

Supply and Demand Tables

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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.

From 1993, demand numbers for **Europe** include an estimate of net consumption in the former COMECON countries of eastern Europe. From 1996, consumption in China is incorporated into our figures for the **Rest of the World** region. 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.

Platinum Supply and Demand

'000 oz	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply										
South Africa	2,750	3,360	3,160	3,370	3,390	3,700	3,680	3,900	3,800	4,080
Russia	750	680	1,010	1,280	1,220	900	1,300	540	1,100	1,050
North America	200	220	220	240	240	240	285	270	285	340
Others	120	130	140	100	130	120	135	160	105	110
Total Supply	3,820	4,390	4,530	4,990	4,980	4,960	5,400	4,870	5,290	5,580
Demand By Application										
Autocatalyst: gross	1,550	1,685	1,870	1,850	1,880	1,830	1,800	1,610	1,890	2,360
recovery	(230)	(255)	(290)	(320)	(350)	(370)	(405)	(420)	(470)	(510)
Chemical	215	180	190	215	230	235	280	320	285	285
Electrical	165	165	185	240	275	305	300	370	450	380
Glass	80	80	160	225	255	265	220	200	255	290
Investment: small	145	125	155	75	110	180	210	90	40	50
large	110	180	240	270	130	60	105	90	(100)	0
Jewellery	1,510	1,615	1,740	1,810	1,990	2,160	2,430	2,880	2,830	2,520
Petroleum	120	105	90	120	185	170	125	115	105	130
Other	150	165	190	225	255	295	305	335	375	435
	3,815	4,045	4,530	4,710	4,960	5,130	5,370	5,590	5,660	5,940
Western Sales to China	0	20	50	130	-	-	-	-	-	-
Total Demand	3,815	4,065	4,580	4,840	4,960	5,130	5,370	5,590	5,660	5,940
Movements in Stocks	5	325	(50)	150	20	(170)	30	(720)	(370)	(360)
	3,820	4,390	4,530	4,990	4,980	4,960	5,400	4,870	5,290	5,580
Demand By Region										
Europe	860	895	935	880	840	875	910	995	1,140	1,405
Japan	1,870	1,975	2,145	2,215	2,005	1,885	1,795	1,820	1,410	1,210
North America	705	760	940	1,015	1,180	1,250	1,325	1,080	1,215	1,190
Rest of the World	380	415	510	600	935	1,120	1,340	1,695	1,895	2,135
	3,815	4,045	4,530	4,710	4,960	5,130	5,370	5,590	5,660	5,940
Western Sales to China	0	20	50	130	-	-	-	-	-	-
Total Demand	3,815	4,065	4,580	4,840	4,960	5,130	5,370	5,590	5,660	5,940



