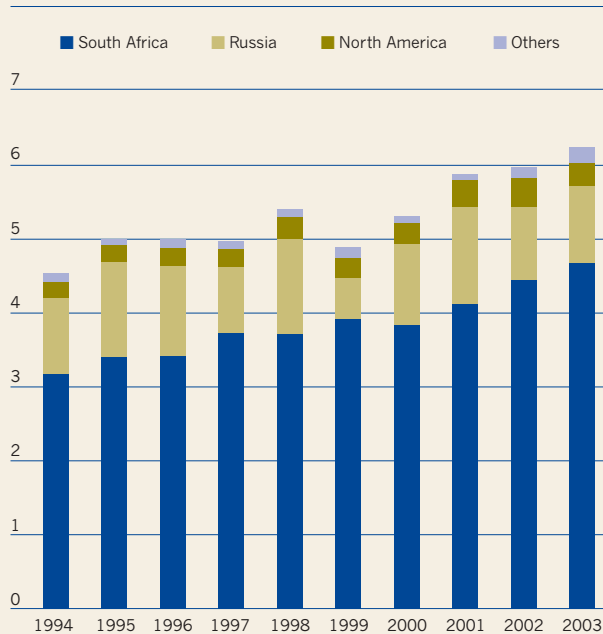


## Platinum Supply and Demand

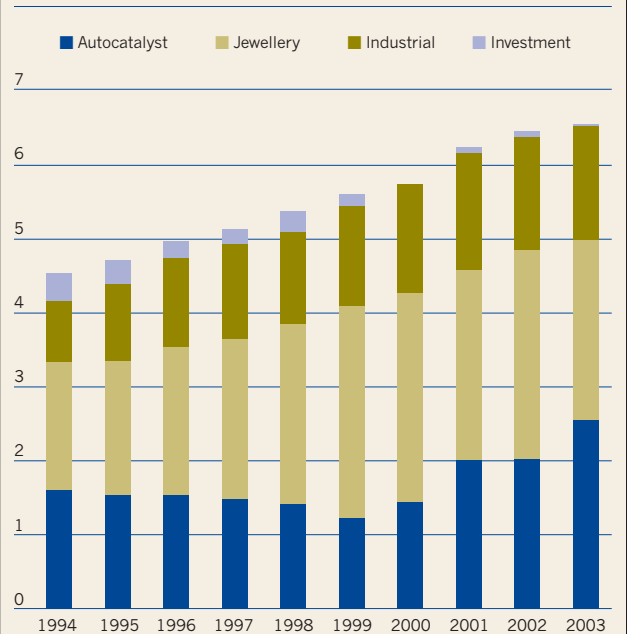
'000 oz	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Supply</b>										
South Africa	3,160	3,370	3,390	3,700	3,680	3,900	3,800	4,100	4,450	<b>4,670</b>
Russia	1,010	1,280	1,220	900	1,300	540	1,100	1,300	980	<b>1,050</b>
North America	220	240	240	240	285	270	285	360	390	<b>295</b>
Others	140	100	130	120	135	160	105	100	150	<b>225</b>
<b>Total Supply</b>	<b>4,530</b>	<b>4,990</b>	<b>4,980</b>	<b>4,960</b>	<b>5,400</b>	<b>4,870</b>	<b>5,290</b>	<b>5,860</b>	<b>5,970</b>	<b>6,240</b>
<b>Demand by Application</b>										
Autocatalyst: gross	1,870	1,850	1,880	1,830	1,800	1,610	1,890	2,520	2,590	<b>3,190</b>
recovery	(290)	(320)	(350)	(370)	(405)	(420)	(470)	(530)	(565)	<b>(645)</b>
Chemical	195	225	230	235	280	320	295	290	325	<b>310</b>
Electrical	190	250	275	305	300	370	455	385	315	<b>340</b>
Glass	170	245	255	265	220	200	255	290	235	<b>175</b>
Investment: small	155	75	110	180	210	90	40	50	45	<b>30</b>
large	240	270	130	60	105	90	(100)	40	35	<b>(15)</b>
Jewellery	1,760	1,880	1,990	2,160	2,430	2,880	2,830	2,590	2,820	<b>2,440</b>
Petroleum	95	135	185	170	125	115	110	130	130	<b>150</b>
Other	195	230	255	295	305	335	375	465	540	<b>545</b>
<b>Total Demand</b>	<b>4,580</b>	<b>4,840</b>	<b>4,960</b>	<b>5,130</b>	<b>5,370</b>	<b>5,590</b>	<b>5,680</b>	<b>6,230</b>	<b>6,470</b>	<b>6,520</b>
<b>Movements in Stocks</b>	<b>(50)</b>	<b>150</b>	<b>20</b>	<b>(170)</b>	<b>30</b>	<b>(720)</b>	<b>(390)</b>	<b>(370)</b>	<b>(500)</b>	<b>(280)</b>



