*	*	kt	38.60	2.8	6	kt	38.40	3.5	6
Silver		*	*	*	t	77.80	0.4	20	t	70.00	*	*
Titanium Minerals	Mt	71.00	9.8	2	kt	1 100.00	19.2	2	*	*	*	*
Uranium	kt	435.00	8	4	t	623.00	1.3	10		*	*	*
Vanadium	kt	12 000.00	32	2	kt	11.60	25.4	1	kt	11.90	*	*
Vermiculite	Mt	80.00	40	2	kt	194.30	35	1	kt	164.60	*	*
Zinc	Mt	15.00	3.3	8	kt	29.00	0.2	25	kt	5.00	0.1	24
Zirconium	Mt	14.00	25	2	kt	395.00	32	2		*	*	*

Sources: USGS, SA Department of Mineral Resources, Mineral Economics Directorate, 2009/2010

Notes: Full details given in respective commodity chapters, †figure under reserves refers to metals production capacity & *Information not available

**TABLE 4: PROVINCIAL OVERVIEW
(LATEST AVAILABLE DATA)**

Capital	EC Bisho	FS Bloemfontein	GP Johannesburg	KZN Ulundi & PMB	LP Polokwane	MP Nelspruit	NW Mafikeng	NC Kimberley	WC Cape Town
Total area (000km ²)	168 965	129 825	18 178	94 361	125 753	76 494	104 881	372 889	129 462
% Of SA area	13.8	10.6	1.4	7.7	10.3	6.3	8.6	30.5	10.6
Total population - 2010 ('000)	6 744	2 825	11 192	10 645	5 440	3 618	3 201	1 104	5 224
% Urban	1.0	9.0	33.0	17.0	2.0	5.0	5.0	3.0	16.0
% Rural	21.0	3.0	2.0	27.0	24.0	11.0	9.0	2.0	2.0
% Of total SA population - mid 2010	13.5	5.7	22.4	21.3	10.9	7.2	6.4	2.2	10.4
Mining GDP 2009 (R' millions – nominal terms)	683	17 193	26 712	6 895	45 278	389 111	47 427	14 306	775
% Contribution to provincial GDP 2009	0.4	13.1	3.3	1.8	26.9	22.9	30.3	26.1	0.2
Access to electricity - 2009	0.04	0.04	0.28	0.20	0.05	0.15	0.11	0.02	0.11
Official unemployment 2011 - Q2	28.9	28.2	28.2	20.3	21.1	30.4	27.3	28.8	21.8
Poverty index % below poverty line (StatsSA) 2009	20.8	7.1	10.5	22.6	15.5	7.9	9.3	1.8	4.5
Poverty levels % of household income below R800 pm	66.3	58.7	33.9	55.4	71.8	60.2	56.1	50.3	26.7
% Prevalence of HIV 2011 (%)	10.6	12.0	11.2	14.9	7.0	12.5	12.4	6.7	5.1

Source : StatsSA, Department of Trade & Industry, DMR, SA Survey 2010/2011

**Data refers to 2010 unless otherwise specified*

SAFETY: FATALITIES & FATALITY FREQUENCY RATES (FFR) ON SA MINES

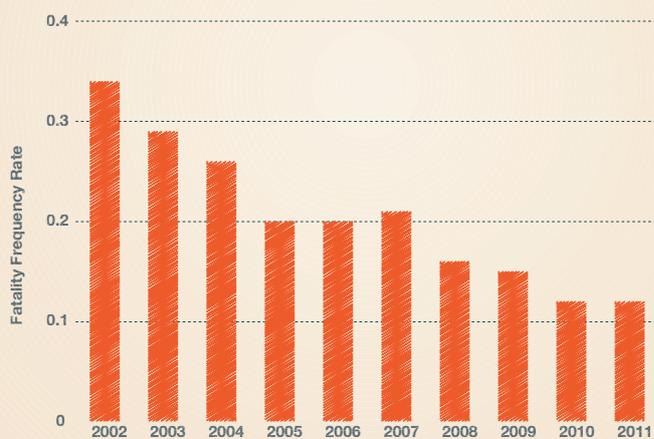
TABLE 5: INDUSTRY FATALITIES – 2002-2011

Commodity	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Gold	172	149	108	105	114	115	85	81	63	54
Platinum	53	58	65	47	40	53	36	41	32	38
Coal	20	23	20	16	20	15	20	18	13	10
Chrome	4	2	16	6	2	4	NIIO	NIIO	NIIO	NIIO
Diamonds	26	15	15	7	3	12	NIIO	NIIO	NIIO	NIIO
Copper	1	2	2	0	2	1	NIIO	NIIO	NIIO	NIIO
Clay	2	0	3	3	2	8	NIIO	NIIO	NIIO	NIIO
Iron Ore	2	1	1	2	2	4	NIIO	NIIO	NIIO	NIIO
Granite DS	1	0	2	0	0	1	NIIO	NIIO	NIIO	NIIO
Limstone	1	0	3	5	5	1	NIIO	NIIO	NIIO	NIIO
Other	8	19	11	10	10	6	30	28	20	21
Total	290	269	246	201	200	220	171	168	128	123

Note: NIIO - Now included in Other

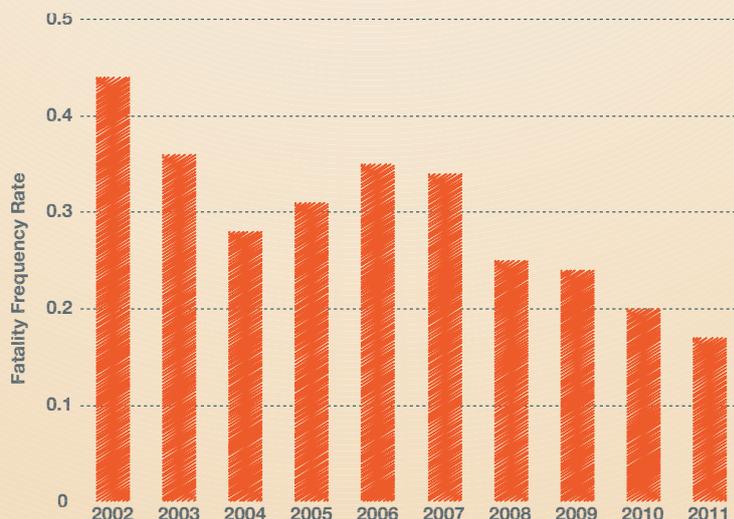
Source: Chamber of Mines

FIGURE 4: FFR – ALL SECTORS



Source: Chamber of Mines

FIGURE 5: FFR – GOLD MINES



Source: Chamber of Mines

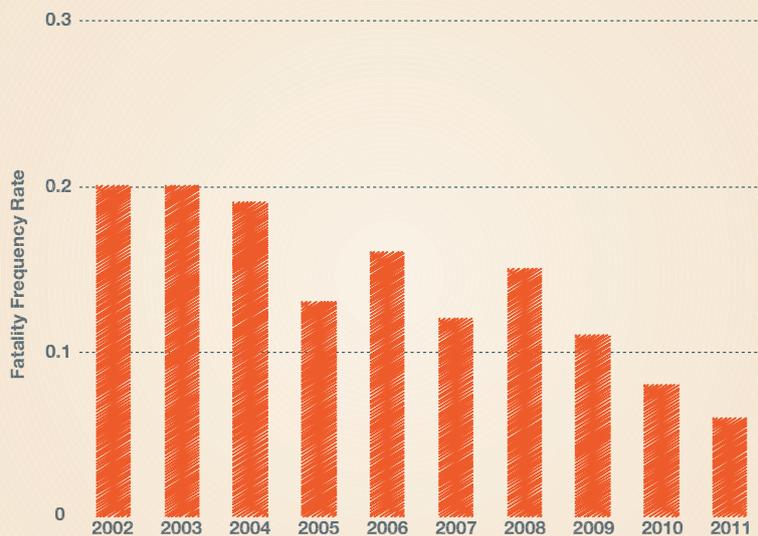
SAFETY: FATALITIES & FATALITY FREQUENCY RATES (FFR) ON SA MINES

FIGURE 6: FFR – PLATINUM MINES



Source: Chamber of Mines

FIGURE 7: FFR – COAL MINES



Source: Chamber of Mines

FIGURE 8: FFR – OTHER MINES



Source: Chamber of Mines

EMPLOYMENT AND REMUNERATION IN SA MINING INDUSTRY, 2011

TABLE 6: LABOUR HISTORY BY COMMODITY

Year	Gold	PGM's	Iron Ore	Copper	Chrome	Manganese	Diamonds	Coal	Aggregate and sand	Other mines and quarries	South Africa
2002	199 378	111 419	5 389	5 107	5 404	2 581	16 346	47 469	3 220	19 675	415 988
2003	198 465	127 672	5 961	4 952	5 784	2 623	17 949	47 239	3 801	21 182	435 628
2004	179 964	150 630	7 142	4 042	6 765	3 243	21 186	50 327	4 080	21 530	448 909
2005	160 634	155 034	7 493	3 746	7 893	3 336	22 033	56 971	5 210	21 782	444 132
2006	159 782	168 530	8 859	3 993	7 899	3 332	19 686	57 778	5 133	21 345	456 337
2007	169 057	186 411	13 858	N/A	9 796	3 240	19 471	60 439	5 833	27 045	495 150
2008	166 063	199 948	13 256	N/A	12 279	3 976	18 474	65 484	6 428	32 821	518 729
2009	159 925	184 163	13 727	N/A	10 966	5 003	11 602	70 791	6 852	28 765	491 794
2010	157 019	181 969	18 216	N/A	13 982	5 879	11 468	74 025	7 009	29 339	498 906
2011	145 561	194 929	22 342	N/A	16 389	7 356	12 030	78 580	7 086	28 938	513 211

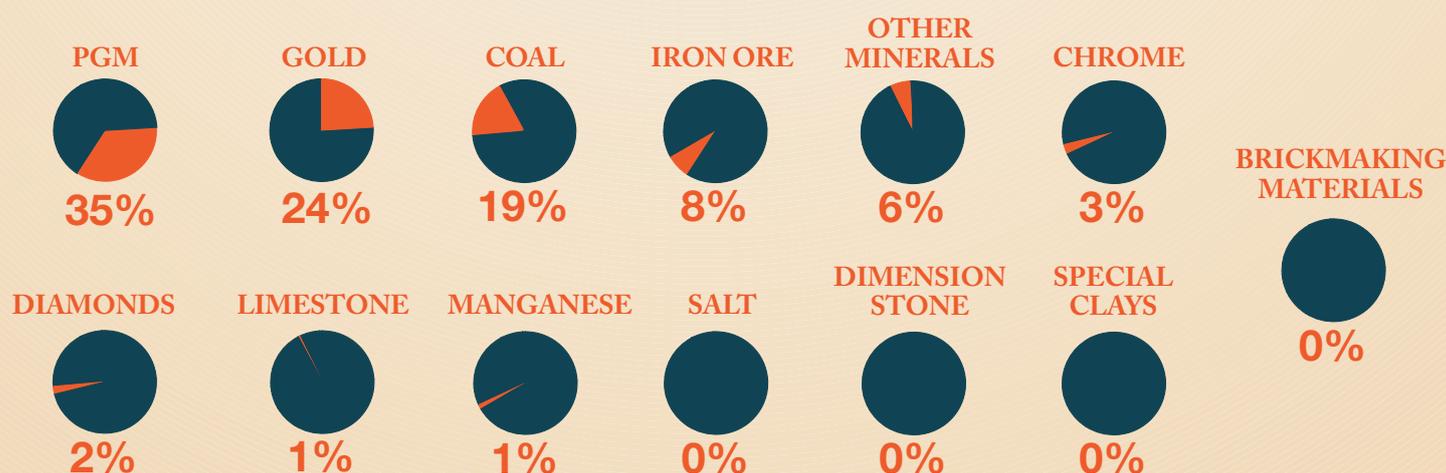
Source: Department of Mineral Resources

TABLE 7: NUMBER OF EMPLOYEES & EARNINGS, 2011

Commodity	Total employed	Total employee earnings (R' millions)	Avg earnings per employee (R)
Gold	145 561	20 948 450 802.00	143 915.00
P.G.M.	194 979	30 523 032 175.00	156 545.00
Iron ore	22 343	6 504 505 718.00	291 121.00
Manganese	7 356	1 263 288 726.00	171 736.00
Chrome	16 389	2 705 744 430.00	165 095.00
Diamonds	12 030	2 142 964 700.00	178 135.00
Coal	78 580	16 094 850 183.00	204 821.00
Brickmaking materials	353	17 166 609.00	48 631.00
Special clays	287	29 415 119.00	102 492.00
Dimension stone	1 826	141 401 066.00	77 438.00
Limestone	2 758	427 008 683.00	154 825.00
Other minerals	22 970	5 499 689 342.00	239 429.00
Salt	693	45 755 135.00	66 025.00
Aggregate and sand	7 086	737 739 137.00	104 109.00
Totals	513 211	87 081 011 825.00	169 679.00

Source: Department of Mineral Resources

FIGURE 9: PERCENTAGE EARNINGS ON ALL SA MINES, INCLUDING CONTRACTORS – 2011

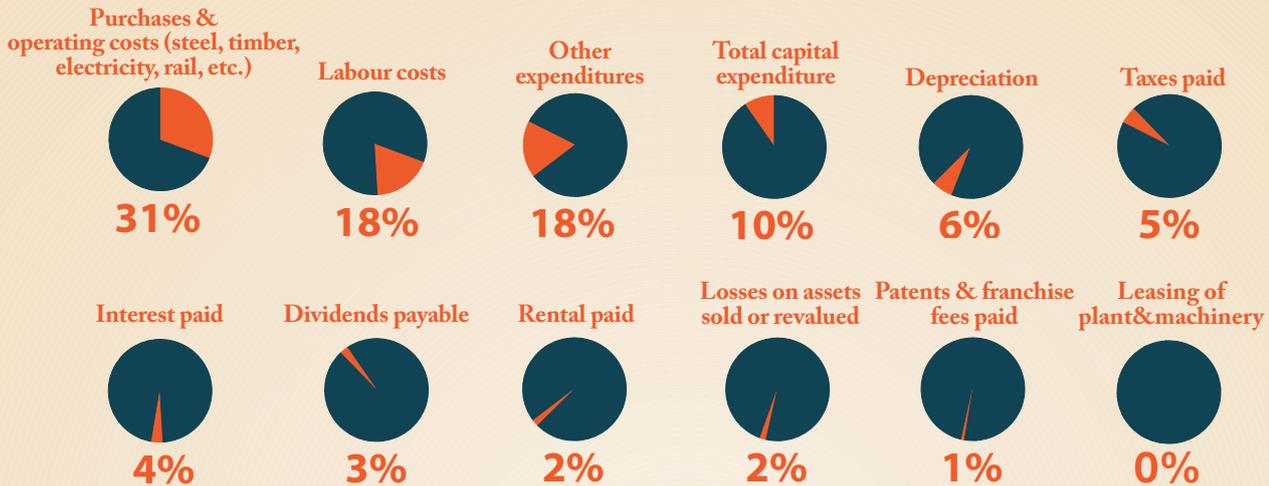


Source: Department of Mineral Resources

INCOME AND EXPENDITURE OF ALL SA MINING, 2011

The South African mining industry's total income in 2011, using quarterly unadjusted data (STATSSA) was estimated at R489billion while expenditure was R484-billion (Figure 10).