Platinum Demand by Application: Regions

'000 oz	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Europe										
Autocatalyst: gross	575	610	605	560	515	510	545	560	680	980
recovery	(5)	(5)	(10)	(15)	(20)	(25)	(30)	(30)	(40)	(55)
Chemical	50	40	50	55	60	70	60	80	100	95
Electrical	30	20	25	25	25	45	45	70	75	65
Glass	15	15	30	35	40	20	25	20	20	15
Investment: small	35	25	45	10	5	5	5	5	0	0
Jewellery	85	105	100	120	125	150	160	185	190	160
Petroleum	20	25	25	15	15	15	15	15	10	20
Other	55	60	65	75	75	85	85	90	105	125
Totals	860	895	935	880	840	875	910	995	1,140	1,405
Japan										
Autocatalyst: gross	350	320	290	270	245	255	240	250	290	345
recovery	(45)	(50)	(45)	(40)	(50)	(50)	(55)	(60)	(60)	(65)
Chemical	20	15	15	20	20	20	20	20	20	20
Electrical	50	45	45	45	45	65	55	75	90	75
Glass	20	30	80	105	80	85	80	65	65	85
Investment: small	40	55	40	35	25	25	25	20	5	5
large	110	180	240	270	130	60	105	90	(100)	0
Jewellery	1,290	1,350	1,450	1,480	1,480	1,390	1,290	1,320	1,060	700
Petroleum	10	10	5	5	5	5	5	5	5	5
Other	25	20	25	25	25	30	30	35	35	40
Totals	1,870	1,975	2,145	2,215	2,005	1,885	1,795	1,820	1,410	1,210
North America										
Autocatalyst: gross	525	600	790	820	850	800	775	535	620	700
recovery	(180)	(200)	(230)	(260)	(275)	(290)	(310)	(315)	(350)	(365)
Chemical	90	75	65	70	80	80	80	95	90	100
Electrical	55	65	75	115	130	100	105	120	145	120
Glass	15	15	20	25	30	45	20	25	50	35
Investment: small	65	40	65	25	75	145	175	60	35	45
Jewellery	35	45	55	65	90	160	270	330	380	270
Petroleum	35	40	5	40	60	50	40	40	35	40
Other	65	80	95	115	140	160	170	190	210	245
Totals	705	760	940	1,015	1,180	1,250	1,325	1,080	1,215	1,190
Rest of the World										
Autocatalyst: gross	100	155	185	200	270	265	240	265	300	335
recovery	0	0	(5)	(5)	(5)	(5)	(10)	(15)	(20)	(25)
Chemical	55	50	60	70	70	65	120	125	75	70
Electrical	30	35	40	55	75	95	95	105	140	120
Glass	30	20	30	60	105	115	95	90	120	155
Investment: small	5	5	5	5	5	5	5	5	0	0
Jewellery	100	115	135	145	295	460	710	1,045	1,200	1,390
Petroleum	55	30	55	60	105	100	65	55	55	65
Other	5	5	5	10	15	20	20	20	25	25
Totals	380	415	510	600	935	1,120	1,340	1,695	1,895	2,135

Palladium Supply and Demand

'000 oz	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply										
South Africa	1,260	1,395	1,500	1,600	1,690	1,810	1,820	1,870	1,860	2,000
Russia	2,100	2,400	3,300	4,200	5,600	4,800	5,800	5,400	5,200	4,600
North America	450	415	410	470	455	545	660	630	635	815
Others	70	70	70	70	95	95	120	160	105	115
Total Supply	3,880	4,280	5,280	6,340	7,840	7,250	8,400	8,060	7,800	7,530
Demand By Application										
Autocatalyst: gross	490	705	975	1,800	2,360	3,200	4,890	5,880	5,640	4,840
recovery	(95)	(100)	(105)	(110)	(145)	(160)	(175)	(195)	(230)	(290)
Chemical	205	190	185	210	240	240	230	240	255	245
Dental	1,195	1,210	1,265	1,290	1,320	1,350	1,230	1,110	820	690
Electronics	1,830	2,015	2,230	2,620	2,020	2,550	2,075	1,990	2,160	1,050
Jewellery	205	210	205	200	215	260	235	235	255	240
Other	60	35	115	110	140	140	115	110	60	65
Total Demand	3,890	4,265	4,870	6,120	6,150	7,580	8,600	9,370	8,960	6,840
Movements in Stocks	(10)	15	410	220	1,690	(330)	(200)	(1,310)	(1,160)	690
	3,880	4,280	5,280	6,340	7,840	7,250	8,400	8,060	7,800	7,530
Demand By Region										
Europe	675	680	885	1,340	1,525	1,840	1,985	2,095	2,410	2,085
Japan	1,780	1,990	2,200	2,445	1,885	2,350	2,215	2,205	2,105	1,415
North America	1,155	1,295	1,430	1,960	2,185	2,675	3,690	4,255	3,445	2,350
Rest of the World	280	300	355	375	555	715	710	815	1,000	990
Total Demand	3,890	4,265	4,870	6,120	6,150	7,580	8,600	9,370	8,960	6,840