**Platinum Supply by Region  
1994-2003**  
Million oz



**Platinum Demand by Application  
1994-2003**  
Million oz



## Platinum Demand by Application: Regions

'000 oz	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Europe</b>										
Autocatalyst: gross	605	560	515	510	545	560	680	1,060	1,210	<b>1,340</b>
recovery	(10)	(15)	(20)	(25)	(30)	(30)	(40)	(70)	(90)	<b>(110)</b>
Chemical	50	55	60	70	60	80	100	105	115	<b>105</b>
Electrical	25	25	25	45	45	70	80	65	40	<b>45</b>
Glass	30	35	40	20	25	20	20	10	10	<b>10</b>
Investment: small	45	10	5	5	5	5	0	0	0	<b>0</b>
Jewellery	100	120	125	150	160	185	190	170	160	<b>170</b>
Petroleum	25	15	15	15	15	15	15	15	15	<b>15</b>
Other	65	75	75	85	85	90	105	155	190	<b>195</b>
<b>Total</b>	<b>935</b>	<b>880</b>	<b>840</b>	<b>875</b>	<b>910</b>	<b>995</b>	<b>1,150</b>	<b>1,510</b>	<b>1,650</b>	<b>1,770</b>
<b>Japan</b>										
Autocatalyst: gross	290	270	245	255	240	250	290	340	430	<b>510</b>
recovery	(45)	(40)	(50)	(50)	(55)	(60)	(60)	(55)	(55)	<b>(60)</b>
Chemical	15	20	20	20	20	20	20	25	30	<b>40</b>
Electrical	45	45	45	65	55	75	90	80	55	<b>60</b>
Glass	80	105	80	85	80	65	65	85	60	<b>50</b>
Investment: small	40	35	25	25	25	20	5	5	5	<b>5</b>
large	240	270	130	60	105	90	(100)	40	35	<b>(15)</b>
Jewellery	1,450	1,480	1,480	1,390	1,290	1,320	1,060	750	780	<b>665</b>
Petroleum	5	5	5	5	5	5	5	5	5	<b>5</b>
Other	25	25	25	30	30	35	35	35	55	<b>55</b>
<b>Total</b>	<b>2,145</b>	<b>2,215</b>	<b>2,005</b>	<b>1,885</b>	<b>1,795</b>	<b>1,820</b>	<b>1,410</b>	<b>1,310</b>	<b>1,400</b>	<b>1,315</b>
<b>North America</b>										
Autocatalyst: gross	790	820	850	800	775	535	620	795	570	<b>880</b>
recovery	(230)	(260)	(275)	(290)	(310)	(315)	(350)	(370)	(380)	<b>(425)</b>
Chemical	65	70	80	80	80	95	100	100	100	<b>90</b>
Electrical	75	115	130	100	105	120	145	120	100	<b>100</b>
Glass	20	25	30	45	20	25	50	35	30	<b>(5)</b>
Investment: small	65	25	75	145	175	60	35	45	40	<b>25</b>
Jewellery	55	65	90	160	270	330	380	280	310	<b>310</b>
Petroleum	5	40	60	50	40	40	35	40	45	<b>45</b>
Other	95	115	140	160	170	190	210	250	265	<b>265</b>
<b>Total</b>	<b>940</b>	<b>1,015</b>	<b>1,180</b>	<b>1,250</b>	<b>1,325</b>	<b>1,080</b>	<b>1,225</b>	<b>1,295</b>	<b>1,080</b>	<b>1,285</b>
<b>Rest of the World</b>										
Autocatalyst: gross	185	200	270	265	240	265	300	325	380	<b>460</b>
recovery	(5)	(5)	(5)	(5)	(10)	(15)	(20)	(35)	(40)	<b>(50)</b>
Chemical	65	80	70	65	120	125	75	60	80	<b>75</b>
Electrical	45	65	75	95	95	105	140	120	120	<b>135</b>
Glass	40	80	105	115	95	90	120	160	135	<b>120</b>
Investment: small	5	5	5	5	5	5	0	0	0	<b>0</b>
Jewellery	155	215	295	460	710	1,045	1,200	1,390	1,570	<b>1,295</b>
Petroleum	60	75	105	100	65	55	55	70	65	<b>85</b>
Other	10	15	15	20	20	20	25	25	30	<b>30</b>
<b>Total</b>	<b>560</b>	<b>730</b>	<b>935</b>	<b>1,120</b>	<b>1,340</b>	<b>1,695</b>	<b>1,895</b>	<b>2,115</b>	<b>2,340</b>	<b>2,150</b>