FIGURE 10: MINING INDUSTRY EXPENDITURES (ZAR MN), *2011

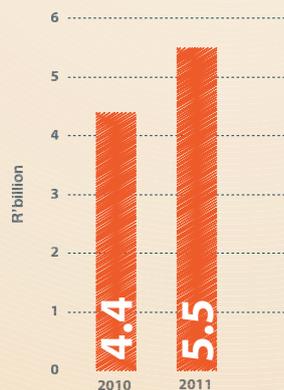


Source: *StatsSA QFS, December 2011

R148.6billion was spent on purchases and operating costs such as timber, steel, explosives, electricity, transport and uniforms. R88.7billion was paid on salaries and wages for mine employees (slightly higher than the DMR estimate of R87-billion), R46.5billion on capex, R25.8billion in tax, R16.2billion in dividends, R38billion on depreciation and impairments and R17.2billion paid on interest.

Furthermore, the mining industry also contributes to the national fiscus through royalties taxes, having paid R4.4billion

FIGURE 11: ROYALTIES PAID BY THE MINING INDUSTRY



Source: National Treasury Revenue Estimates, 2012

and R5.5billion in 2010 & 2011 respectively (Figure 11). In addition, it is important to dispel the myth that all mined products are exported in raw form with very little downstream beneficiation taking place locally. Nearly 100% of South Africa's cement and building aggregates are made locally and 80% of the country's steel is made locally from locally mined iron ore, chrome, manganese and coking coal using furnaces that are 95% powered by electricity from coal fired power stations (the 20% imported steel is speciality steel products not made locally). Over 30% of the country's liquid fuels are produced within the country from locally mined coal and 95% of electricity is generated in power plants that use locally mined coal. Most domestic chemicals, fertilisers, waxes, polymers and plastics are fabricated using locally mined minerals and coal and 13% of the world's platinum catalytic converters are made in South Africa.

AGGREGATE & SAND SALES, EMPLOYMENT & TOTAL EARNINGS, 2002 – 2011

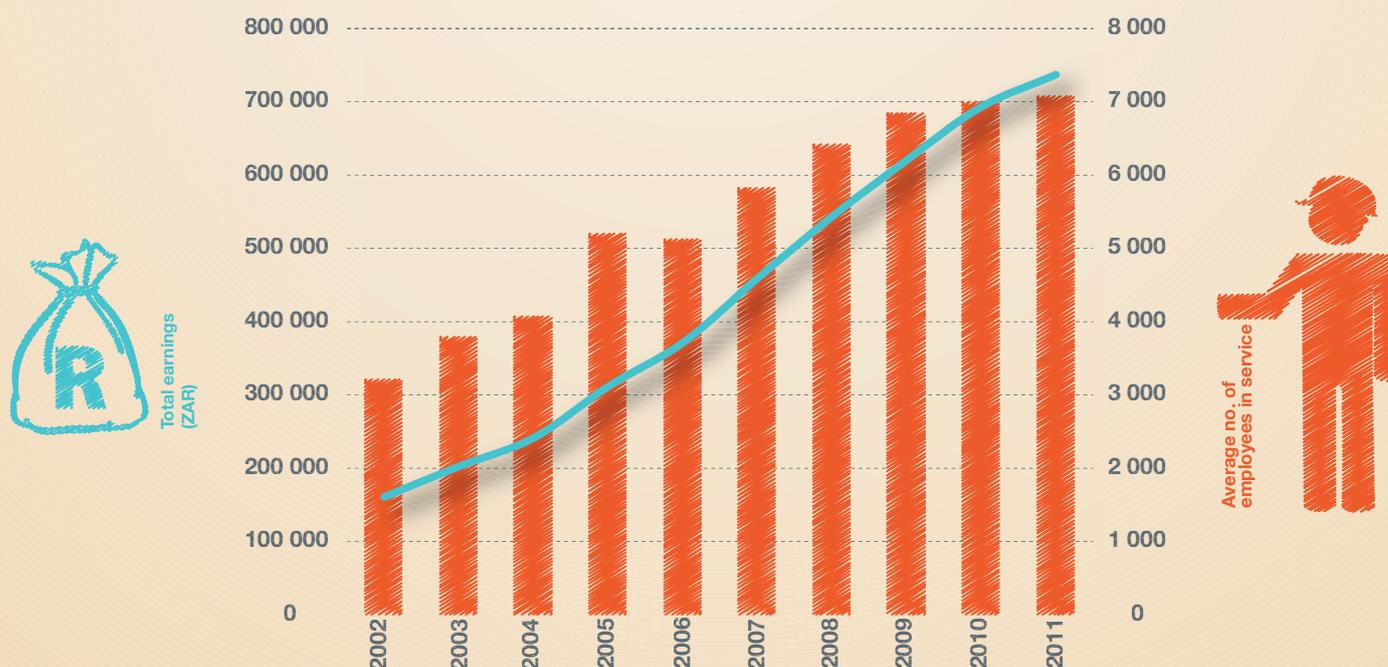
TABLE 8: AGGREGATE & SAND SALES

Year	Mass (1 000t)	Value (R1 000)
2002	27 150.2	917 636.8
2003	32 400.7	1 350 491.2
2004	47 381.7	2 085 363.9
2005	50 186.6	2 233 340.9
2006	58 563.4	2 789 556.0
2007	63 872.8	3 374 162.2
2008	58 608.5	3 775 002.5
2009	53 603.6	3 895 685.7
2010	52 624.7	3 864 613.2
2011	52 285.6	4 066 141.8

Source: Department of Mineral Resources

In 2011, SA aggregate sand production contracted by 0.6% to 52.3 million tons (MT), though the sales value increased by 5% to R4million (Table 8). The sector employed 7 086 people and paid a total of R737 739 in salaries and wages (Figure 12).

FIGURE 12: EMPLOYMENT & EARNINGS – SA AGGREGATE & SAND QUARRIES



Source: Department of Mineral Resources

BASE MINERALS PRODUCTION & SALES, 2002 – 2011: CHROMITE

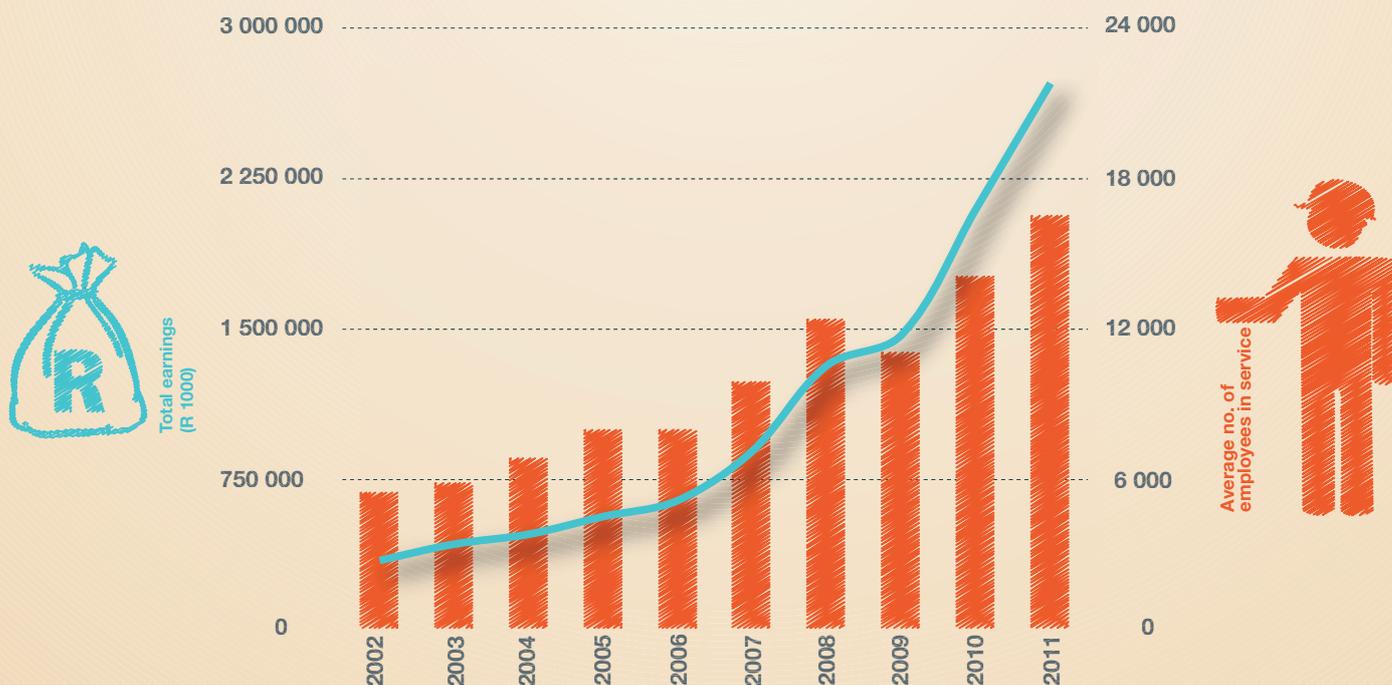
In 2011, SA chromite production contracted by 1.4% to 10.7 million tons (MT). Domestic sales grew by 29% to R5.4million from R4.2million in the previous year, whilst export sales grew by 32% from R2.5million to R3.2million in 2011 (Table 9). Total sales increased by 30% to R8.6million. The sector employed 16 389 people, and paid a total of R2.7billion in salaries and wages (Figure 13).

TABLE 9: CHROMITE PRODUCTION & SALES

Year	Production	Local Sales		Export Sales		Total Sales	
	Metric tons	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000
2002	6 435 746.0	5 300.0	786 979.0	314 380	482.6	5 951.5	1 101 359
2003	7 405 391.0	6 333.8	976 689.7	177 808	354.3	6 835.6	1 154 497
2004	7 676 800.0	6 743.1	1 368 846.0	318 894	621.6	7 256.2	1 687 740
2005	7 552 237.0	6 128.2	1 468 520.7	442 045	672.7	6 785.3	1 910 566
2006	7 425 860.0	6 386.7	1 803 587.1	506 177	683.3	7 127.5	2 309 764
2007	9 664 656.0	7 388.6	2 346 981.8	659 467	738.4	8 281.6	3 006 448
2008	9 682 640.0	7 116.4	4 130 453.3	1 267 931	1 663.6	7 878.5	5 398 385
2009	7 560 938.0	4 879.8	2 081 057.7	1 571 311	919.3	6 589.1	3 652 368
2010	10 871 095.0	7 266.7	4 159 308.3	2 459 473	1 274.7	9 196.1	6 618 781
2011	10 721 360.0	7 434.0	5 382 327.8	3 237 219	1 618.8	9 433.8	8 619 547

Source: Department of Mineral Resources

FIGURE 13: EMPLOYMENT & EARNINGS - SA CHROMITE MINES



Source: Department of Mineral Resources

BASE MINERALS PRODUCTION & SALES, 2002 – 2011: COPPER & IRON ORE

Copper

In 2011, SA copper production increased by 7% to 89,300 tons. Domestic sales grew by 25% to R3.9million from R3.2million in the previous year, whilst export sales grew by 24% from R1.2million to R1.5million in 2011 (Table 10). Total sales grew by 24% to R5.4million from R4.4million in the previous year.

TABLE 10: SA COPPER PRODUCTION & SALES

Year	Production	Local Sales		Export Sales		Total Sales	
	Metric tons	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000
2002	129 452.0	80.3	1 381 519.1	51.1	761 829.3	131.4	2 143 348
2003	120 920.0	76.1	1 073 733.8	46.4	567 502.4	122.5	1 641 236
2004	102 570.0	83.9	1 542 829.4	29.3	483 292.8	113.2	2 026 122
2005	103 856.0	82.0	1 926 378.3	30.0	656 721.4	112.0	2 583 100
2006	109 590.0	83.8	3 892 035.2	24.4	1 064 042.4	108.2	4 956 078
2007	117 066.0	76.6	4 025 724.8	37.4	1 828 126.1	113.9	5 853 851
2008	97 185.0	68.5	4 120 564.4	32.9	1 507 355.6	101.4	5 627 920
2009	92 884.0	68.0	2 835 737.2	26.8	1 024 013.8	94.9	3 859 751
2010	83 640.0	56.7	3 160 028.7	55.8	1 209 297.4	112.4	4 369 326
2011	89 298.0	60.4	3 937 749.1	25.5	1 495 100.3	85.9	5 432 849

Source: Department of Mineral Resources

Iron ore

Global steel production grew by 6.7% to 1.5 billion tons, while the trade in global iron ore increased by 6.8% to just over one billion tons in 2011. Global iron ore reserves as estimated by USGS, is 170 billion tons of crude ore with an iron ore content of about 80 billion tons. A new pricing agreement was reached between producers and customers in 2010—to move to shorter term or quarterly contracts, based on the spot market. The annual average iron ore price in 2011 was \$167,8/dmt.

In 2011, South Africa produced 58.1 million tons (MT) of iron ore, which was 1.2% lower on the previous year's total (Table 11). Domestic sales contracted by 7% to 9.8 MT while export sales grew by 9% to 58.4 MT. Local sales were valued at R4.2billion while export sales realized R58.4billion.

Total iron ore sales grew by 44% overall to R62.7billion, making iron ore the fourth largest component of the South African mining industry by sales value. Iron ore exports accounted for 9% of total merchandise exports. In 2011, the sector employed 22 343 people and paid R6.5billion in salaries and wages (Figure 14).

