

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	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply										
South Africa	2,770	2,750	3,360	3,160	3,370	3,390	3,700	3,680	3,900	3,800
Russia	1,100	750	680	1,010	1,280	1,220	900	1,300	540	1,100
North America	220	200	220	220	240	240	240	285	270	285
Others	70	120	130	140	100	130	120	135	160	105
Total Supply	4,160	3,820	4,390	4,530	4,990	4,980	4,960	5,400	4,870	5,290
Demand By Application										
Autocatalyst: gross	1,565	1,550	1,685	1,870	1,850	1,880	1,830	1,800	1,610	1,840
recovery	(205)	(230)	(255)	(290)	(320)	(350)	(370)	(405)	(420)	(470)
Chemical	240	215	180	190	215	230	235	280	320	270
Electrical	175	165	165	185	240	275	305	300	370	455
Glass	120	80	80	160	225	255	265	220	200	255
Investment: small	175	145	125	155	75	110	180	210	90	40
large	240	110	180	240	270	130	60	105	90	(100)
Jewellery	1,470	1,510	1,615	1,740	1,810	1,990	2,160	2,430	2,880	2,840
Petroleum	150	120	105	90	120	185	170	125	115	105
Other	140	150	165	190	225	255	295	305	335	365
	4,070	3,815	4,045	4,530	4,710	4,960	5,130	5,370	5,590	5,600
Western Sales to China	(20)	0	20	50	130	-	-	-	-	-
Total Demand	4,050	3,815	4,065	4,580	4,840	4,960	5,130	5,370	5,590	5,600
Movements in Stocks	110	5	325	(50)	150	20	(170)	30	(720)	(310)
	4,160	3,820	4,390	4,530	4,990	4,980	4,960	5,400	4,870	5,290
Demand By Region										
Europe	785	860	895	935	880	840	875	910	995	1,095
Japan	2,050	1,870	1,975	2,145	2,215	2,005	1,885	1,795	1,820	1,410
North America	815	705	760	940	1,015	1,180	1,250	1,325	1,080	1,215
Rest of the World	420	380	415	510	600	935	1,120	1,340	1,695	1,880
	4,070	3,815	4,045	4,530	4,710	4,960	5,130	5,370	5,590	5,600
Western Sales to China	(20)	0	20	50	130	-	-	-	-	-
Total Demand	4,050	3,815	4,065	4,580	4,840	4,960	5,130	5,370	5,590	5,600