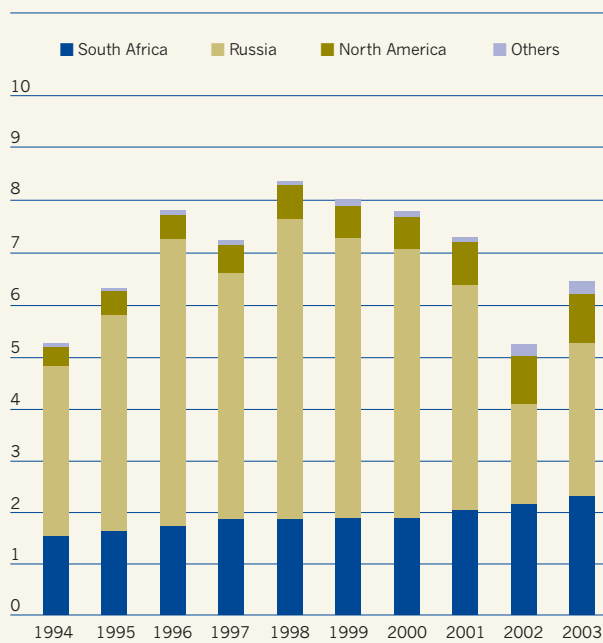
## Palladium Supply and Demand

'000 oz	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Supply</b>										
South Africa	1,500	1,600	1,690	1,810	1,820	1,870	1,860	2,010	2,160	2,310
Russia	3,300	4,200	5,600	4,800	5,800	5,400	5,200	4,340	1,930	2,950
North America	410	470	455	545	660	630	635	850	990	940
Others	70	70	95	95	120	160	105	120	170	250
<b>Total Supply</b>	<b>5,280</b>	<b>6,340</b>	<b>7,840</b>	<b>7,250</b>	<b>8,400</b>	<b>8,060</b>	<b>7,800</b>	<b>7,320</b>	<b>5,250</b>	<b>6,450</b>
<b>Demand by Application</b>										
Autocatalyst: gross	975	1,800	2,360	3,200	4,890	5,880	5,640	5,090	3,050	3,460
recovery	(105)	(110)	(145)	(160)	(175)	(195)	(230)	(280)	(370)	(410)
Chemical	185	210	240	240	230	240	255	250	255	250
Dental	1,265	1,290	1,320	1,350	1,230	1,110	820	725	785	725
Electronics	2,230	2,620	2,020	2,550	2,075	1,990	2,160	670	760	895
Jewellery	205	200	215	260	235	235	255	230	260	250
Other	115	110	140	140	115	110	60	65	90	90
<b>Total Demand</b>	<b>4,870</b>	<b>6,120</b>	<b>6,150</b>	<b>7,580</b>	<b>8,600</b>	<b>9,370</b>	<b>8,960</b>	<b>6,750</b>	<b>4,830</b>	<b>5,260</b>
<b>Movements in Stocks</b>	<b>410</b>	<b>220</b>	<b>1,690</b>	<b>(330)</b>	<b>(200)</b>	<b>(1,310)</b>	<b>(1,160)</b>	<b>570</b>	<b>420</b>	<b>1,190</b>



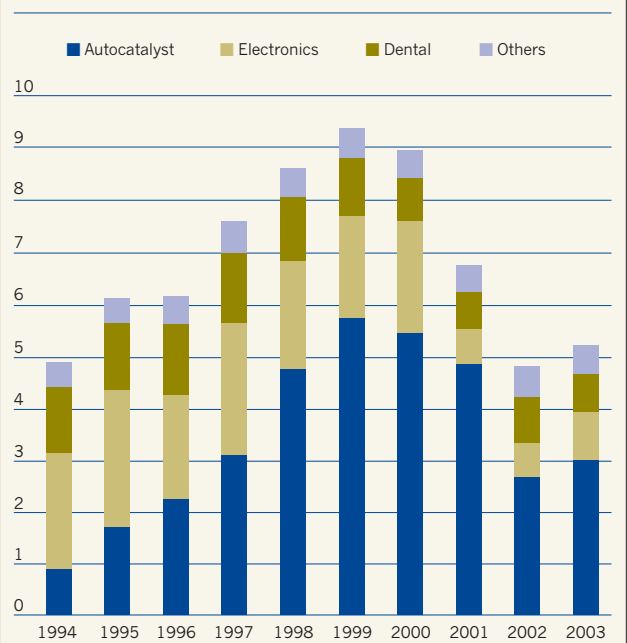
**Palladium Supply by Region  
1994-2003**