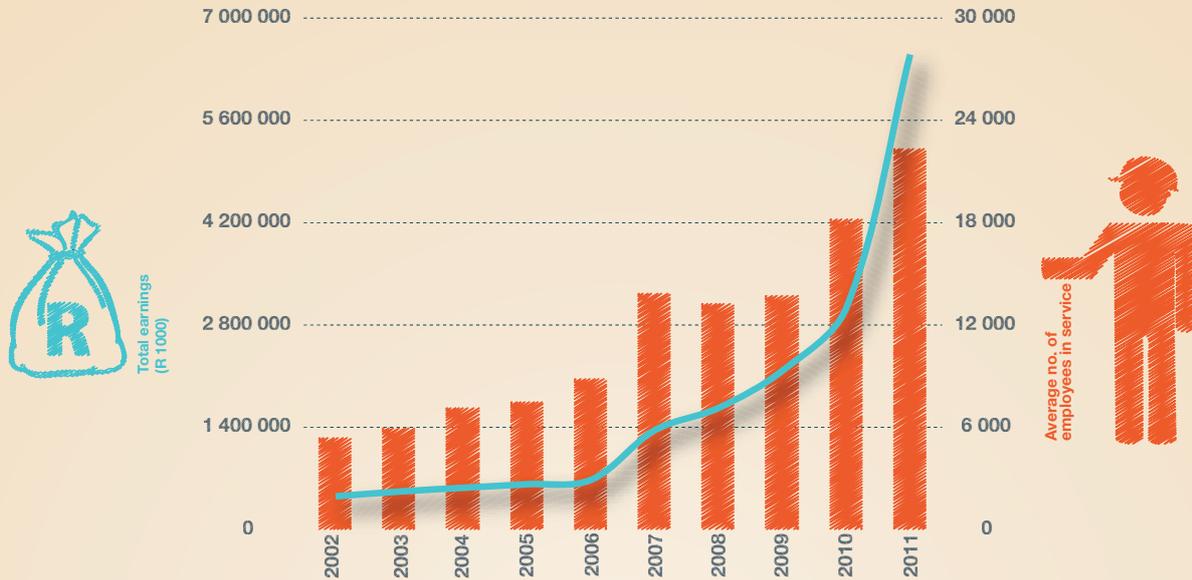
TABLE 11: SA IRON ORE PRODUCTION & SALES

Year	Production	Local Sales		Export Sales		Total Sales	
	Metric tons	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000
2002	36 484 015.0	11 057.1	1 009 107.6	24 304	4 304 610.8	2 143 348.4	35 361 5 313 718.3
2003	38 085 855.0	12 079.2	1 060 635.2	24 076	3 130 436.0	1 641 236.2	36 155 4 191 071.2
2004	39 322 050.0	12 430.9	1 145 600.0	24 745	3 439 885.1	2 026 122.3	37 176 4 585 485.1
2005	39 542 072.0	12 009.4	1 272 795.7	26 628	6 246 776.5	2 583 099.8	38 637 7 519 572.2
2006	41 371 896.0	12 035.8	1 398 450.0	27 371	8 532 831.2	4 956 077.7	39 407 9 931 281.2
2007	42 083 081.0	12 407.4	1 749 497.9	30 767	12 006 062.4	5 853 850.9	43 174 13 755 560.3
2008	48 982 537.0	11 258.0	1 974 629.3	32 766	20 267 206.3	5 627 920.0	44 024 22 241 835.7
2009	55 313 053.0	8 369.1	1 888 800.9	44 550	25 242 933.6	3 859 751.0	52 919 27 131 734.5
2010	58 709 330.0	10 560.9	3 270 326.5	47 493	40 148 279.1	4 369 326.1	58 054 43 418 605.5
2011	58 056 897.0	9 844.3	4 207 746.3	51 891	58 444 147.8	5 432 849.4	61 735 62 651 894.1

Source: Department of Mineral Resources

BASE MINERALS PRODUCTION & SALES, 2002 – 2011: IRON ORE (continued)

FIGURE 14: EMPLOYMENT & EARNINGS - SA IRON ORE MINES



Source: Department of Mineral Resources

BASE MINERALS PRODUCTION & SALES, 2002 – 2011: MANGANESE

Manganese

South Africa accounted for 24% of the global manganese production in 2011 (USGS), followed by China (20%) and Australia (17%).

TABLE 12: SA MANGANESE PRODUCTION & SALES

Year	Production	Local Sales		Export Sales		Total Sales	
	Metric tons	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000	Mass 1 000t	Value R1000
2002	3 358 381.0	-	589 674.4	1 539	1 042 952.1	-	1 632 626.5
2003	3 546 558.0	-	624 646.5	1 957	852 982.9	-	1 477 629.4
2004	4 281 960.0	-	656 434.7	2 403	1 082 284.6	-	1 738 719.4
2005	4 611 683.0	-	681 861.0	2 119	1 518 965.3	-	2 200 826.3
2006	5 213 338.0	-	727 182.4	2 846	1 518 652.5	-	2 245 835.0
2007	5 996 086.0	-	934 900.7	3 691	2 636 526.1	-	3 571 426.8
2008	6 807 059.0	-	1 761 848.5	4 689	15 581 559.6	-	17 343 408.1
2009	4 578 770.0	-	583 601.6	3 976	5 003 011.1	-	5 586 612.7
2010	7 171 745.0	-	1 320 564.4	5 986	9 340 025.7	-	10 660 590.2
2011	8 651 842.0	-	1 325 213.5	6 773	8 569 853.8	-	9 895 067.3

Source: Department of Mineral Resources

In 2011, SA manganese production increased by 21% to 8.7 MT. Of the total production, 6.8MT was exported at a value of R8.6 billion, whilst the balance was sold domestically at a value of R1.3billion (Table 12). The export sales value contracted by 5% relative to 2010, and this was due to a 19% drop in the price received per ton, from R1,560 to R1,265.

The sector employed 7 356 employees in 2011 (25% up from 2010), and paid a total of R1.3billion in salaries & wages (Figure 15).

FIGURE 15: EMPLOYMENT & EARNINGS – SA MANGANESE MINES



Source: Department of Mineral Resources

ANNUAL SA COAL PRODUCTION SALES & EXPORTS, 2002 – 2011

The global coal production market was negatively impacted by the natural disasters in Japan & Australia which occurred in the first quarter of 2011. South Africa was unable to fill the “export gap” from these regions, as it still experiences rail capacity constraints. In 2011, South African coal production contracted slightly by 1.7% to 252.8MT (Table 13).

TABLE 13: SA COAL PRODUCTION & SALES

Year	Production	Local Sales		Export Sales		Total Sales	
	Metric tons	Mass 1 000t	Value R1000 (FOR)	Mass 1 000t	Value R1000 (FOR)	Mass 1 000t	Value R1000
2002	220 269 559	157 613 621	11 771 017 406	69 437 941	18 696 806 881	246 512 359	30 467 824 287
2003	237 872 103	168 942 472	13 243 714 171	71 556 461	13 490 623 059	240 498 933	26 734 337 230
2004	243 371 530	178 674 890	13 644 186 220	67 946 530	14 494 479 360	246 621 420	28 138 665 580
2005	244 988 246	173 437 259	14 878 140 000	71 442 092	21 155 176 000	244 879 351	36 033 316 000
2006	244 832 433	177 048 957	16 245 873 671	68 747 339	21 620 934 213	245 796 296	37 866 807 884
2007	247 666 358	182 769 630	19 718 642 143	67 675 426	24 447 656 215	250 445 056	44 166 298 358
2008	252 213 358	197 082 758	30 119 929 207	57 890 352	42 388 395 680	254 973 110	72 508 324 887
2009	250 538 125	184 676 658	34 442 650 086	60 539 489	31 006 559 224	245 216 147	65 449 209 310
2010	257 205 807	186 366 177	33 702 228 680	66 769 790	37 477 184 405	253 135 967	71 179 413 085
2011	252 756 845	177 705 290	37 285 726 061	68 807 069	50 548 677 636	246 512 359	87 834 403 697

Source: Department of Mineral Resources

Total coal sales by value increased by 23% from 2010, to an amount of R87.8 billion. Approximately 72% of production was sold locally at a value of R37.3 billion, whilst the balance of production (28%) was exported at a value of R50.5 billion (Figure 16 & 17). The coal sector accounted for 7.7% of merchandise exports in 2011, making it the fourth largest component after PGM’s, gold & iron ore. Exports from the Richards Bay Coal Terminal (RBCT) increased to 65.5 MT in 2011, but still short of its full potential at 91MT. The underutilization at RBCT was due to Transnet Freight Rail (TFR) inability to deliver coal timeously, due to derailments etc.

FIGURE 16: COAL SALES BY VOLUME

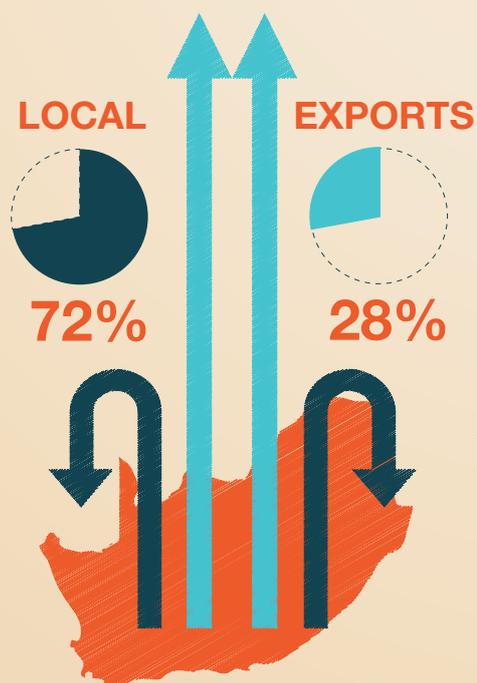
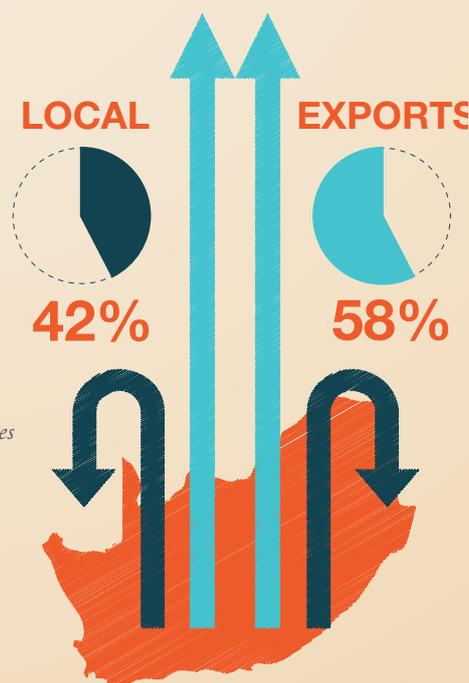


FIGURE 17: COAL SALES BY VALUE



Source: Department of Mineral Resources

ANALYSIS OF COAL SOLD BY CHAMBER MEMBER COAL PRODUCERS IN 2011

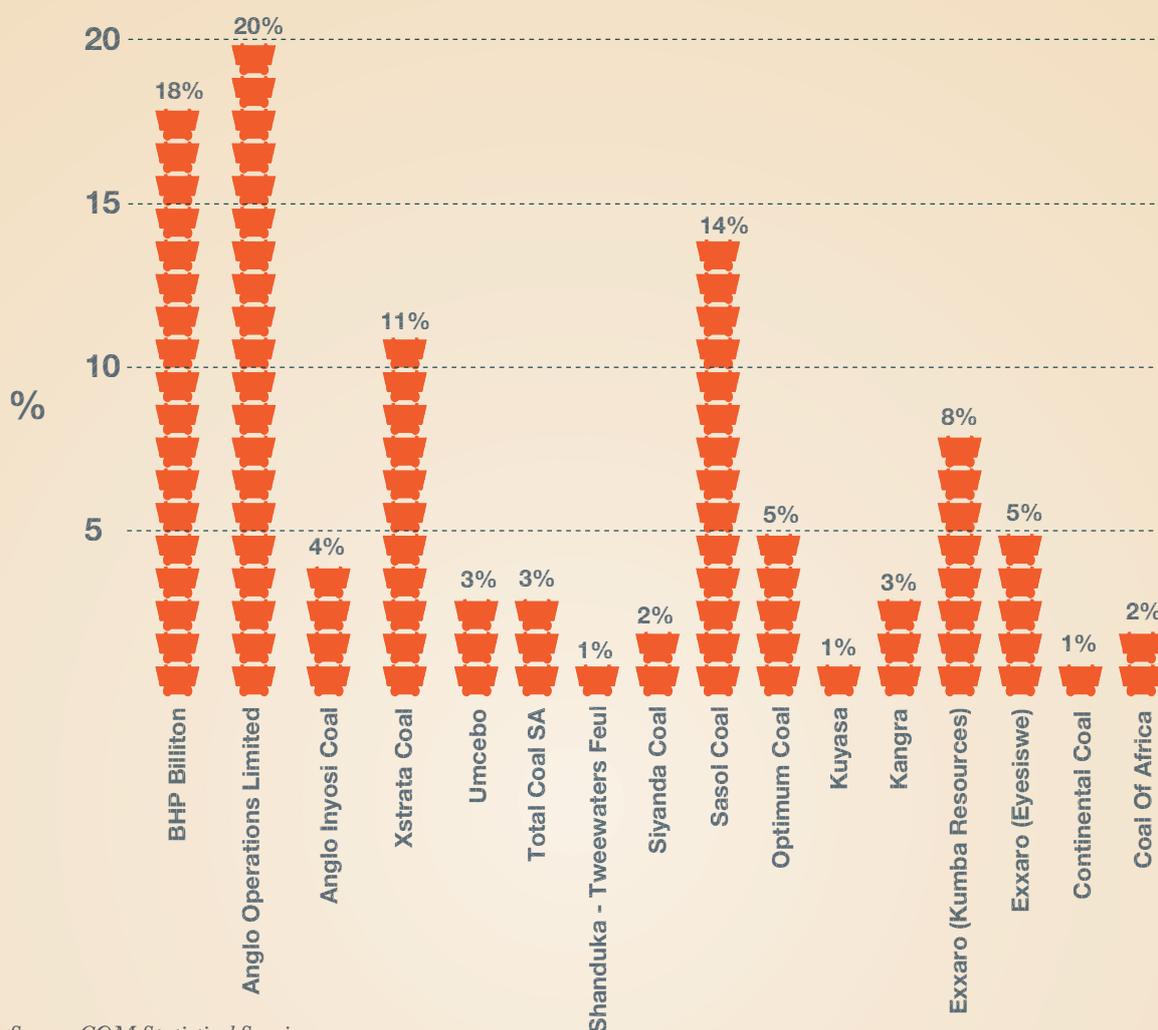
TABLE 14: COAL SALES BY CHAMBER MEMBERS

Coal mine	2011 Total Sales tons	2011 Total Sales value (R)	2011 Total Sales value (R)	Coal mine	2011 Total Sales tons	2011 Total Sales value (R)
<u>ANGLO INYOSI COAL</u>			2 968 663 111	<u>EXXARO</u> (Kumba Resources)		
Kriel	8 165 869	1 340 022 551		Grootegeluk	18 095 413	3 975 201 082
Zibulo Colliery	3 489 404	1 628 640 560		Leeuwan	4 056 748	1 280 284 832
<u>ANGLO OPERATIONS LIMITED</u>			14 432 043 207	Tshikondeni	325 676	689 135 828
Goedehoop	5 553 479	4 318 681 454		<u>KANGRA</u>		
Isibonelo	4 382 753	488 121 227		Savmore	3 189 583	1 923 789 112
New Denmark	4 812 609	1 513 433 989		<u>KUYASA</u>		
New Vaal	17 399 700	1 941 175 590		Delmas	1 842 446	419 343 824
SACE – Greenside	2 811 391	2 013 374 730		<u>OPTIMUM COAL</u>		
SACE – Kleinkopje	4 138 699	1 625 049 583		Optimum	9 456 485	3 858 135 472
SACE – Landau	4 106 836	2 532 206 634		<u>SASOL COAL</u>		
<u>BHP BILLITON</u>			13 414 145 742	Sasol Mining	42 611 273	10 026 644 597
BHP Billiton – Khutala	12 223 575	2 388 210 415		<u>SIYANDA COAL</u>		
BHP Billiton – Klipspruit	7 043 514	4 666 246 816		Koorfontein	3 390 451	1 811 633 451
BHP Billiton – Middelburg	14 743 147	6 359 688 511		<u>SHANDUKA – TWEEWATERS FEUL</u>		
<u>COAL OF AFRICA</u>			1 388 367 899	Springlake	509 392	406 158 744
Mooiplats	886 693	356 497 128		<u>TOTAL COAL SA</u>		
Vele	0	0		Dorstfontein East–Opencast	296 296	197 006 401
Woestalleen + Vuna	2 659 337	1 031 870 771		Dorstfontein West–Underground	446 219	283 842 795
<u>CONTINENTAL COAL</u>			626 999 167	Forzando North	652 675	497 943 345
Mashala Resources – Ferreira mine	629 982	456 846 205		Forzando South	897 981	677 599 930
Ntshovelo Mining – Vlakvarkfontein	1 151 676	170 152 962		Tumelo	365 970	279 925 820
<u>EXXARO (Eyesiswe)</u>			3 624 783 547	<u>UMCEBO</u>	6 872 283	2 337 564 164
Arnot	2 291 181	1 040 550 488		<u>XSTRATA COAL</u>	18 311 929	8 302 503 065
Matla	10 386 170	1 665 011 594				
New Clydesdale	690 313	472 135 124				
NBC – North Block Complex –Grootpan, Strathrae, Glisa	2 265 017	447 086 341				
TOTAL SALES VALUE: 73 421 715 135						

