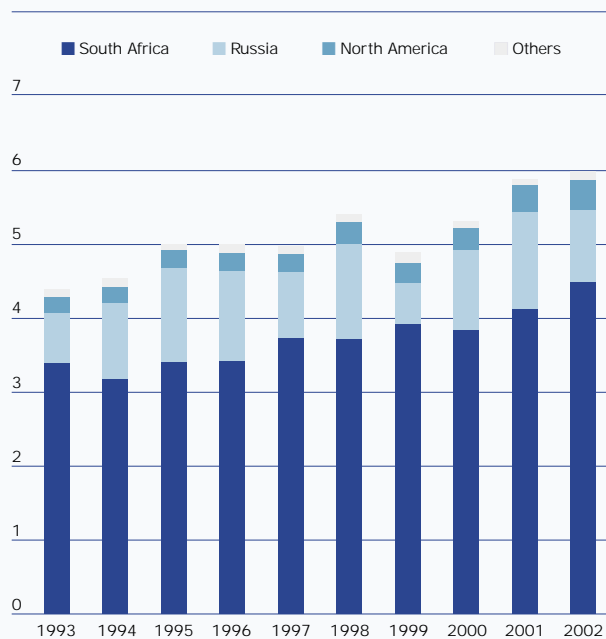


Platinum Supply and Demand

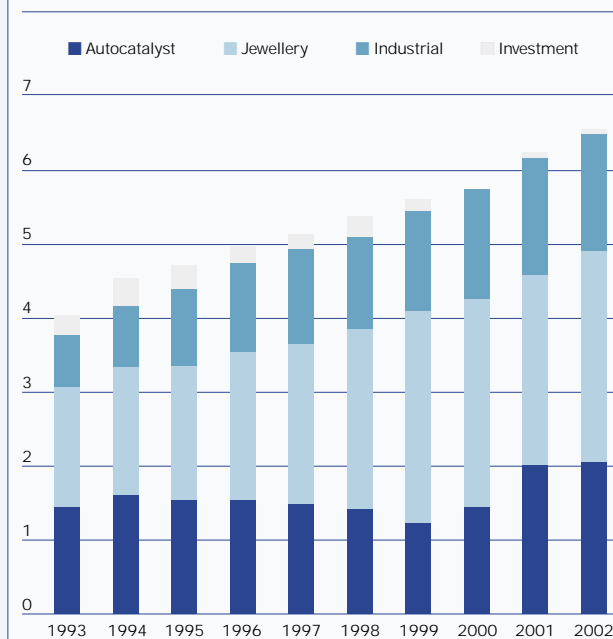
'000 oz	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply										
South Africa	3,360	3,160	3,370	3,390	3,700	3,680	3,900	3,800	4,100	4,450
Russia	680	1,010	1,280	1,220	900	1,300	540	1,100	1,300	980
North America	220	220	240	240	240	285	270	285	360	395
Others	130	140	100	130	120	135	160	105	100	145
Total Supply	4,390	4,530	4,990	4,980	4,960	5,400	4,870	5,290	5,860	5,970
Demand by Application										
Autocatalyst: gross	1,685	1,870	1,850	1,880	1,830	1,800	1,610	1,890	2,520	2,610
recovery	(255)	(290)	(320)	(350)	(370)	(405)	(420)	(470)	(530)	(570)
Chemical	180	195	225	230	235	280	320	295	290	325
Electrical	165	190	250	275	305	300	370	455	385	380
Glass	85	170	245	255	265	220	200	255	290	255
Investment: small	125	155	75	110	180	210	90	40	50	45
large	180	240	270	130	60	105	90	(100)	40	35
Jewellery	1,625	1,760	1,880	1,990	2,160	2,430	2,880	2,830	2,590	2,830
Petroleum	105	95	135	185	170	125	115	110	130	140
Other	170	195	230	255	295	305	335	375	465	490
Total Demand	4,065	4,580	4,840	4,960	5,130	5,370	5,590	5,680	6,230	6,540
Movements in Stocks	325	(50)	150	20	(170)	30	(720)	(390)	(370)	(570)



