

Palladium Supply and Demand

'000 oz	2000	2001	2002	2003	2004
Supply					
South Africa	1,860	2,010	2,160	2,320	2,480
Russia					
Primary	5,200	4,340	1,930	2,950	4,800
Stock Sales	-	-	-	-	-
North America	635	850	990	935	1,035
Zimbabwe	0	0	0	0	0
Others	105	120	170	245	265
Total Supply	7,800	7,320	5,250	6,450	8,580
Demand by Application					
Autocatalyst	5,640	5,090	3,050	3,450	3,790
Chemical	255	250	255	265	310
Dental	820	725	785	825	850
Electrical	2,160	670	760	900	920
Investment	0	0	0	30	200
Jewellery	255	240	270	260	930
Other	60	65	90	110	90
Total Gross Demand	9,190	7,040	5,210	5,840	7,090
Recycling					
Autocatalyst	-230	-280	-370	-410	-530
Electrical	-	-	-	-	-
Jewellery	-	-	-	-	-
Total Recycling	-230	-280	-370	-410	-530
Total Net Demand	8,960	6,760	4,840	5,430	6,560
Movements in stocks	-1,160	560	410	1,020	2,020

* Sales from Russian state stocks are incorporated in total Russian supply

** "Zimbabwe" supply is incorporated in "Other"

*** Jewellery and electrical demand is net of recycling.

Gross Palladium Demand by Application: Regions

'000 oz	2000	2001	2002	2003	2004
Europe					
Autocatalyst	1,900	1,730	1,370	2,003	1,105
Chemical	95	65	70	65	70
Dental	100	50	55	70	80
Electrical*	265	35	85	85	115
Investment	0	0	0	0	0
Jewellery*	45	35	35	35	35
Other	20	20	15	20	25
Totals	2,425	1,935	1,630	2,278	1,430
Japan					
Autocatalyst	510	505	520	550	635
Chemical	20	20	20	25	25
Dental	470	475	505	515	520
Electrical*	990	260	140	225	235
Investment	0	0	0	0	0
Jewellery*	150	140	165	160	155
Other	15	10	10	5	10
Totals	2,155	1,410	1,360	1,480	1,580
North America					
Autocatalyst	2,805	2,375	640	1,205	1,445
Chemical	65	75	75	70	85
Dental	230	190	215	225	235
Electrical*	485	250	210	215	185
Investment	0	0	0	0	0
Jewellery*	10	10	10	10	10
Other	5	15	45	95	230
Totals	3,600	2,915	1,195	1,820	2,190
China					
Autocatalyst	15	40	55	90	105
Chemical	30	30	40	40	50
Dental	0	0	0	5	5
Electrical*	175	100	75	240	275
Investment	0	0	0	0	0
Jewellery*	20	25	30	25	700
Other	5	5	5	5	10
Totals	245	200	205	405	1,145
Rest of the World					
Autocatalyst	410	440	465	385	500
Chemical	45	60	50	65	80
Dental	20	10	10	10	10
Electrical*	245	25	250	135	110
Investment	0	0	0	0	0
Jewellery*	30	30	30	30	30
Other	15	15	15	15	15
Totals	765	580	820	640	745
Total Gross Demand	9,190	7,040	5,210	6,623	7,090

* Jewellery and electrical demand is net of recycling.

Palladium Supply and Demand

Tonnes	2000	2001	2002	2003	2004
Supply					
South Africa	57.9	62.5	67.2	72.2	77.1
Russia					
Primary	161.7	135.0	60.0	91.8	149.3
Stock Sales*	-	-	-	-	-
North America	19.8	26.4	30.8	29.1	32.2
Zimbabwe	-	-	-	-	-
Others	3.3	3.7	5.3	7.6	8.2
Total Supply	242.6	227.7	163.3	200.6	266.9
Demand by Application					
Autocatalyst	175.4	158.3	94.9	107.3	117.9
Chemical	7.9	7.8	7.9	8.2	9.6
Dental	25.5	22.6	24.4	25.7	26.4
Electrical***	67.2	20.8	23.6	28.0	28.6
Investment	0	0	0	0.9	6.2
Jewellery***	7.9	7.5	8.4	8.1	28.9
Other	1.9	2.0	2.8	3.4	2.8
Total Gross Demand	285.8	219.0	162.0	181.6	220.5
Recycling					
Autocatalyst	-7.2	-8.7	-11.5	-12.8	-16.5
Electrical	-	-	-	-	-
Jewellery	-	-	-	-	-
Total Recycling	-7.2	-8.7	-11.5	-12.8	-16.5
Total Net Demand	278.7	210.3	150.5	168.9	204.0
Movements in stocks	-36.1	17.4	12.8	31.7	62.8

* Totals may not add due to rounding

** Sales from Russian state stocks are incorporated in total Russian supply

*** "Zimbabwe" supply is incorporated in "Other"

**** Jewellery and electrical demand is net of recycling.

Gross Palladium Demand by Application: Regions

Tonnes	2000	2001	2002	2003	2004
Europe					
Autocatalyst	59.1	53.8	42.6	37.9	34.4
Chemical	3.0	2.0	2.2	2.0	2.2
Dental	3.1	1.6	1.7	2.2	2.5
Electrical*	8.2	1.1	2.6	2.6	3.6
Investment	0	0	0	0	0
Jewellery*	1.4	1.1	1.1	1.1	1.1
Other	0.6	0.6	0.5	0.6	0.8
Totals	75.0	59.3	49.3	44.3	41.1
Japan					
Autocatalyst	15.9	15.7	16.2	17.1	19.8
Chemical	0.6	0.6	0.6	0.8	0.8
Dental	14.6	14.8	15.7	16.0	16.2
Electrical*	30.8	8.1	4.4	7.0	7.3
Investment	0	0	0	0	0
Jewellery*	4.7	4.4	5.1	5.0	4.8
Other	0.5	0.3	0.3	0.2	0.3
Totals	65.5	42.6	41.1	44.8	47.9
North America					
Autocatalyst	87.2	73.9	19.9	37.5	44.9
Chemical	2.0	2.3	2.3	2.2	2.6
Dental	7.2	5.9	6.7	7.0	7.3
Electrical*	15.1	7.8	6.5	6.7	5.8
Investment	0	0	0	0.9	6.2
Jewellery*	0.3	0.3	0.3	0.3	0.3
Other	0.2	0.5	1.4	2.0	0.9
Totals	107.2	84.4	29.1	48.2	57.4
China					
Autocatalyst	0.4	1.2	1.7	2.8	3.3
Chemical	0.9	0.9	1.2	1.3	1.6
Dental	0	0	0	0.2	0.2
Electrical*	5.5	3.1	2.3	7.4	8.6
Investment	0	0	0	0	0
Jewellery*	0.6	0.8	0.9	0.8	21.8
Other	0.2	0.2	0.2	0.2	0.3
Totals	7.6	6.2	6.3	12.7	35.8
Rest of the World					
Autocatalyst	12.8	13.7	14.5	12.0	15.5
Chemical	1.4	1.9	1.6	2.0	2.4
Dental	0.6	0.3	0.3	0.3	0.3
Electrical*	7.6	0.8	7.8	4.1	3.4
Investment	0	0	0	0	0
Jewellery*	1.0	0.9	1.0	0.9	0.9
Other	0.4	0.4	0.4	0.5	0.5
Totals	23.5	17.7	24.8	18.9	21.9
Total Gross Demand	285.8	219.0	162.0	181.6	220.5

* Totals may not add due to rounding

** Before 2005 jewellery and electrical demand is net of recycling.