Source: COM Statistical Services

ANALYSIS OF COAL SOLD BY CHAMBER MEMBER COAL PRODUCERS IN 2011 (continued)

FIGURE 18: PERCENTAGE OF COAL SALES VALUE BY CHAMBER MEMBERS



Source: COM Statistical Services

TABLE 15: MONTHLY ANALYSIS OF COAL SALES BY CHAMBER MEMBERS

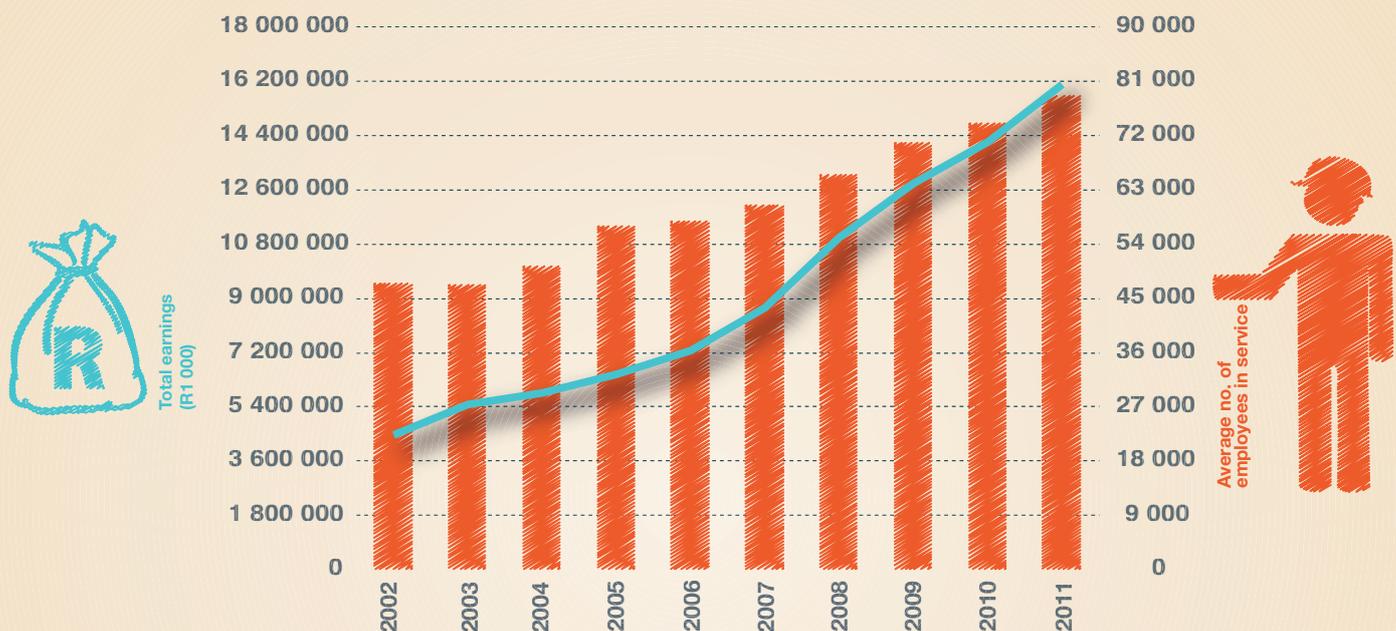
Month	Sales Tons (metric tons)	Sales Value (‘R)
January	17 640 360	5 241 450 317
February	17 084 915	5 476 435 425
March	19 610 668	6 252 712 558
April	17 847 952	5 816 212 341
May	17 425 714	4 852 468 190
June	17 897 550	5 654 723 548
July	17 152 144	5 743 204 835
August	19 325 980	7 061 359 167
September	18 615 961	6 327 777 004
October	19 240 742	7 105 653 457
November	19 622 827	6 756 086 522
December	19 687 352	7 133 631 771
TOTAL	221 152 165	73 421 715 135

Source: COM Statistical Services

EMPLOYMENT ON SA COAL MINES, 2011

In 2011, the number of people employed in the local coal mining industry increased by 6% to 78 580, with employees earning R16.1-billion in salaries and wages (Figure 19).

FIGURE 19: EMPLOYMENT & EARNINGS – SA COAL MINES

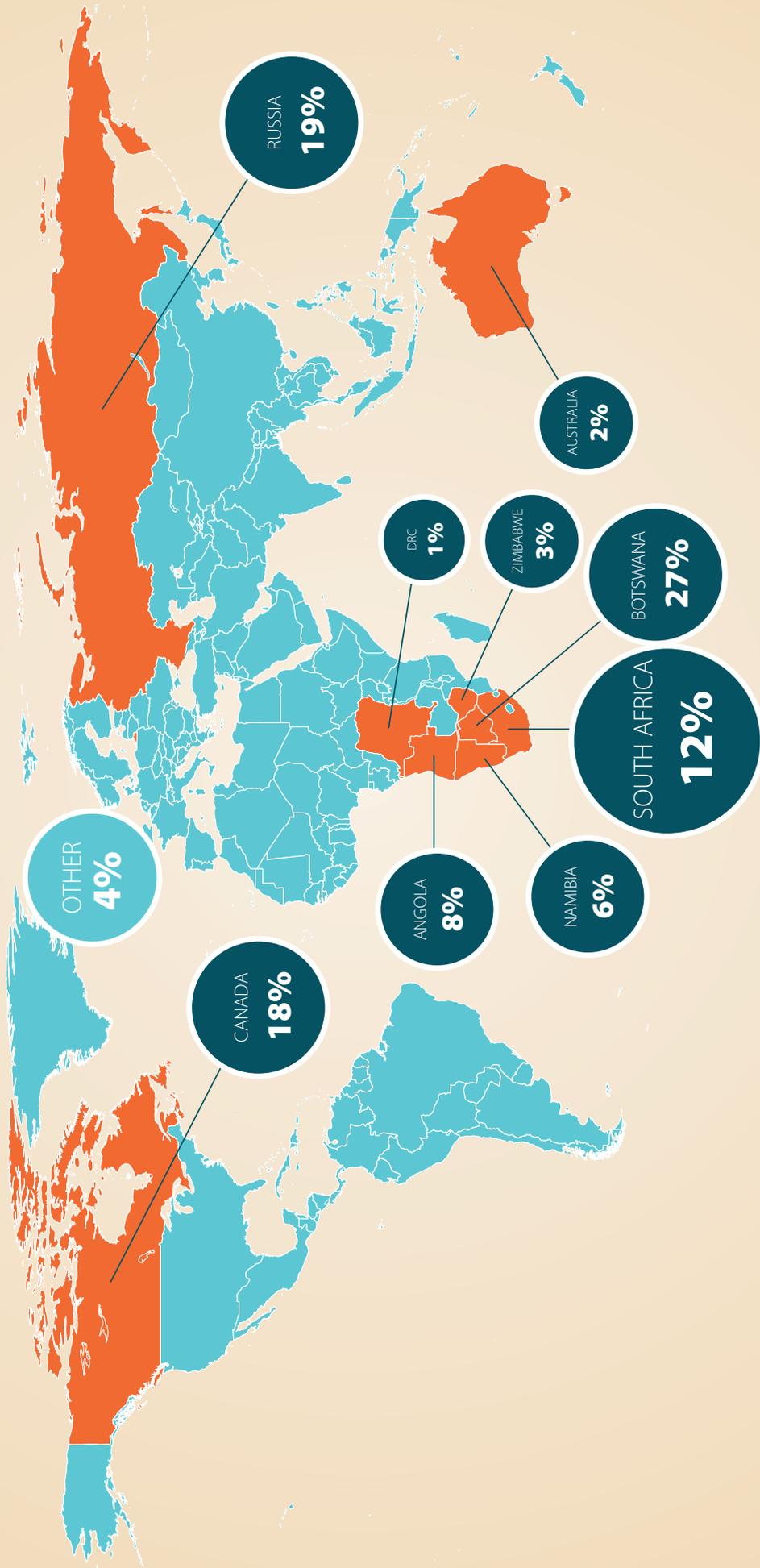


Source: Department of Mineral Resources

DIAMOND PRODUCTION & SALES, 2002 – 2011

The diamond industry continued to pick up in 2011. With an estimated 75% of cut diamonds destined for North America, Japan & Europe- the growth in these regions has driven demand, together higher demand in China and India. Global diamond production as estimated by the Kimberley Process Certification Scheme (KPCS) to have contracted by 3% to 124 million carats, from an adjusted 128 million carats in 2010. Leading producers by volume include Russia (27%), Botswana (17%), DRC (15%) and Canada (8%). Leading producers by value are Botswana (27%), Russia (19%), Canada (18%) & South Africa (12%), as indicated in Figure 19. South African diamond production contracted by 20% from 8.9 million carats in 2010 to 7 million carats in 2011 (Table 16). The value of rough diamonds produced rose strongly by 26% to approximately R14.4 billion.

FIGURE 20: GLOBAL DIAMOND PRODUCTION FOR 2011, PER COUNTRY, BY VALUE IN US\$ (TOTAL VALUE \$14.4-BILLION)



Source: KPCS Annual Global Summary, 2011

DIAMOND PRODUCTION & SALES, 2002 – 2011 (continued)

In 2011, global diamond retail sales rose by 18% to US\$70.8 billion, with the US market accounting for 38% (Figure 21). The balance of the sales was covered by Japan (8%), Indian (12%), China (11%) & Hong Kong (2%).

TABLE 16: SA PRODUCTION: CARATS

	Carats
2002	10 905 889
2003	12 647 702
2004	14 294 662
2005	15 776 427
2006	15 153 542
2007	15 250 079
2008	12 901 018
2009	6 112 834
2010	8 870 968
2011	7 046 644

Source: Department of Mineral Resources

FIG21: THE DIAMOND PIPELINE (US\$ BILLIONS)



Source: Idexonline, 2011

FIGURE 22: IDEX ONLINE POLISHED DIAMOND PRICE INDEX, 2005 – 2011



Source: Idexonline, 2011

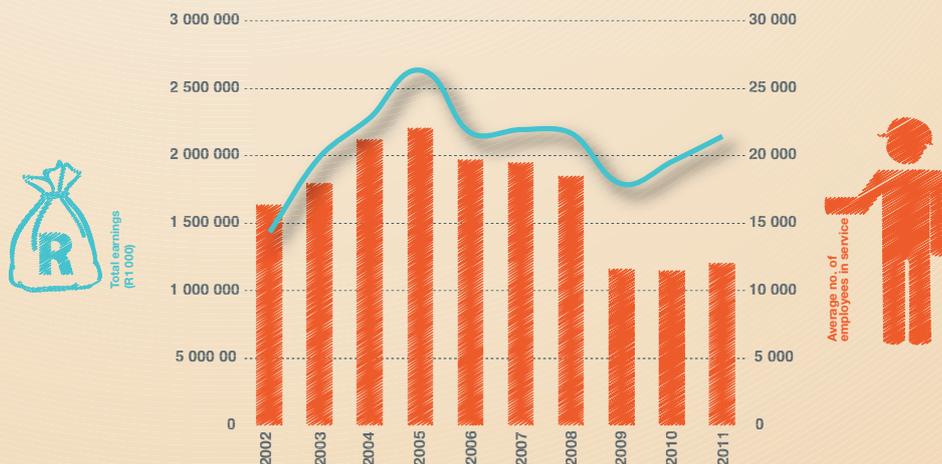
The value of the diamond content in retail jewellery sales in 2011, appreciated by 29% \$23.6 billion, with R22.6 billion from recently mined rough diamonds or inventories. Hence, the balance of R1 billion in value, as estimated by the International Diamond Exchange (IDEX) is from recycled diamonds, which represents approximately 4.4% of all polished diamonds sold at polished wholesale prices. Pipeline participants therefore need to bear this factor in mind, especially when estimating supply-and-demand trends (Figure 21).

The KPCS figures show that global production is not growing in volume however demand is driving up prices. The IDEX Diamond price index estimated diamond prices appreciating strongly by 17% in 2011. Even with the strong performance during 2011, polished diamond price gains remained in line with their long-term compound annual growth rate (CAGR) of about 4% (annually), as illustrated in Figure 22.

Factors positively affecting diamond prices include: Consumer demand growth in the US, Chinese & Indian markets, re-stocking of diamonds and diamond jewelry by retailers in virtually all markets & higher rough diamond prices, which were passed along, in part, throughout the diamond pipeline.

In 2011, the number of people employed in the local diamond mining industry increased by 5% to 12 030, with employees earning R2.1-billion in salaries and wages (Figure 23).