Platinum Supply by Region
1993-2002
Million oz



Platinum Demand by Application
1993-2002
Million oz



Platinum Demand by Application: Regions

'000 oz	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Europe										
Autocatalyst: gross	610	605	560	515	510	545	560	680	1,060	1,240
recovery	(5)	(10)	(15)	(20)	(25)	(30)	(30)	(40)	(70)	(90)
Chemical	40	50	55	60	70	60	80	100	105	115
Electrical	20	25	25	25	45	45	70	80	65	65
Glass	15	30	35	40	20	25	20	20	10	10
Investment: small	25	45	10	5	5	5	5	0	0	0
Jewellery	105	100	120	125	150	160	185	190	170	165
Petroleum	25	25	15	15	15	15	15	15	15	15
Other	60	65	75	75	85	85	90	105	155	170
Total	895	935	880	840	875	910	995	1,150	1,510	1,690
Japan										
Autocatalyst: gross	320	290	270	245	255	240	250	290	340	425
recovery	(50)	(45)	(40)	(50)	(50)	(55)	(60)	(60)	(55)	(60)
Chemical	15	15	20	20	20	20	20	20	25	30
Electrical	45	45	45	45	65	55	75	90	80	80
Glass	30	80	105	80	85	80	65	65	85	80
Investment: small	55	40	35	25	25	25	20	5	5	5
large	180	240	270	130	60	105	90	(100)	40	35
Jewellery	1,350	1,450	1,480	1,480	1,390	1,290	1,320	1,060	750	780
Petroleum	10	5	5	5	5	5	5	5	5	5
Other	20	25	25	25	30	30	35	35	35	40
Total	1,975	2,145	2,215	2,005	1,885	1,795	1,820	1,410	1,310	1,420
North America										
Autocatalyst: gross	600	790	820	850	800	775	535	620	795	570
recovery	(200)	(230)	(260)	(275)	(290)	(310)	(315)	(350)	(370)	(380)
Chemical	75	65	70	80	80	80	95	100	100	100
Electrical	65	75	115	130	100	105	120	145	120	115
Glass	15	20	25	30	45	20	25	50	35	30
Investment: small	40	65	25	75	145	175	60	35	45	40
Jewellery	45	55	65	90	160	270	330	380	280	310
Petroleum	40	5	40	60	50	40	40	35	40	45
Other	80	95	115	140	160	170	190	210	250	255
Total	760	940	1,015	1,180	1,250	1,325	1,080	1,225	1,295	1,085
Rest of the World										
Autocatalyst: gross	155	185	200	270	265	240	265	300	325	375
recovery	0	(5)	(5)	(5)	(5)	(10)	(15)	(20)	(35)	(40)
Chemical	50	65	80	70	65	120	125	75	60	80
Electrical	35	45	65	75	95	95	105	140	120	120
Glass	25	40	80	105	115	95	90	120	160	135
Investment: small	5	5	5	5	5	5	5	0	0	0
Jewellery	125	155	215	295	460	710	1,045	1,200	1,390	1,575
Petroleum	30	60	75	105	100	65	55	55	70	75
Other	10	10	15	15	20	20	20	25	25	25
Total	435	560	730	935	1,120	1,340	1,695	1,895	2,115	2,345

