

Palladium Supply and Demand

'000 oz	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Supply										
South Africa	1,820	1,870	1,860	2,010	2,160	2,320	2,480	2,605	2,905	2,795
Russia	5,800	5,400	5,200	4,340	1,930	2,950	4,800	4,620	3,900	4,240
North America	660	630	635	850	990	935	1035	910	985	1,000
Others	120	160	105	120	170	245	265	270	270	285
Total Supply	8,400	8,060	7,800	7,320	5,250	6,450	8,580	8,405	8,060	8,320
Demand by Application										
Autocatalyst: gross	4890	5,880	5,640	5,090	3,050	3,450	3,790	3,865	4,040	4,380
recovery	-175	-195	-230	-280	-370	-410	-530	-625	-800	-945
Chemical *	230	240	255	250	255	265	310	415	425	355
Dental	1,230	1,110	820	725	785	825	850	815	620	620
Electrical	2,075	1,990	2,160	670	760	900	920	970	1,060	1,100
Jewellery	235	235	255	240	270	260	930	1,430	995	745
Other	115	110	60	65	90	140	290	485	130	350
Total Demand	8,600	9,370	8,960	6,760	4,840	5,430	6,560	7,355	6,470	6,605
Movements in stocks	-200	-1310	-1,160	560	410	1,020	2,020	1,050	1,590	1,715
Demand by Region										
Europe	1985	2,095	2,410	1,905	1,585	1,425	1,320	1,175	1,065	1,240
Japan	2,215	2,205	2,105	1,370	1,320	1,440	1,540	1,550	1,470	1,495
North America	3,690	4,255	3,445	2,705	925	1,540	1,845	2,025	1,625	1,695
Rest of the World	710	815	1000	770	1000	1015	1,855	2,605	2,310	2,175
Total Demand	8,600	9,370	8,960	6,750	4,830	5,420	6,560	7,355	6,470	6,605

Palladium Demand by Application: Regions

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Europe											
Autocatalyst:	gross	1370	1530	1900	1,730	1,370	1,220	1,105	975	880	895
	recovery	-5	-10	-15	-30	-45	-70	-110	-165	-220	-295
Chemical		65	65	95	65	70	65	70	155	165	90
Dental		210	180	100	50	55	70	80	75	75	70
Electronics		270	255	265	35	85	85	115	80	105	145
Jewellery		50	50	45	35	35	35	35	35	40	45
Other		25	25	20	20	15	20	25	20	20	290
Totals		1985	2,095	2,410	1,905	1,585	1,425	1,320	1,175	1,065	1,240
Japan											
Autocatalyst:	gross	480	600	510	505	520	550	635	660	795	840
	recovery	-50	-55	-50	-40	-40	-40	-40	-30	-30	-35
Chemical		20	20	20	20	20	25	25	25	25	25
Dental		590	545	470	475	505	515	520	475	270	265
Electronics		1,060	980	990	260	140	225	235	265	275	260
Jewellery		105	105	150	140	165	160	155	145	130	125
Other		10	10	15	10	10	5	10	10	5	15
Totals		2,215	2,205	2,105	1,370	1,320	1,440	1,540	1,550	1,470	1,495
North America											
Autocatalyst:	gross	2820	3490	2,805	2,375	640	1,205	1,445	1,430	1,470	1,640
	recovery	-115	-125	-155	-200	-260	-270	-345	-390	-500	-560
Chemical		70	75	65	75	75	70	85	85	80	80
Dental		390	350	230	190	215	225	235	250	260	265
Electronics		460	405	485	250	210	215	185	195	190	200
Jewellery		10	10	10	10	10	10	10	20	40	50
Other		55	50	5	15	45	95	230	435	85	20
Totals		3,690	4,255	3,445	2,705	925	1,540	1,845	2,025	1,625	1,695
Rest of the World											
Autocatalyst:	gross	220	260	425	480	520	475	605	800	895	1,005
	recovery	-5	-5	-10	-10	-25	-30	-35	-40	-50	-55
Chemical		75	80	75	90	90	105	130	150	155	160
Dental		40	35	20	10	10	15	15	15	15	20
Electronics		285	350	420	125	325	375	385	430	490	495
Jewellery		70	70	50	55	60	55	730	1,230	785	525
Other		25	25	20	20	20	20	25	20	20	25
Totals		710	815	1000	770	1000	1015	1,855	2,605	2,310	2,175