FIGURE 23: EMPLOYMENT & EARNINGS ON SA DIAMOND MINES



Source: Department of Mineral Resources

GOLD PRODUCTION: GLOBAL TOTALS & SA CONTRIBUTION

In 2011, global gold production increased by 2.8% to 2 818 tons. The largest growth was seen on the African continent, with production in 7 countries rising by 4 tons or more. South Africa retained its position as the fifth largest contributor to global production, at 191 tons (6.8% of the total). This is 2% lower than its 2010 levels. The 2011 GFMS number for South Africa at 198 tons is slightly more than the 191 tons recorded by the Chamber as the GFMS number includes an estimate for the production of illicit gold from the country (Table 17).

TABLE 17: GLOBAL GOLD PRODUCTION

Year	World gold production (tonnes)	SA gold production (tonnes)	SA – % of total
2002	2 625.0	395.2	15.1
2003	2 630.6	375.8	14.3
2004	2 504.0	342.0	13.7
2005	2 561.1	297.3	11.6
2006	2 494.7	275.1	11.0
2007	2 496.8	254.7	10.2
2008	2 428.8	217.6	9.0
2009	2 610.5	204.9	7.8
2010	2 740.5	195.3	7.1
*2011	2 818.4	191.0	6.8

*GFMS Thomson Reuters, COM * 2011 data is estimated*

In 2011, the gold price rose to a record US\$1 569 an ounce on the back of increased global uncertainty (Figure 24). The continued fragility of the global economy and debt overhangs in advanced economies, together with vulnerable housing and equity markets continue to force policy makers in advanced economies to be cautious, which should continue to support rising gold prices.

FIGURE 24: GOLD PRICE (ANNUAL AVERAGE), US\$/OZ



Source: StatsSA, SARB

SA GOLD OUTPUT & SALES, 2002 – 2011

TABLE 18: SA GOLD OUTPUT

Year	Metric tons treated (1 000)	Fine gold (kg's)	Realised value (R1 000)
2002	73 160.1	395 173.4	41 100 381.6
2003	77 169.6	375 786.9	32 908 857.7
2004	66 517.2	341 997.9	28 877 446.7
2005	53 817.1	297 311.6	27 214 684.9
2006	52 743.0	275 119.4	36 414 037.7
2007	56 361.5	254 685.4	38 394 267.2
2008	53 639.7	217 648.5	47 660 255.2
2009	48 870.1	204 922.8	51 246 219.2
2010	49 923.9	195 316.2	55 865 873.5
2011	50 753.9	191 013.6	65 818 195.2

Source: Department of Mineral Resources

TABLE 19: SA GOLD PRODUCTION & SALES

Year	Production	Local Sales		Export Sales		Total Sales	
	Metric tons	Metric tons	Value R/Mil	Metric tons	Value R/Mil	Metric tons	Value R/Mil
2002	398.5	2.9	289.4	393.0	40 932.8	395.9	41 222.2
2003	373.2	3.1	276.5	372.5	32 776.4	375.6	33 052.9
2004	337.2	3.9	347.1	343.1	28 982.8	347.0	29 329.9
2005	294.7	4.6	419.6	265.4	24 181.6	270.1	24 601.2
2006	272.1	5.7	720.8	277.4	36 722.3	283.1	37 443.1
2007	252.6	13.2	2 081.7	229.3	35 954.0	242.6	38 035.7
2008	212.7	8.8	1 997.8	190.0	43 994.5	198.8	45 992.2
2009	197.6	6.6	1 701.3	180.6	46 994.2	187.2	48 695.5
2010	188.7	7.2	2 055.7	176.9	51 037.4	184.1	53 093.1
2011	180.2	10.2	3 633.1	175.5	65 258.3	185.7	68 891.4

Source: Department of Mineral Resources

TABLE 20: SA GOLD, ORE MILLED & GRADE/TON

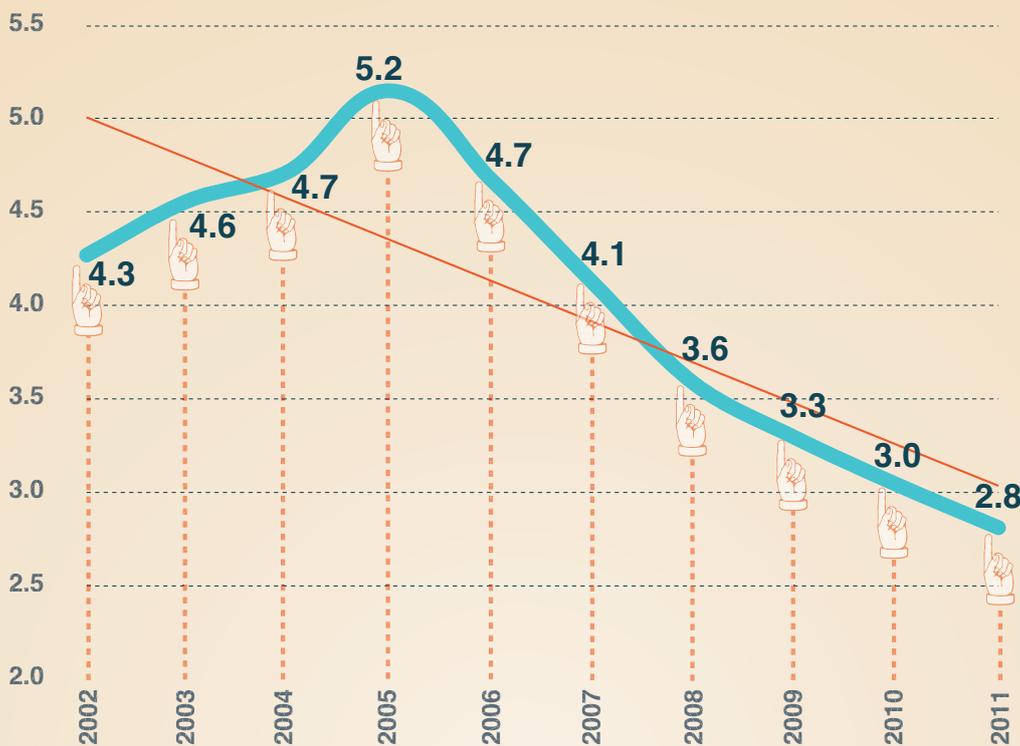
Year	Ore milled, metric tons (1 000)	Production (kgs)	Grade (g/m ton)
2002	81 422.0	347 542.6	4.3
2003	68 215.0	311 257.8	4.6
2004	59 702.0	282 030.6	4.7
2005	49 609.0	255 290.4	5.2
2006	50 349.0	235 042.5	4.7
2007	53 257.0	219 223.1	4.1
2008	50 999.0	182 489.8	3.6
2009	65 545.0	170 298.2	3.3
2010	73 803.0	160 646.4	3.0
2011	75 569.0	149 708.1	2.8

Source: Department of Mineral Resources

The gold mining sector remained a key contributor to the South African economy in 2011 and accounted for R68.9-billion in foreign currency earnings or 10.7% of total merchandise exports (the single largest mineral export after platinum group metals) and about 2% of GDP (if the multipliers and induced effect are included). Approximately 5% of production was sold locally at a value of R3.6 billion, whilst the balance of production (95%) was exported at a value of R65.3 billion (Table 19).

AVERAGE GRADE OF CHAMBER MEMBER GOLD PRODUCERS

FIGURE 26: SA GOLD GRADES (G/MTON)



Source: Department of Mineral Resources

FIGURE 25: EMPLOYMENT & EARNINGS – SA GOLD MINES



Source: Department of Mineral Resources

In 2011, the local gold mining industry employed 145 561 people, with employees earning R20.9billion in salaries and wages (Figure 26). The industry further invested R11.8-billion in capital expenditure in the country in 2011.

2011 QUARTERLY SUMMARY OF OPERATING RESULTS OF CHAMBER MEMBER GOLD PRODUCERS

TABLE 21: CHAMBER GOLD PRODUCERS

PRODUCTION OF MAJOR GOLD PRODUCERS

Quarter	Ore milled, metric tons (1 000)	Kilograms, fine gold (total)	Grade, g/ton milled	Total fine gold (kgs)
January - March	18 358.00	36 408.50	2.80	39 225.80
April - June	19 562.00	38 591.50	2.79	41 455.80
July - September	18 878.00	36 959.30	2.77	39 421.90
October - December	18 771.00	37 748.80	2.86	40 610.00
Totals/ average	75 569.00	149 708.10	2.81	160 713.50

REVENUE

Quarter	Operating revenues (R1 000)	Revenue/metric ton milled (‘R)		Net sundry revenue & expenditure
January - March	11 246 201.00	612.62	DR	356 188.00
April - June	12 793 219.00	653.98	DR	506 452.00
July - September	14 545 890.00	770.50	DR	226 139.00
October - December	16 567 956.00	882.64	DR	226 778.00
Totals/ average	55 153 266.00	729.84	DR	1 315 557.00

PROFITS

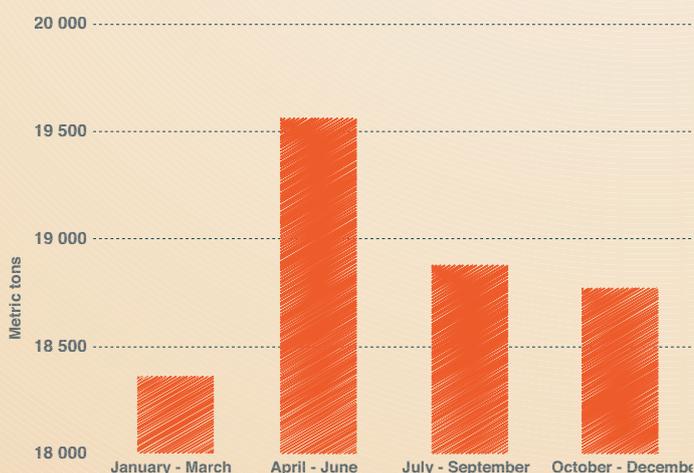
Quarter	Operating profit/ metric ton milled (‘R)	Total operating profit (R1 000)		Total profit (R1 000)
January - March	243.27	4 465 772.00		2 025 050.00
April - June	258.09	5 048 788.00		1 849 153.00
July - September	343.03	6 475 855.00		4 048 770.00
October - December	452.97	8 502 570.00		6 075 833.00
Totals/ average	324.11	24 492 985.00		13 998 806.00

Source: Source: CoM Statistical Unit

NB: For detailed company working results, go to : www.chamberofmines.org.za

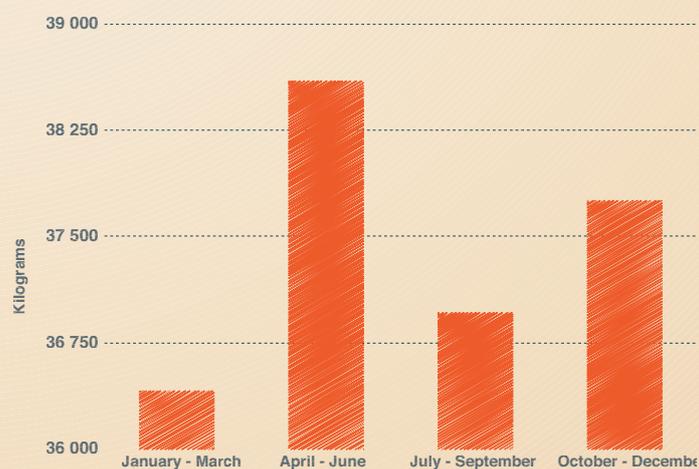
NOTES: Operating revenue includes revenue from gold and silver and, in certain cases, revenue from other sources, but excludes revenue from uranium and sulphuric acid. Certain mines have entered into gold hedging transactions the effect of which is brought into account in gold revenue. Net sundry revenue and expenditure includes interest royalties, payments to Far West Rand Dolomite Water Association, tribute revenue, etc.

FIGURE 28: ORE MILLED, 2011: CHAMBER MEMBER GOLD MINES



Source: Source: CoM Statistical Unit

FIGURE 27: KILOGRAMS, FINE GOLD, 2011: CHAMBER MEMBER GOLD MINES



Source: Source: CoM Statistical Unit

2011 QUARTERLY SUMMARY OF OPERATING RESULTS OF CHAMBER MEMBER GOLD PRODUCERS (continued)

TABLE 22: CHAMBER GOLD PRODUCERS

CASH OPERATING COSTS

Quarter	Total R1000	Costs/metric ton milled	Costs/kilogram gold ('R)	Total other costs
January - March	6 780 429.00	369.35	186232.034	2 084 534.00
April - June	7 744 431.00	395.89	200677.118	2 693 183.00
July - September	8 070 035.00	427.47	218349.238	2 200 946.00
October - December	8 065 386.00	429.67	213659.401	2 199 959.00
Totals/ average	30 660 281.00	405.73	204800.415	9 178 622.00

TAXATION/ CAPEX/ DIVIDENDS

Quarter		Tax & State's share of profits (estimated) ('R)	Capex (less recoupments) R1 000	Dividends ('R)
January - March	CR	181 917.00	2 342 521.00	0.00
April - June	CR	69 150.00	2 751 508.00	344 979 701.10
July - September	DR	647 588.00	2 988 345.00	
October - December	DR	1 441 582.00	3 701 760.00	767 088 676.00
Totals/ average	DR	1 838 103.00	11 784 134.00	1 112 068 377.10

Source: Source: CoM Statistical Unit

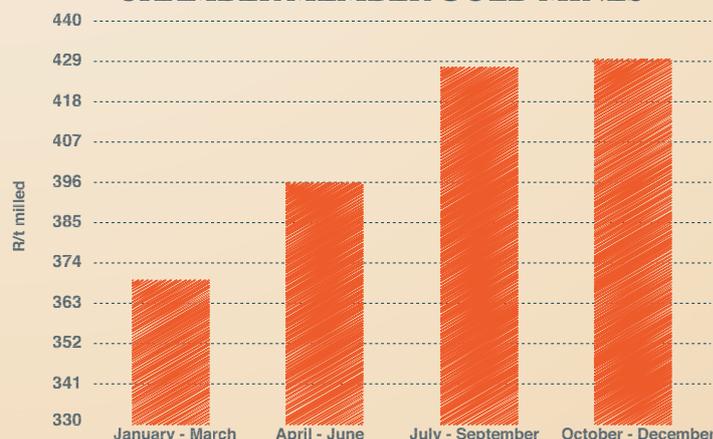
NOTES: In addition, gold production by non-Chamber members has been ascertained to be 25 962.3kgs. The Gold producers above, treated 2 173 387 metric tons of material to produce 626 117kgs of Uranium oxide of grade=0,288 kg/ton. The financial results are published in accordance with international financial accounting standards. Anglogold Ashanti: Profit from sales of the by-products uranium and acid/or pyrite, is offset against cash costs, in accordance with the Gold Institute definition. Retrenchment costs are included net of other costs. DRDGOLD: Grade calculation excludes surface tons (= 24 129 890 tons) and kilograms gold produced (= 5 299,9 kg) from 2nd & 3rd time milling and treatment ops. The data in this report refers to South African operations only. Totals may not add due to rounding.