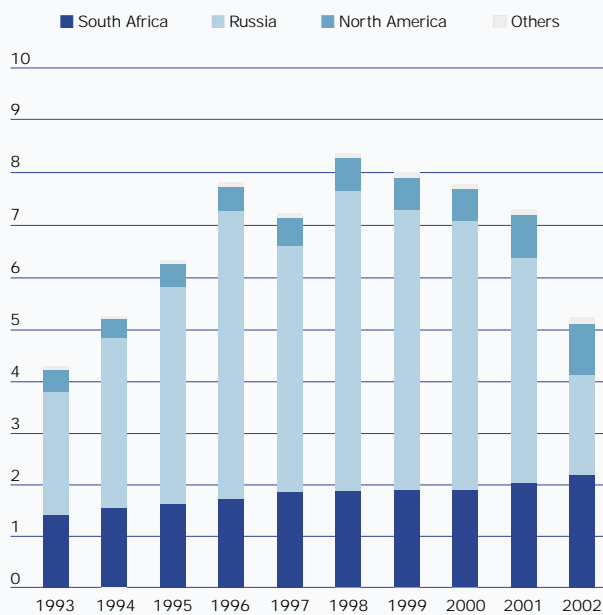


Palladium Supply and Demand

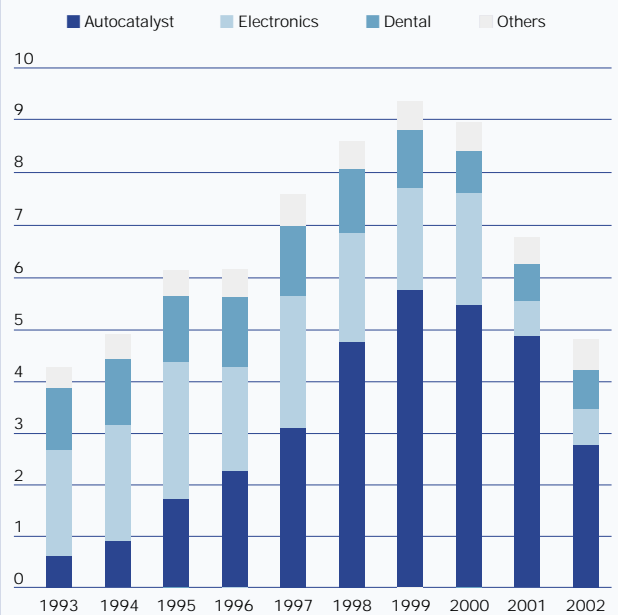
'000 oz	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply										
South Africa	1,395	1,500	1,600	1,690	1,810	1,820	1,870	1,860	2,010	2,160
Russia	2,400	3,300	4,200	5,600	4,800	5,800	5,400	5,200	4,340	1,930
North America	415	410	470	455	545	660	630	635	850	990
Others	70	70	70	95	95	120	160	105	120	170
Total Supply	4,280	5,280	6,340	7,840	7,250	8,400	8,060	7,800	7,320	5,250
Demand by Application										
Autocatalyst: gross	705	975	1,800	2,360	3,200	4,890	5,880	5,640	5,090	3,080
recovery	(100)	(105)	(110)	(145)	(160)	(175)	(195)	(230)	(280)	(370)
Chemical	190	185	210	240	240	230	240	255	250	255
Dental	1,210	1,265	1,290	1,320	1,350	1,230	1,110	820	725	750
Electronics	2,015	2,230	2,620	2,020	2,550	2,075	1,990	2,160	670	710
Jewellery	210	205	200	215	260	235	235	255	230	260
Other	35	115	110	140	140	115	110	60	65	95
Total Demand	4,265	4,870	6,120	6,150	7,580	8,600	9,370	8,960	6,750	4,780
Movements in Stocks	15	410	220	1,690	(330)	(200)	(1,310)	(1,160)	570	470