Million oz



**Palladium Demand by Application  
1994-2003**


Million oz



## Palladium Demand by Application: Regions

'000 oz	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Europe</b>										
Autocatalyst: gross	260	650	860	1,100	1,370	1,530	1,900	1,730	1,370	<b>1,210</b>
recovery	0	0	(5)	(5)	(5)	(10)	(15)	(30)	(45)	<b>(70)</b>
Chemical	60	65	65	70	65	65	95	65	70	<b>65</b>
Dental	255	250	255	260	210	180	100	50	55	<b>70</b>
Electronics	255	325	300	340	270	255	265	35	85	<b>85</b>
Jewellery	30	30	30	50	50	50	45	35	35	<b>35</b>
Other	25	20	20	25	25	25	20	20	15	<b>20</b>
<b>Total</b>	<b>885</b>	<b>1,340</b>	<b>1,525</b>	<b>1,840</b>	<b>1,985</b>	<b>2,095</b>	<b>2,410</b>	<b>1,905</b>	<b>1,585</b>	<b>1,415</b>
<b>Japan</b>										
Autocatalyst: gross	125	145	180	245	480	600	510	505	520	<b>540</b>
recovery	(30)	(25)	(30)	(45)	(50)	(55)	(50)	(40)	(40)	<b>(40)</b>
Chemical	20	20	20	20	20	20	20	20	20	<b>20</b>
Dental	550	580	600	620	590	545	470	475	505	<b>405</b>
Electronics	1,400	1,600	990	1,390	1,060	980	990	260	140	<b>220</b>
Jewellery	120	115	115	110	105	105	150	140	165	<b>160</b>
Other	15	10	10	10	10	10	15	10	10	<b>10</b>
<b>Total</b>	<b>2,200</b>	<b>2,445</b>	<b>1,885</b>	<b>2,350</b>	<b>2,215</b>	<b>2,205</b>	<b>2,105</b>	<b>1,370</b>	<b>1,320</b>	<b>1,315</b>
<b>North America</b>										
Autocatalyst: gross	525	950	1,230	1,680	2,820	3,490	2,805	2,375	640	<b>1,210</b>
recovery	(75)	(85)	(110)	(105)	(115)	(125)	(155)	(200)	(260)	<b>(270)</b>
Chemical	60	70	70	70	70	75	65	75	75	<b>70</b>
Dental	410	410	410	415	390	350	230	190	215	<b>235</b>
Electronics	450	545	490	550	460	405	485	250	210	<b>215</b>
Jewellery	5	5	5	10	10	10	10	0	0	<b>0</b>
Other	55	65	90	55	55	50	5	15	45	<b>40</b>