Palladium Demand by Application: Regions

'000 oz	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Europe										
Autocatalyst: gross	40	115	260	650	860	1,100	1,370	1,530	1,900	1,740
recovery	0	0	0	0	(5)	(5)	(5)	(10)	(15)	(25)
Chemical	75	65	60	65	65	70	65	65	95	75
Dental	300	265	255	250	255	260	210	180	100	60
Electronics	210	210	255	325	300	340	270	255	265	180
Jewellery	35	35	30	30	30	50	50	50	45	35
Other	15	(10)	25	20	20	25	25	25	20	20
Totals	675	680	885	1,340	1,525	1,840	1,985	2,095	2,410	2,085
Japan										
Autocatalyst: gross	85	90	125	145	180	245	480	600	510	540
recovery	(35)	(30)	(30)	(25)	(30)	(45)	(50)	(55)	(50)	(55)
Chemical	20	20	20	20	20	20	20	20	20	20
Dental	450	500	550	580	600	620	590	545	470	430
Electronics	1,130	1,280	1,400	1,600	990	1,390	1,060	980	990	330
Jewellery	120	120	120	115	115	110	105	105	150	140
Other	10	10	15	10	10	10	10	10	15	10
Totals	1,780	1,990	2,200	2,445	1,885	2,350	2,215	2,205	2,105	1,415
North America										
Autocatalyst: gross	320	450	525	950	1,230	1,680	2,820	3,490	2,805	2,020
recovery	(60)	(70)	(75)	(85)	(110)	(105)	(115)	(125)	(155)	(200)
Chemical	65	65	60	70	70	70	70	75	65	75
Dental	400	400	410	410	410	415	390	350	230	190
Electronics	405	420	450	545	490	550	460	405	485	240
Jewellery	0	5	5	5	5	10	10	10	10	10
Other	25	25	55	65	90	55	55	50	5	15
Totals	1,155	1,295	1,430	1,960	2,185	2,675	3,690	4,255	3,445	2,350
Rest of the World										
Autocatalyst: gross	45	50	65	55	90	175	220	260	425	540
recovery	0	0	0	0	0	(5)	(5)	(5)	(10)	(10)
Chemical	45	40	45	55	85	80	75	80	75	75
Dental	45	45	50	50	55	55	40	35	20	10
Electronics	85	105	125	150	240	270	285	350	420	300
Jewellery	50	50	50	50	65	90	70	70	50	55
Other	10	10	20	15	20	50	25	25	20	20
Totals	280	300	355	375	555	715	710	815	1,000	990



Rhodium Supply and Demand

'000 oz	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Supply										
South Africa	278	278	330	342	359	377	400	410	457	441
Russia	80	80	80	80	110	240	110	65	290	100
North America	19	17	15	13	5	16	16	18	16	22
Others	1	1	1	1	2	3	4	8	3	4
Total Supply	378	376	426	436	476	636	530	501	766	567
Demand By Application										
Autocatalyst: gross	305	356	379	464	424	418	483	509	793	548
recovery	(22)	(25)	(34)	(37)	(45)	(49)	(57)	(65)	(79)	(92)
Chemical	18	11	10	13	21	36	31	34	35	43
Electrical	7	9	8	8	9	9	6	6	7	6
Glass	7	3	14	17	53	43	34	35	42	41
Other	13	12	11	9	9	10	10	9	11	11
Total Demand	328	366	388	474	471	467	507	528	809	557
Movements in Stocks	50	10	38	(38)	5	169	23	(27)	(43)	10
	378	376	426	436	476	636	530	501	766	567
Demand By Region										
Europe	119	127	129	139	154	165	175	178	199	202
Japan	63	68	68	59	64	70	75	84	154	110
North America	110	127	139	224	170	137	177	167	332	108
Rest of the World	36	44	52	52	83	95	80	99	124	137
Total Demand	328	366	388	474	471	467	507	528	809	557