FIGURE 29: OPERATING PROFIT PER TON MILLED, 2011: CHAMBER MEMBER GOLD MINES



Source: Source: CoM Statistical Unit

FIGURE 30: CASH OPERATING COSTS PER TON MILLED, 2011: CHAMBER MEMBER GOLD MINES



Source: Source: CoM Statistical Unit

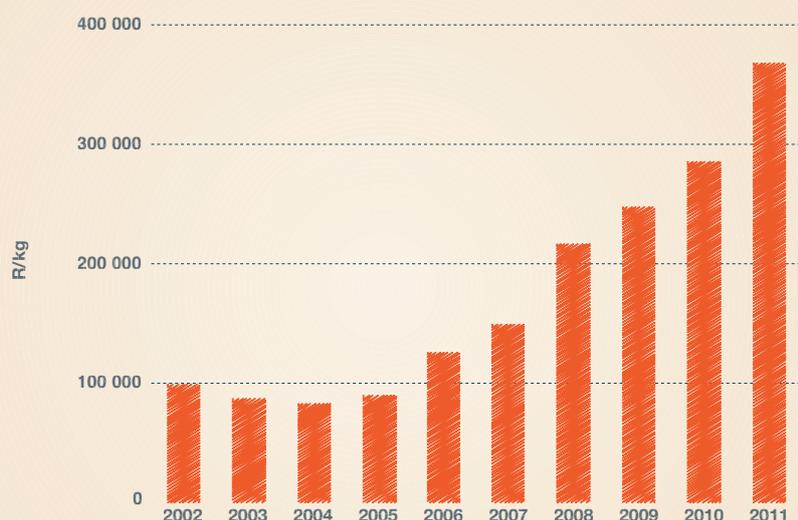
ANNUAL AVERAGE UNIT CASH OPERATING COSTS & PROFITS OF CHAMBER MEMBER GOLD PRODUCERS, 2002 - 2011

TABLE 23: CHAMBER GOLD PRODUCERS

Year	Operating revenue/ metric ton (R)	Operating revenue/ kilogram (R)	Cash operating costs/metric ton (R)	Cash operating costs/kilogram (R)	Operating profits/metric ton (R)
2002	435.20	99 498.00	256.42	58 624.00	178.78
2003	405.17	87 522.00	313.67	67 755.00	91.50
2004	393.53	83 304.00	335.16	70 949.00	58.37
2005	464.29	90 223.00	376.02	73 070.00	88.27
2006	588.79	126 126.00	366.21	78 447.00	222.58
2007	616.23	149 702.00	406.09	98 653.00	210.14
2008	776.36	216 967.00	449.27	125 557.00	327.09
2009	644.15	247 927.00	400.03	153 967.00	244.12
2010	622.42	285 947.00	388.93	178 679.00	233.49
2011	729.84	368 405.00	405.73	204 800.00	324.11

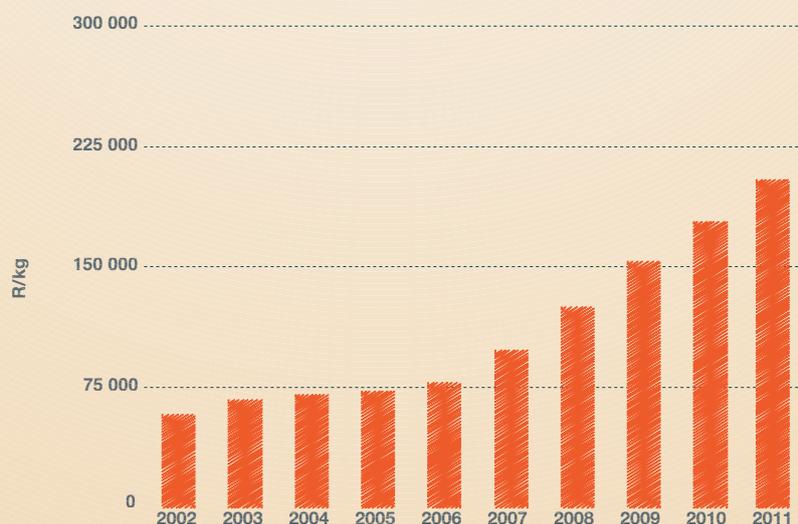
Source: Source: CoM Statistical Unit

FIGURE 31: OPERATING REVENUE/KG (ANNUAL), 2011: CHAMBER MEMBER GOLD MINES



Source: Source: CoM Statistical Unit

FIGURE 32: CASH OPERATING COSTS/KG (ANNUAL), 2011: CHAMBER MEMBER GOLD MINES



Source: Source: CoM Statistical Unit

PGM's take strain in 2011

The South African PGM mining sector is one of the largest components of the South African mining sector on the basis of GDP, export earnings and is a significant contributor to the South African economy: - In 2011, the PGM mining industry generated R84 billion in sales, was responsible for 36% of the country's mining exports (17% of total merchandise exports); and has significant direct, indirect and induced multipliers into the rest of the economy, which makes it a significant contributor to the fiscus.

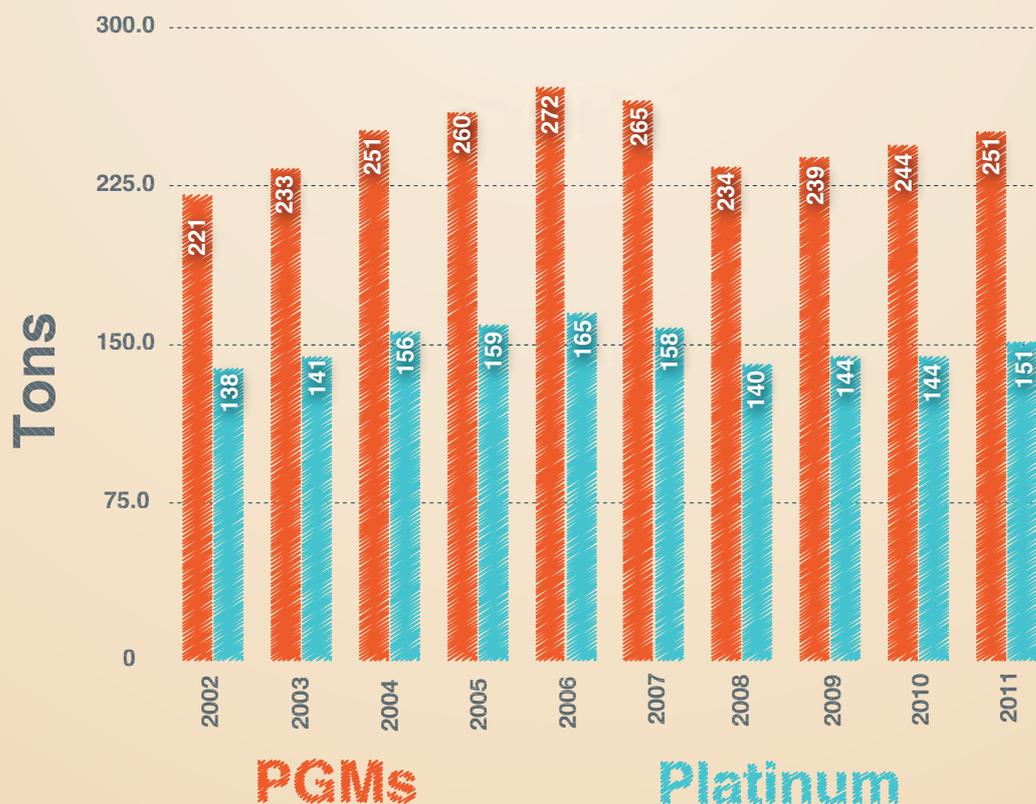
The SA PGM sector has taken strain in 2011. The industry finds itself, on the demand side, with material surpluses of product and depressed demand resulting in depressed prices. On the supply side, industry finds itself with high operating costs, such that a significant portion of the local producers are in a marginal position, given current prices.

The short-term market volatility, the decline in price and the rising cost pressures are affecting the viability of many companies in the short-run and will affect the industry's long term capability to grow and prosper. This issue has been recognized and acknowledged by the Department of Mineral Resources, and has been raised at the MIGDETT (Mining Industry Growth & Development Task Team) level. Challenges identified broadly are: the high cost structure of the pgm mining sector, the platinum surplus as a result of weakness in one of the major markets viz. Europe, further exacerbated by the increased availability of scrap and recycled metal, the low price of PGMs, the substitution of platinum by palladium and finally the declining competitiveness of the pgm mining sector. Stakeholders have agreed to explore practical solutions that can help to reduce costs, and improve the viability of the sector, though a strategic partnership and a collective vision.

PGM production & labour

South Africa's PGM production increased marginally by 2.6% from 244.2 tons to 250.6 tons in 2011 (Figure 33). Platinum production increased by 4.7% to 151 tons.

FIGURE 33: SA PRODUCTION

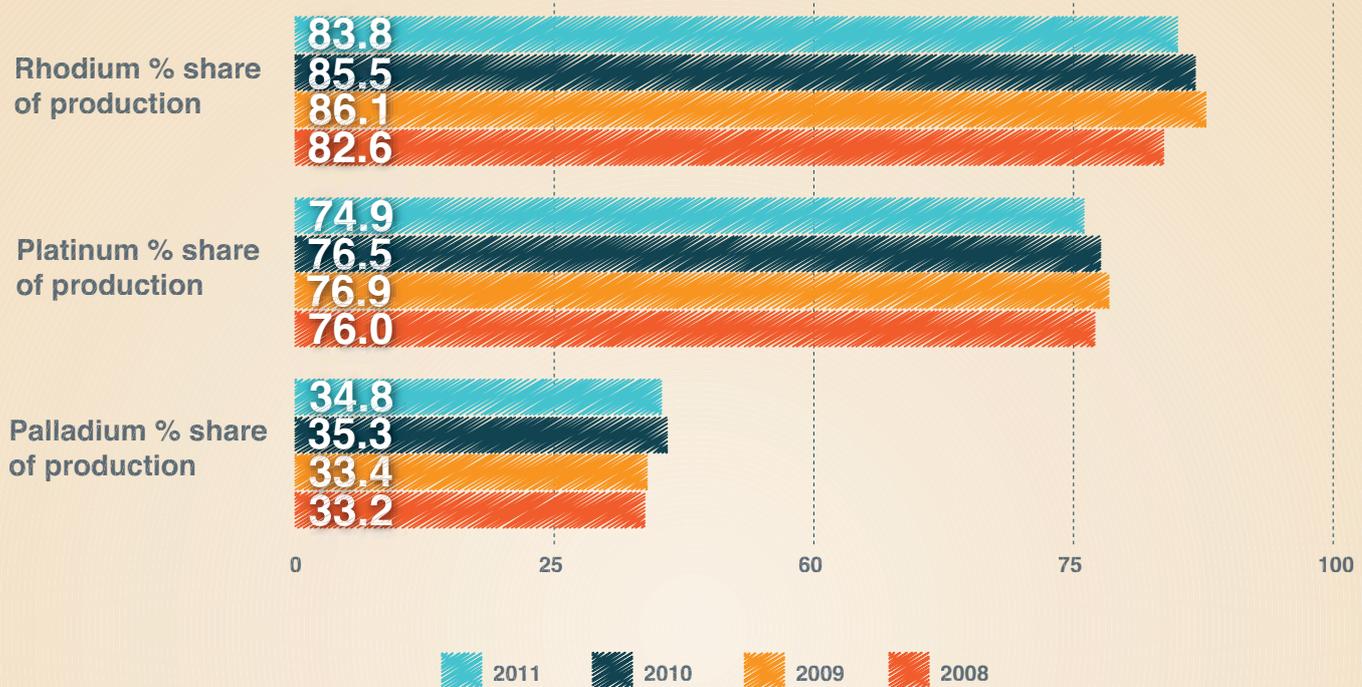


Source: Source: Johnson Matthey, Platinum 2012

SA SHARE OF PGM RESERVES AND PRODUCTION & EMPLOYMENT AND EARNINGS ON SA PGM MINES, 2011

In 2011, South Africa accounted for 83.8% of primary rhodium production, 74.9% of primary platinum production and 34.8% of primary palladium production (Figure 34). SA production of PGM's in 2011 was essentially in line with 2010, despite a challenging environment.

FIG34: SA SHARE OF PGM RESERVES & PRODUCTION



Source: Source: Johnson Matthey, Platinum 2012

The PGM sector employed 194 479 people in 2011, an increase of 7% from 2010, with employees earning R30.5 billion in salaries and wages (Figure 35).

FIGURE 35: EMPLOYMENT & EARNINGS – SA PGM MINES



Source: Source: Department of Mineral Resources

PLATINUM SUPPLY & DEMAND, 2002 – 2011

The global platinum market swung into oversupply of approximately 13.4 tons in 2011. Global supply grew by 7% to 201.6 tons from 188.2 tons in 2010. This increase was strongly due to a pipeline drawdown from SA- some South African mining companies' response to the rising unit costs has been to expand production to achieve economies of scale and reduce costs, in an attempt to protect margins. This has compounded the oversupply problem. A contributing factor was the increase in the recycling of metal. Recycling rose by 12% in this year to 62.2 tons (2.05mn oz).