Palladium Supply and Demand

Tonnes *	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Supply										
South Africa	56.6	58.2	57.9	62.5	67.2	72.2	77.1	81.0	90.4	86.9
Russia	180.4	168.0	161.7	135.0	60.0	91.8	149.3	143.7	121.3	131.9
North America	20.5	19.6	19.8	26.4	30.8	29.1	32.2	28.3	30.6	31.1
Others	3.7	5.0	3.3	3.7	5.3	7.6	8.2	8.4	8.4	8.9
Total Supply	261.3	250.7	242.6	227.7	163.3	200.6	266.9	261.4	250.7	258.8
Demand by Application										
Autocatalyst: gross	152.1	182.9	175.4	158.3	94.9	107.3	117.9	120.2	125.7	136.2
recovery	-5.4	-6.1	-7.2	-8.7	-11.5	-12.8	-16.5	-19.4	-24.9	-29.4
Chemical	7.2	7.5	7.9	7.8	7.9	8.2	9.6	12.9	13.2	11.0
Dental	38.3	34.5	25.5	22.6	24.4	25.7	26.4	25.3	19.3	19.3
Electrical	64.5	61.9	67.2	20.8	23.6	28.0	28.6	30.2	33.0	34.2
Jewellery	7.3	7.3	7.9	7.5	8.4	8.1	28.9	44.5	30.9	23.2
Other	3.6	3.4	1.9	2.0	2.8	4.4	9.0	15.0	4.0	10.9
Total Demand	267.5	291.4	278.7	210.3	150.5	168.9	204.0	228.7	201.2	205.4
Movements in stocks	-6.2	-40.7	-36.1	17.4	12.8	31.7	62.8	32.7	49.5	53.4
Demand by Region										
Europe	61.7	65.2	75.0	59.3	49.3	44.3	41.1	36.4	32.3	38.6
Japan	68.9	68.6	65.5	42.6	41.1	44.8	47.9	48.1	51.7	46.5
North America	114.8	132.3	107.2	84.1	28.8	47.9	57.4	63.0	50.5	52.6
Rest of the World	22.1	25.3	31.1	23.9	31.1	31.6	57.7	81.2	71.8	67.7
Total Demand	267.5	291.4	278.7	209.9	150.2	168.6	204.0	228.7	206.3	

* Totals may not add due to rounding

Palladium Demand by Application: Regions

Tonnes *		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Europe											
Autocatalyst:	gross	42.6	47.6	59.1	53.8	42.6	38.0	34.4	30.3	27.5	27.9
	recovery	-0.2	-0.3	-0.5	-0.9	-1.4	-2.2	-3.4	-5.2	-6.9	-9.2
Chemical		2.0	2.0	3.0	2.0	2.2	2.0	2.2	4.8	5.1	2.7
Dental		6.5	5.6	3.1	1.5	1.7	2.2	2.5	2.3	2.3	2.3
Electronics		8.4	7.9	8.2	1.1	2.6	2.6	3.6	2.5	3.3	4.5
Jewellery		1.6	1.6	1.4	1.1	1.1	1.1	1.1	1.1	1.2	1.4
Other		0.8	0.8	0.6	0.6	0.5	0.6	0.8	0.6	0.6	9.0
Totals		61.7	65.2	74.9	59.2	49.3	44.3	41.2	36.4	33.1	38.6
Japan											
Autocatalyst:	gross	14.9	18.7	15.8	15.7	16.2	17.1	19.7	20.5	24.7	26.1
	recovery	-1.6	-1.7	-1.6	-1.2	-1.2	-1.3	-1.2	-0.9	-0.9	-1.1
Chemical		0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8
Dental		18.4	16.9	14.6	14.8	15.7	16.0	16.2	14.7	8.4	8.2
Electronics		33.0	30.5	30.8	8.1	4.4	7.0	7.3	8.2	8.5	8.1
Jewellery		3.3	3.3	4.7	4.4	5.1	5.0	4.8	4.5	4.1	3.9
Other		0.3	0.3	0.5	0.3	0.3	0.2	0.3	0.3	0.2	0.5
Totals		68.9	68.6	65.4	42.7	41.1	44.8	47.9	48.1	45.8	46.5
North America											
Autocatalyst:	gross	87.7	108.6	87.3	73.9	19.9	37.5	44.9	44.5	45.7	50.9
	recovery	-3.6	-3.9	-4.8	-6.2	-8.1	-8.4	-10.7	-12.1	-15.5	-17.4
Chemical		2.2	2.3	2.0	2.3	2.3	2.2	2.6	2.6	2.5	2.5
Dental		12.1	10.9	7.1	5.9	6.7	7.0	7.3	7.8	8.1	8.2
Electronics		14.3	12.6	15.1	7.8	6.5	6.7	5.8	6.1	5.9	6.2
Jewellery		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	1.2	1.6
Other		1.7	1.6	0.2	0.5	1.4	2.9	7.2	13.5	2.6	0.6
Totals		114.7	132.4	107.2	84.5	29.1	48.2	57.4	63.0	50.5	52.6
Rest of the World											
Autocatalyst:	gross	6.9	8.1	13.2	14.9	16.2	14.8	18.8	24.9	27.8	31.3
	recovery	-0.2	-0.2	-0.3	-0.3	-0.8	-0.9	-1.1	-1.2	-1.6	-1.7
Chemical		2.3	2.5	2.3	2.8	2.8	3.3	4.0	4.7	4.8	5.0
Dental		1.2	1.1	0.6	0.3	0.3	0.5	0.5	0.5	0.5	0.6
Electronics		8.9	10.9	13.1	3.9	10.1	11.6	12.0	13.4	15.3	15.4
Jewellery		2.2	2.2	1.6	1.7	1.9	1.7	22.7	38.3	24.4	16.3
Other		0.8	0.8	0.6	0.6	0.6	0.6	0.8	0.6	0.6	0.8
Totals		22.1	25.4	31.1	23.9	31.1	31.6	57.7	81.2	71.8	67.7

* Totals may not add due to rounding