**Palladium Supply by Region
1993-2002**
Million oz




**Palladium Demand by Application
1993-2002**
Million oz



Palladium Demand by Application: Regions

'000 oz	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Europe										
Autocatalyst: gross	115	260	650	860	1,100	1,370	1,530	1,900	1,730	1,430
recovery	0	0	0	(5)	(5)	(5)	(10)	(15)	(30)	(45)
Chemical	65	60	65	65	70	65	65	95	65	70
Dental	265	255	250	255	260	210	180	100	50	50
Electronics	210	255	325	300	340	270	255	265	35	80
Jewellery	35	30	30	30	50	50	50	45	35	35
Other	(10)	25	20	20	25	25	25	20	20	20
Total	680	885	1,340	1,525	1,840	1,985	2,095	2,410	1,905	1,640
Japan										
Autocatalyst: gross	90	125	145	180	245	480	600	510	505	515
recovery	(30)	(30)	(25)	(30)	(45)	(50)	(55)	(50)	(40)	(40)
Chemical	20	20	20	20	20	20	20	20	20	20
Dental	500	550	580	600	620	590	545	470	475	485
Electronics	1,280	1,400	1,600	990	1,390	1,060	980	990	260	155
Jewellery	120	120	115	115	110	105	105	150	140	165
Other	10	15	10	10	10	10	10	15	10	10
Total	1,990	2,200	2,445	1,885	2,350	2,215	2,205	2,105	1,370	1,310
North America										
Autocatalyst: gross	450	525	950	1,230	1,680	2,820	3,490	2,805	2,375	635
recovery	(70)	(75)	(85)	(110)	(105)	(115)	(125)	(155)	(200)	(260)
Chemical	65	60	70	70	70	70	75	65	75	75
Dental	400	410	410	410	415	390	350	230	190	205
Electronics	420	450	545	490	550	460	405	485	250	250
Jewellery	5	5	5	5	10	10	10	10	0	0
Other	25	55	65	90	55	55	50	5	15	45
Total	1,295	1,430	1,960	2,185	2,675	3,690	4,255	3,445	2,705	950
Rest of the World										
Autocatalyst: gross	50	65	55	90	175	220	260	425	480	500
recovery	0	0	0	0	(5)	(5)	(5)	(10)	(10)	(25)
Chemical	40	45	55	85	80	75	80	75	90	90
Dental	45	50	50	55	55	40	35	20	10	10
Electronics	105	125	150	240	270	285	350	420	125	225
Jewellery	50	50	50	65	90	70	70	50	55	60
Other	10	20	15	20	50	25	25	20	20	20
Total	300	355	375	555	715	710	815	1,000	770	880



Rhodium Supply and Demand										
'000 oz	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply										
South Africa	278	330	342	359	377	400	410	457	452	485
Russia	80	80	80	110	240	110	65	290	125	90
North America	17	15	13	5	16	16	18	17	23	28
Others	1	1	1	2	3	4	8	3	4	9
Total Supply	376	426	436	476	636	530	501	767	604	612
Demand by Application										
Autocatalyst: gross	356	379	464	424	418	483	509	793	566	600
recovery	(25)	(34)	(37)	(45)	(49)	(57)	(65)	(79)	(88)	(99)
Chemical	11	10	13	21	36	31	34	39	44	42
Electrical	9	8	8	9	9	6	6	7	6	6
Glass	3	14	17	53	43	34	35	42	41	37
Other	12	11	9	9	10	10	9	10	10	11
Total Demand	366	388	474	471	467	507	528	812	579	596
Movements in Stocks	10	38	(38)	5	169	23	(27)	(45)	25	16
										

Notes to tables

Supply figures are estimates of sales by the mines of primary pgm.

With the exception of the autocatalyst sector, **demand** estimates are net figures, demand in each sector being total purchases by consumers less any sales back to the market. Thus, annual totals represent the amount of primary metal that is acquired by consumers in a particular year. We continue to exclude the CIS from our demand estimates.

Movements in stocks in a given year reflect changes in stocks held by fabricators, dealers, banks and depositories but excluding stocks held by primary refiners and final consumers. A positive figure indicates an increase in stocks; a negative figure indicates a rundown in stocks.

Gross autocatalyst demand is purchases of pgm by the auto industry for manufacture of catalytic converters. **Autocatalyst recovery** is pgm recovered from scrapped catalytic converters and is allocated to the region in which the converter was scrapped.

Investment: small refers to the long-term holding of metal in the form of coins, and bars weighing 10 oz or less. **Investment: large** is in the form of 500 g and 1 kg bars in Japan and includes platinum held on account for subscribers to accumulation plans.