TABLE 25: ANNUAL PLATINUM DEMAND, BY APPLICATION (METRIC TONS)

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Autocatalyst:	gross	80.6	101.7	108.6	118.0	121.5	128.9	113.7	68.0	95.6	96.6
	recycling	-17.6	-20.1	-21.5	-23.9	-26.7	-29.1	-35.1	-25.8	-33.7	-38.1
Chemical		10.1	10.0	10.1	10.1	12.3	13.1	12.4	9.0	13.7	14.6
Electrical	gross	9.8	8.1	9.3	11.2	11.2	7.9	7.2	5.9	7.2	7.2
	recycling	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.3
Glass		7.3	6.5	9.0	11.2	12.6	14.6	9.8	0.3	12.0	17.3
Investment:		2.5	0.5	1.4	0.5	-1.2	5.3	17.3	20.5	20.4	14.3
Jewellery	gross	87.7	78.1	67.2	76.7	68.3	65.6	64.1	87.4	75.3	77.1
	recycling	0.0	0.0	0.0	-15.6	-17.3	-20.4	-21.6	-17.6	-22.9	-25.2
Medical & Biomedical		0.0	0.0	0.0	7.8	7.8	7.2	7.6	7.8	7.2	7.2
Petroleum		4.0	3.7	4.7	5.3	5.6	6.4	7.5	6.5	5.3	6.5
Other		16.8	14.6	14.6	7.0	7.5	8.2	9.0	5.9	9.3	11.0
Total Demand		201.2	203.1	203.4	208.2	201.4	207.8	191.6	167.6	189.0	188.2
Movements in Stocks		-15.6	-10.3	-1.6	-1.7	11.0	-2.5	-6.8	19.8	-0.8	13.4

Source: Source: Johnson Matthey, Platinum 2012

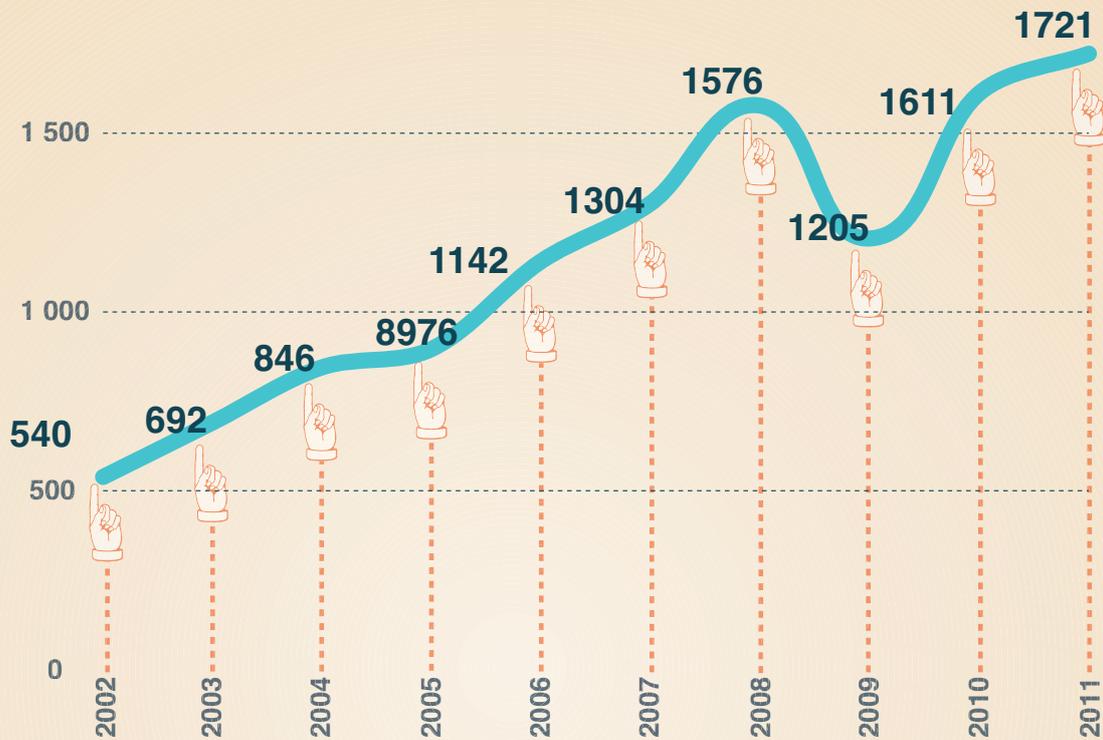
Totals may not add, due to rounding

Gross demand for platinum (excl recycling) in 2011, rose by 2% from 245.9 tons to 251.8 tons due to heavy purchasing demand in the glass and petrochemical industries (Table 25). Platinum demand in heavy duty diesels rose but this was offset by a drop in light duty diesel vehicles (substitution effect and lower demand growth in Europe), and reduced buying from Japanese manufacturers (Japanese earthquake reduced production). Given that Europe is the South African PGM mining industry's biggest market (27% of global platinum demand comes from Europe), the current sovereign debt crisis in the Eurozone and the resulting recession in that region has materially undermined the prospects of the PGM industry.

Jewellery demand (gross) remained strong at 77 tons, up 2% from its 2010 levels-, driven by demand from China (see table above). Demand in China remained robust in the first half of the year despite higher prices than in the previous year. Investment demand on the other hand contracted by 30%, from 20.4 tons in 2010 to 14.3 tons in 2011.

ANNUAL AVERAGE PLATINUM PRICE, 2011

FIG36: PLATINUM PRICE (ANNUAL AVERAGE), US\$/OZ



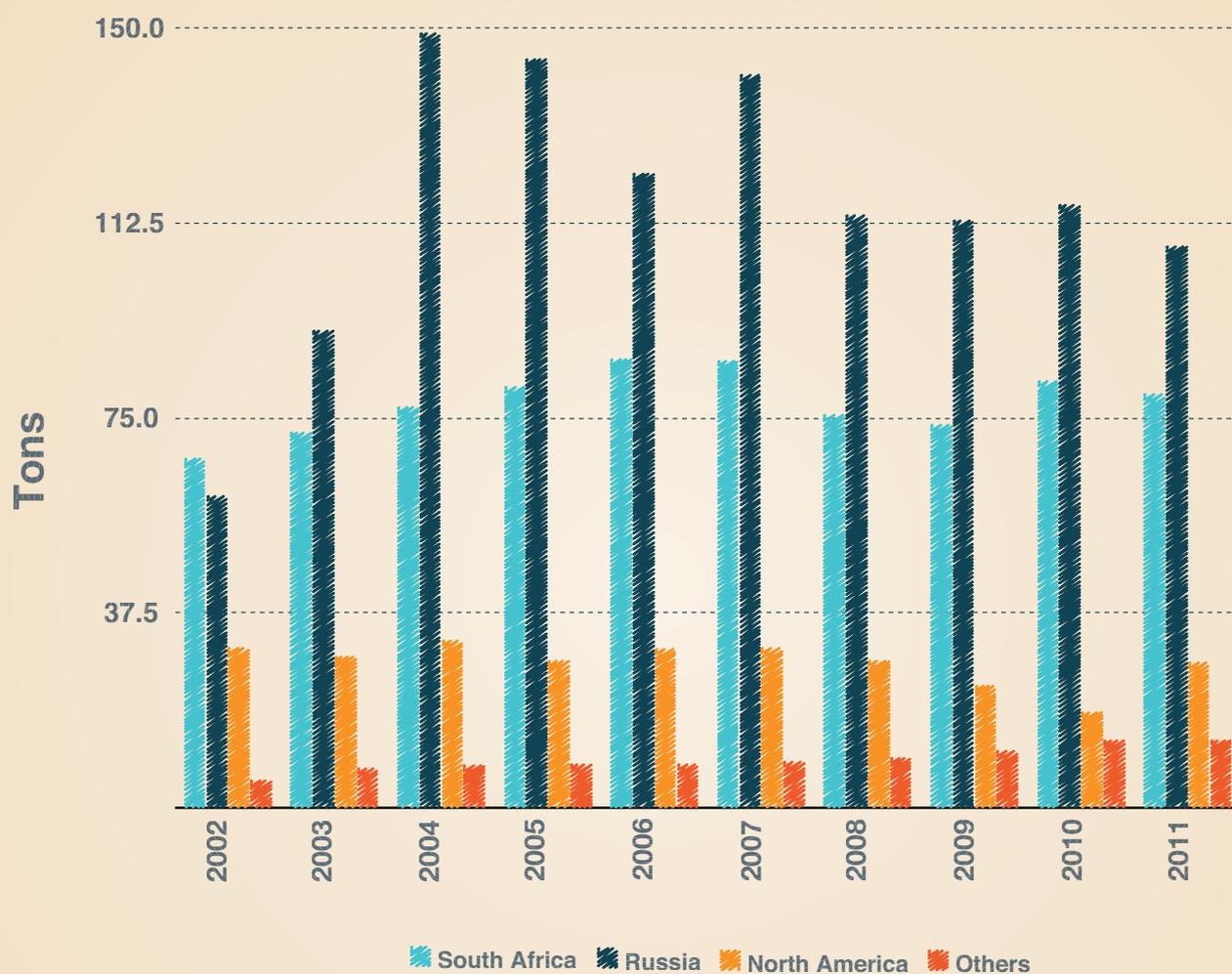
Source: Source: StatsSA, SARB

The platinum price in 2011 averaged US\$1,721 per oz, trading about 7% higher than the 2010 average of US\$1,611 per oz (Figure 36). As Eurozone concerns increased, commodity prices took a dive at end September 2011, as investors turned away from risk assets. With Greece on the brink of default, concerns around Italy and fears of a banking crisis in the region resulted in a risk off strategy, with bearish sentiments on platinum and palladium. Platinum reached a high of US\$1,887 in August, with a low of US\$1,354 in December of the same year.

PALLADIUM SUPPLY & DEMAND, 2002 – 2011

The global supply of palladium in 2011 remained flat at 228.9 tons. The increased production from North America and Zimbabwe was offset by a drop in sales from Russian State inventories (Figure 37). South African palladium production contracted by 3% from 82.1 tons in 2010, to 79.6 tons in 2011.

FIGURE 37: ANNUAL PALLADIUM SUPPLY BY COUNTRY



Source: Source: Johnson Matthey, Platinum 2012

Gross palladium demand (excl recycling) contracted by 13% in 2011, to 262.8 tons (Table 26). A strong automotive sector however, pushed up gross palladium demand by 8% to 187.6 tons in 2011. The growth in automotive sectors in most regions (excl Japan), as well as the increased use of palladium in light duty diesel aftertreatment systems were the drivers. Although autocatalyst and industrial demand for palladium rose, the sale of metal from the Russian government controlled inventories, together with a large amount of metal released from ETF's and higher recycling, meant that the palladium market moved into oversupply in 2011.

Gross jewellery demand contracted by 15% from 18.5 tons in 2010 to 15.7 tons in 2011.

Due the higher year-on-year average prices for palladium, many investors in the ETF market, were in a position to take profits in 2011. With net disinvestment in the ETF from late February onwards, total net ETF investment for 2011 was in negative territory by 17.6 tons (Table 26).

PALLADIUM SUPPLY & DEMAND, 2002 – 2011 (continued)

TABLE 26: ANNUAL PALLADIUM DEMAND, BY APPLICATION (METRIC TONS)

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Autocatalyst:	gross	94.9	107.3	117.9	120.2	124.9	141.4	138.9	126.0	173.6	187.6
	recycling	-11.5	-12.8	-16.5	-19.4	-25.0	-31.6	-35.5	-30.0	-40.7	-51.5
Chemical		7.9	8.2	9.6	12.9	13.7	11.7	10.9	10.1	11.5	13.8
Dental		24.4	25.7	26.4	25.3	19.3	19.6	19.4	19.8	18.5	17.1
Electrical	gross	23.6	28.0	28.6	39.7	46.5	48.2	42.6	42.6	43.9	42.9
	recycling	0.0	0.0	0.0	-9.5	-9.0	-9.8	-10.7	-12.3	-13.7	-14.9
Investment		0.0	0.9	6.2	6.8	1.6	8.1	13.1	19.4	34.1	-17.6
Jewellery	gross	8.4	8.1	28.9	46.3	35.5	29.5	30.6	24.1	18.5	15.7
	recycling	0.0	0.0	0.0	-1.9	-4.2	-7.3	-4.0	-2.2	-3.1	-6.5
Other		2.8	3.4	2.8	8.2	2.6	2.6	2.3	2.2	2.8	3.3
Total demand		150.5	168.9	204.0	228.8	205.7	212.4	207.6	199.7	245.3	189.9
Movements in stocks		12.8	31.7	62.8	32.7	41.5	54.4	19.8	21.2	-16.5	39.0

Source: Source: Johnson Matthey, Platinum 2012

Totals may not add, due to rounding

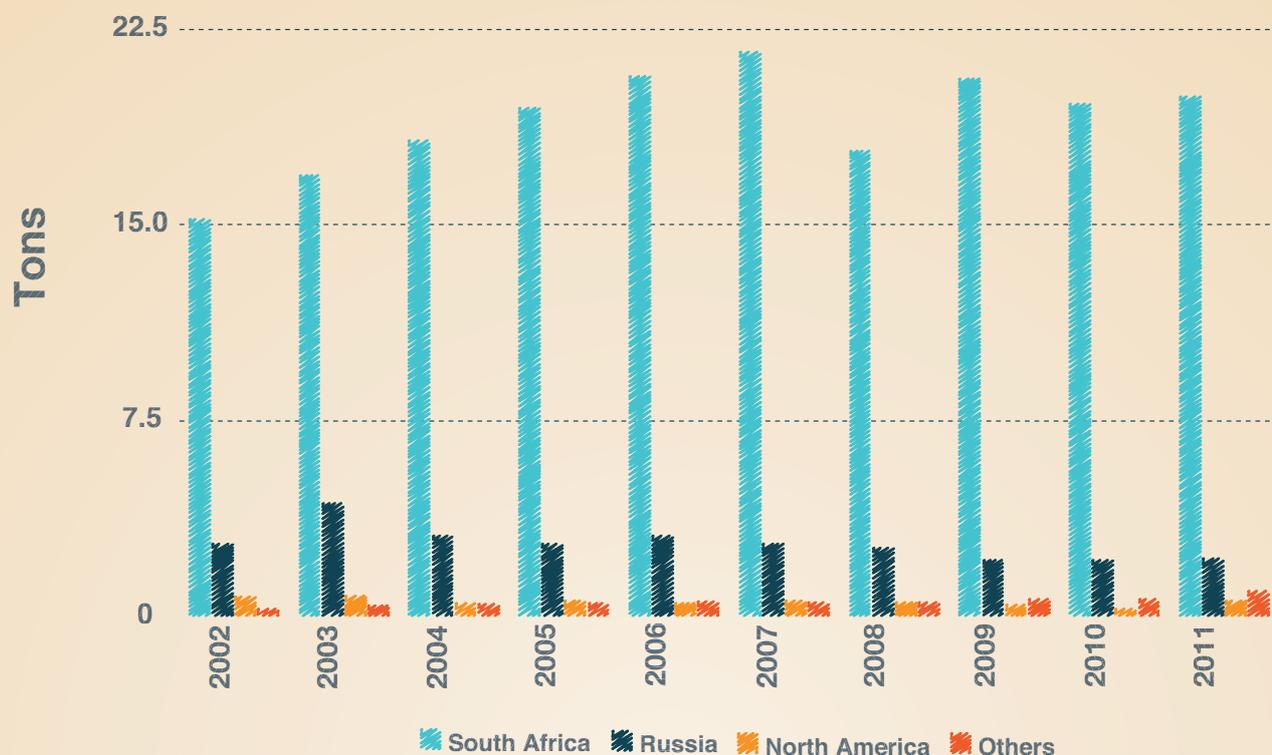
The palladium price in 2011 averaged US\$733 per oz, trading about 39% higher than the 2010 average of US\$526 per oz. A deep sell-off in the ETF market, together with the perception of weaker fundamentals led the palladium price to fall from its highs of US\$850 during the first 3 quarters of 2011, to trade at US\$700 for the rest of the year.

RHODIUM SUPPLY & DEMAND, 2002 – 2011

Despite a growth in demand, the rhodium market remained in surplus in 2011 by 0.4tons, as a result of higher supplies & recycling. A modest growth in demand was outpaced by a rise in supplies and higher volumes of metal recovered from scrap autocatalysts.