<b>Total</b>	<b>1,430</b>	<b>1,960</b>	<b>2,185</b>	<b>2,675</b>	<b>3,690</b>	<b>4,255</b>	<b>3,445</b>	<b>2,705</b>	<b>925</b>	<b>1,500</b>
<b>Rest of the World</b>										
Autocatalyst: gross	65	55	90	175	220	260	425	480	520	<b>500</b>
recovery	0	0	0	(5)	(5)	(5)	(10)	(10)	(25)	<b>(30)</b>
Chemical	45	55	85	80	75	80	75	90	90	<b>95</b>
Dental	50	50	55	55	40	35	20	10	10	<b>15</b>
Electronics	125	150	240	270	285	350	420	125	325	<b>375</b>
Jewellery	50	50	65	90	70	70	50	55	60	<b>55</b>
Other	20	15	20	50	25	25	20	20	20	<b>20</b>
<b>Total</b>	<b>355</b>	<b>375</b>	<b>555</b>	<b>715</b>	<b>710</b>	<b>815</b>	<b>1,000</b>	<b>770</b>	<b>1,000</b>	<b>1,030</b>



Rhodium Supply and Demand										
'000 oz	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Supply</b>										
South Africa	330	342	359	377	400	410	457	452	490	545
Russia	80	80	110	240	110	65	290	125	90	140
North America	15	13	5	16	16	18	17	23	25	20
Others	1	1	2	3	4	8	3	4	10	15
<b>Total Supply</b>	<b>426</b>	<b>436</b>	<b>476</b>	<b>636</b>	<b>530</b>	<b>501</b>	<b>767</b>	<b>604</b>	<b>615</b>	<b>720</b>
<b>Demand by Application</b>										
Autocatalyst: gross	379	464	424	418	483	509	793	566	599	665
recovery	(34)	(37)	(45)	(49)	(57)	(65)	(79)	(88)	(99)	(123)
Chemical	10	13	21	36	31	34	39	44	39	37
Electrical	8	8	9	9	6	6	7	6	6	6
Glass	14	17	53	43	34	35	42	41	37	31
Other	11	9	9	10	10	9	10	10	10	11
<b>Total Demand</b>	<b>388</b>	<b>474</b>	<b>471</b>	<b>467</b>	<b>507</b>	<b>528</b>	<b>812</b>	<b>579</b>	<b>592</b>	<b>627</b>
<b>Movements in Stocks</b>	<b>38</b>	<b>(38)</b>	<b>5</b>	<b>169</b>	<b>23</b>	<b>(27)</b>	<b>(45)</b>	<b>25</b>	<b>23</b>	<b>93</b>
										

## 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 consuming industries 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.