Total supply grew by 4% to 23.8tons, largely due to increased supplies from North America & Zimbabwe (Figure 38). South African rhodium increased by 1.4% to 19.9tons, from 19.7 tons in 2010.

FIGURE 38: ANNUAL RHODIUM SUPPLY BY COUNTRY



Source: Source: Johnson Matthey, Platinum 2012

TABLE 27: ANNUAL RHODIUM DEMAND, BY APPLICATION (METRIC TONS)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Autocatalyst:	gross	18.6	20.5	23.6	25.8	26.8	27.6	23.9	19.3	22.6	22.1
	recycling	-3.1	-3.9	-4.4	-4.3	-5.3	-6.0	-7.1	-5.8	-7.5	-8.7
Chemical	1.2	1.2	1.3	1.5	1.5	2.0	2.1	1.7	2.1	2.2	
Electrical	0.2	0.2	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.2	
Glass	1.2	0.8	1.4	1.8	2.0	1.8	1.1	0.6	2.1	2.4	
Other	0.3	0.4	0.4	0.6	0.7	0.7	0.7	0.7	0.7	1.2	
Total demand	18.4	19.3	22.7	25.7	26.1	26.3	20.8	16.5	20.1	19.5	
Movements in stocks	0.7	3.2	-0.3	-2.3	-1.1	-0.6	0.8	7.5	2.7	4.3	

Source: Source: Johnson Matthey, Platinum 2012

Totals may not add, due to rounding

Gross demand for rhodium increased by 2.1% in 2011, to 28.2 tons, due to capacity building in the glass industry and investment in a new rhodium ETF.

The first physically-backed rhodium ETF was launched by Deutsche Bank in May 2011, and attracted steady new investment (on aggregate) of 529 tons for the year.

Gross autocatalyst demand contracted by 2% to 22.1 tons due to lower output by Japanese car manufacturers (see table above). Reason being, the earthquake in Japan in March 2011, vastly affected vehicle production and hence rhodium purchases for use in autocatalysts. Japanese manufacturers are the largest users of rhodium in gasoline aftertreatment processes.

The rhodium price in 2011 averaged US\$2,022 per oz, trading about 18% lower than the 2010 average of US\$2,458 per oz. The rhodium price reflected weaker fundamentals, reaching a two-and-a-half year low of US\$1,400 by the end of 2011.

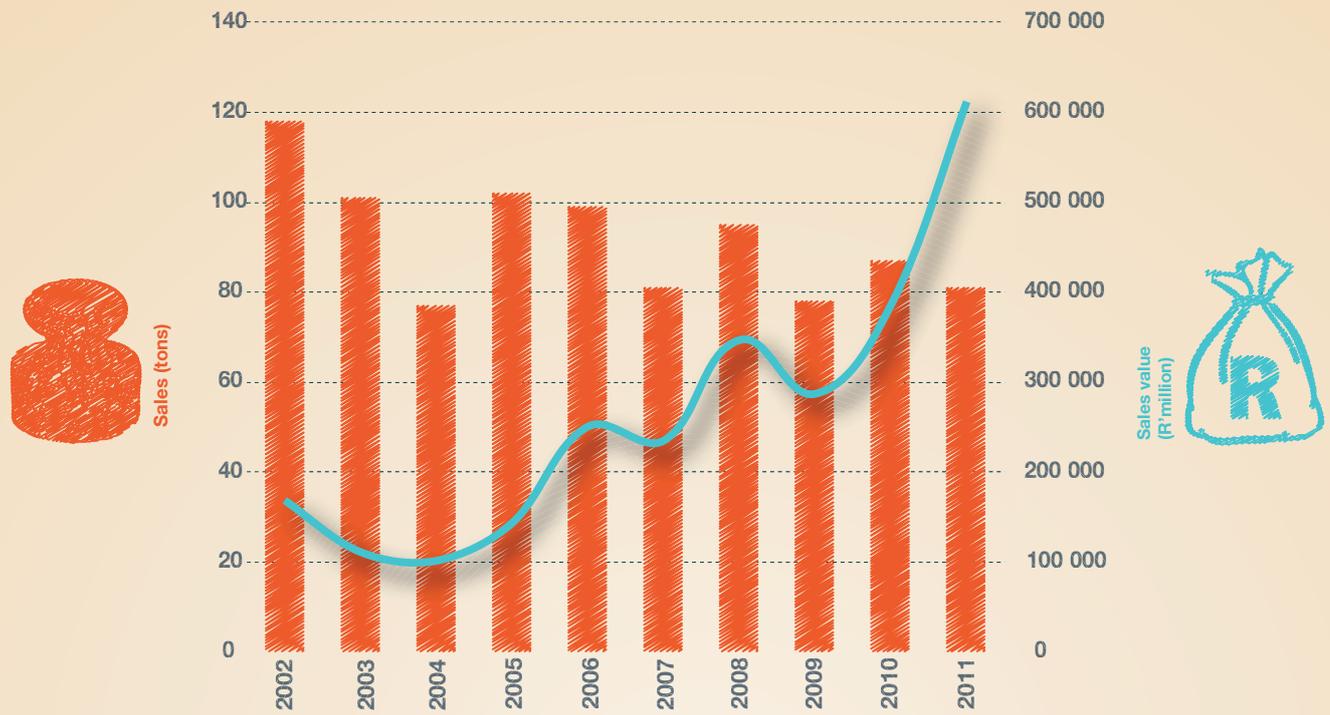
TABLE 28: SILVER: ANNUAL SA OUTPUT & SALES, 1910-2011

Year	Production (kgs, fine)	Sales Value (₹R)	Year	Production (kgs, fine)	Sales Value (₹R)	Year	Production (kgs, fine)	Sales Value (₹R)	Year	Production (kgs, fine)	Sales Value (₹R)
1910	25 287	181 580	1936	33 456	194 102	1962	79 289	1 952 200	1988	199 746	79 469 224
1911	27 888	197 014	1937	34 233	198 926	1963	85 126	2 511 941	1989	179 829	69 628 311
1912	31 695	248 748	1938	35 314	199 348	1964	90 718	2 720 349	1990	161 003	57 314 758
1913	29 629	231 644	1939	36 780	217 000	1965	97 403	2 902 564	1991	170 832	38 329 339
1914	27 706	204 942	1940	40 195	259 108	1966	97 480	2 936 887	1992	190 462	55 816 450
1915	30 051	212 490	1941	45 123	313 128	1967	95 286	3 536 449	1993	182 513	67 922 850
1916	30 137	212 622	1942	45 957	312 810	1968	103 794	3 546 137	1994	195 794	78 913 490
1917	29 180	345 994	1943	41 493	282 432	1969	103 718	4 114 099	1995	163 048	68 640 332
1918	27 294	375 216	1944	37 730	256 818	1970	109 701	4 392 365	1996	155 529	83 012 940
1919	27 723	457 608	1945	38 675	315 144	1971	105 071	4 566 873	1997	187 402	102 261 000
1920	27 763	491 742	1946	37 554	489 072	1972	102 443	5 239 165	1998	160 828	122 821 438
1921	25 826	274 882	1947	35 697	436 124	1973	113 591	7 331 163	1999	160 807	153 509 773
1922	34 701	342 854	1948	36 421	439 526	1974	83 940	8 207 660	2000	168 617	169 937 577
1923	42 734	395 776	1949	36 061	475 536	1975	95 923	10 012 472	2001	126 482	141 723 487
1924	43 450	424 940	1950	34 809	604 230	1976	87 736	10 617 725	2002	118 256	168 674 333
1925	36 126	333 796	1951	36 161	754 214	1977	97 364	12 607 089	2003	101 119	111 215 548
1926	30 523	253 160	1952	36 591	728 796	1978	96 559	14 695 091	2004	76 594	101 478 216
1927	31 469	237 062	1953	37 111	735 226	1979	100 664	29 872 517	2005	102 265	143 503 595
1928	32 079	248 128	1954	38 426	756 526	1980	222 188	82 520 689	2006	99 343	250 621 132
1929	32 092	227 006	1955	45 876	958 074	1981	228 834	55 822 121	2007	80 549	235 040 623
1930	32 660	166 828	1956	49 712	1 054 066	1982	242 748	53 171 269	2008	94 830	346 844 987
1931	33 065	139 520	1957	54 975	1 135 762	1983	201 752	71 139 799	2009	78 198	287 103 382
1932	34 857	131 678	1958	55 843	1 163 186	1984	217 068	66 186 353	2010	86 735	386 078 880
1933	33 126	173 708	1959	62 853	1 325 562	1985	208 384	75 010 169	2011	81 221	611 933 219
1934	31 172	191 374	1960	69 243	1 471 882	1986	222 241	73 975 331			
1935	32 416	271 806	1961	71 173	1 576 355	1987	208 150	74 187 998			

+ From 1981 the figures represent sales of silver.

Source: Department of Mineral resources

FIGURE 39: SILVER SALES (TONS & VALUE)



Source: Department of Mineral Resources

TABLE 29: URANIUM OUTPUT AND PRODUCTION, 1970 – 2011

Year	Metric tons treated (1000)	Total Uranium Oxide Produced (kg)	Grade (Kg per ton treated)	Total SA Uranium Production (metric tons)
1970	13 976	3 736 819	0.267	3 737
1971	14 253	3 800 007	0.267	3 800
1972	14 609	3 629 265	0.248	3 778
1973	12 828	3 093 982	0.241	3 230
1974	14 654	3 074 418	0.210	3 177
1975	14 873	2 809 490	0.189	2 902
1976	17 267	3 111 366	0.180	3 288
1977	19 855	*3873795	0.179	3 972
1978	21 976	*4531157	0.171	4 687
1979	26 096	*5539081	0.168	5 637
1980	30 841	*6086442	0.166	7 295
1981	31 362	*6030171	0.157	7 234
1982	30 415	*5733188	0.160	6 863
1983	32 010	*6138282	0.169	7 128
1984	29 490	*5896062	0.180	6 762
1985	25 856	*5114008	0.175	5 751
1986	24 836	*4799301	0.172	5 460
1987	21 805	*3920002	0.159	4 735
1988	20 174	*3783364	0.163	4 583
1989	15 326	*3185428	0.179	3 456
1990	14 213	*2697125	0.178	2 913
1991	10 145	1 885 257	0.186	2 034
1992	9 768	1 854 946	0.190	1 971
1993	9 675	1 912 921	0.198	2 008
1994	9 250	1 818 717	0.197	1 906
1995	8 345	1 554 210	0.186	1 701
1996	8 661	1 594 506	0.184	1 706
1997	6 536	1 198 742	0.183	1 324
1998	4 810	1 061 492	0.221	1 138
1999	4 021	997 297	0.248	1 093
2000	3 098	894 109	0.289	1 015
2001	2 824	1 024 838	0.363	1 065
2002	2 789	979 865	0.351	998
2003	2 836	915 861	0.323	894
2004	2 799	880 943	0.315	887
2005	2 638	793 943	0.301	795
2006	2 705	630 103	0.233	639
2007	2 462	557 525	0.226	619
2008	2 502	582 001	0.233	654
2009	2 471	654 086	0.265	629
2010	2 437	691 359	0.284	682
2011	2 174	626 117	0.288	656
Total	775,199	177,615,141	0.217	189,797

* Includes production from Free state Cons Gold mines Metallurgical Scheme. These figures are excluded from the grade calculation.

** Total Production includes non-members of the Chamber.

**TABLE 30: CUMULATIVE URANIUM OUTPUT –
CHAMBER MEMBERS**

Name of Company		Date commenced production	Cummulative metric tons treated (1000)	Cummulative uranium produced (kg)	Grade (kg per ton treated)
Anglogold Ashanti	(i)	May 1956	211 376	49 610 735	0.235
Blyvooruitzicht		April 1953	37 947	6 551 267	0.173
Buffelsfontein (Buffels)		July 1957	83 820	18 237 778	0.218
Daggafontein		April 1953	11 183	2 160 591	0.193
Dominion Reefs		June 1955	3 578	1 822 873	0.510
Doornfontein		Oct. 1956	1 835	266 238	0.145
Driefontein Cons. (West Driefontein)		Oct. 1956	20 529	3 915 762	0.191
East Champ d'Or		Feb. 1954	1 371	552 993	0.396
Ellaton		Oct. 1954	2 153	329 585	0.153
Freddies Cons.	(g)	Feb. 1955	4 555	580 667	0.127
Free State Saaiplaas	(h)	Feb. 1955	350	45 545	0.130
Harmony	(a)	July 1955	103 261	12 490 823	0.121
Hartebeestfontein		Nov. 1956	103 426	16 456 207	0.159
Lorraine		Nov. 1956	2 807	330 969	0.118
Luipaardsvlei		Jan. 1955	4 518	3 518 258	0.779
Merriespruit	(b), (c)	Mar. 1956	518	14 249	0.028
President Brand	(h)	Feb. 1955	4 521	566 693	0.125
President Steyn	(h)	Feb. 1955	5 566	736 015	0.132
Randfontein		Feb. 1954	45 248	12 060 225	0.266
St. Helena (Beisa section)		Jan. 1982	2 298	1 061 698	0.462
Stilfontein		Oct. 1953	7 328	987 707	0.135
Virginia	(c)	Sept. 1955	22 067	5 279 693	0.239
Vogelstruisbult		April 1955	3 480	844 797	0.242
Welkom	(h)	May 1957	3 453	491 898	0.142
West Rand Cons.	(d)	Sept. 1952	22 332	13 035 712	0.584
Western Areas		Jan. 1982	9 408	4 037 235	0.429
Western Deep Levels		Feb. 1970	17 136	2 553 326	0.149
Western Reefs	(e)	Oct. 1953	34 933	8 475 181	0.243
Zandpan	(f)	Mar. 1966	4 205	1 419 095	0.337
Free State Cons. Joint Metallurgical Scheme		1977	-	8 583 087	-
Miscellaneous Producers - Chamber members		1978	-	598 240	-

Source: Chamber of Mines

NOTES:

- (a) Consolidated operations of the company and its wholly owned subsidiaries.
 (b) Ceased production in October 1956, due to flooding and subsequently became a wholly owned subsidiary of Harmony.
 (c) Became a wholly owned subsidiary of Harmony.
 (d) Ceased uranium production at the end of 1974 - resumed production 1976 and ceased uranium production in 1981.
 (e) Includes Joint Production Scheme with Vaal Reefs. As from 20 September 1971, merged with Vaal Reefs.
 (f) As from 1 July 1972, merged with Hartebeestfontein.
 (g) As from 1977, merged with Free State Geduld - see note (b).
 (h) These Mines together with Free State Geduld; Free State Saaiplaas; and Western Holdings - as from 1977, are participants in the Anglo American O.F.S. Joint Metallurgical Production Scheme, which has merged with Free State Cons. (South Region).
 (i) As from 1999, Vaal Reefs renamed Vaal River Operations and reports under the name Anglogold.