Platinum Demand by Application: Regions

'000 oz	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Europe										
Autocatalyst: gross	480	575	610	605	560	515	510	545	560	640
recovery	(5)	(5)	(5)	(10)	(15)	(20)	(25)	(30)	(30)	(40)
Chemical	55	50	40	50	55	60	70	60	80	85
Electrical	30	30	20	25	25	25	45	45	70	80
Glass	20	15	15	30	35	40	20	25	20	20
Investment: small	40	35	25	45	10	5	5	5	5	0
Jewellery	85	85	105	100	120	125	150	160	185	200
Petroleum	30	20	25	25	15	15	15	15	15	10
Other	50	55	60	65	75	75	85	85	90	100
Totals	785	860	895	935	880	840	875	910	995	1,095
Japan										
Autocatalyst: gross	380	350	320	290	270	245	255	240	250	290
recovery	(35)	(45)	(50)	(45)	(40)	(50)	(50)	(55)	(60)	(60)
Chemical	20	20	15	15	20	20	20	20	20	20
Electrical	50	50	45	45	45	45	65	55	75	90
Glass	35	20	30	80	105	80	85	80	65	65
Investment: small	65	40	55	40	35	25	25	25	20	5
large	240	110	180	240	270	130	60	105	90	(100)
Jewellery	1,260	1,290	1,350	1,450	1,480	1,480	1,390	1,290	1,320	1,060
Petroleum	15	10	10	5	5	5	5	5	5	5
Other	20	25	20	25	25	25	30	30	35	35
Totals	2,050	1,870	1,975	2,145	2,215	2,005	1,885	1,795	1,820	1,410
North America										
Autocatalyst: gross	620	525	600	790	820	850	800	775	535	620
recovery	(165)	(180)	(200)	(230)	(260)	(275)	(290)	(310)	(315)	(350)
Chemical	100	90	75	65	70	80	80	80	95	90
Electrical	65	55	65	75	115	130	100	105	120	145
Glass	20	15	15	20	25	30	45	20	25	50
Investment: small	40	65	40	65	25	75	145	175	60	35
Jewellery	20	35	45	55	65	90	160	270	330	380
Petroleum	50	35	40	5	40	60	50	40	40	35
Other	65	65	80	95	115	140	160	170	190	210
Totals	815	705	760	940	1,015	1,180	1,250	1,325	1,080	1,215
Rest of the World										
Autocatalyst: gross	85	100	155	185	200	270	265	240	265	290
recovery	0	0	0	(5)	(5)	(5)	(5)	(10)	(15)	(20)
Chemical	65	55	50	60	70	70	65	120	125	75
Electrical	30	30	35	40	55	75	95	95	105	140
Glass	45	30	20	30	60	105	115	95	90	120
Investment: small	30	5	5	5	5	5	5	5	5	0
Jewellery	105	100	115	135	145	295	460	710	1,045	1,200
Petroleum	55	55	30	55	60	105	100	65	55	55
Other	5	5	5	5	10	15	20	20	20	20
Totals	420	380	415	510	600	935	1,120	1,340	1,695	1,880

Palladium Supply and Demand

'000 oz	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply										
South Africa	1,270	1,260	1,395	1,500	1,600	1,690	1,810	1,820	1,870	1,860
Russia	2,150	2,100	2,400	3,300	4,200	5,600	4,800	5,800	5,400	5,200
North America	420	450	415	410	470	455	545	660	630	635
Others	70	70	70	70	70	95	95	120	160	95
Total Supply	3,910	3,880	4,280	5,280	6,340	7,840	7,250	8,400	8,060	7,790
Demand By Application										
Autocatalyst: gross	355	490	705	975	1,800	2,360	3,200	4,890	5,880	5,650
recovery	(85)	(95)	(100)	(105)	(110)	(145)	(160)	(175)	(195)	(230)
Chemical	225	205	190	185	210	240	240	230	240	260
Dental	1,165	1,195	1,210	1,265	1,290	1,320	1,350	1,230	1,110	820
Electronics	1,855	1,830	2,015	2,230	2,620	2,020	2,550	2,075	1,990	2,140
Jewellery	210	205	210	205	200	215	260	235	235	200
Other	65	60	35	115	110	140	140	115	110	60
Total Demand	3,790	3,890	4,265	4,870	6,120	6,150	7,580	8,600	9,370	8,900
Movements in Stocks	120	(10)	15	410	220	1,690	(330)	(200)	(1,310)	(1,110)
	3,910	3,880	4,280	5,280	6,340	7,840	7,250	8,400	8,060	7,790
Demand By Region										
Europe	620	675	680	885	1,340	1,525	1,840	1,985	2,095	2,430
Japan	1,800	1,780	1,990	2,200	2,445	1,885	2,350	2,215	2,205	2,045
North America	1,095	1,155	1,295	1,430	1,960	2,185	2,675	3,690	4,255	3,420
Rest of the World	275	280	300	355	375	555	715	710	815	1,005
Total Demand	3,790	3,890	4,265	4,870	6,120	6,150	7,580	8,600	9,370	8,900



Palladium Demand by Application: Regions

'000 oz	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Europe										
Autocatalyst: gross	5	40	115	260	650	860	1,100	1,370	1,530	1,920
recovery	0	0	0	0	0	(5)	(5)	(5)	(10)	(15)
Chemical	70	75	65	60	65	65	70	65	65	95
Dental	300	300	265	255	250	255	260	210	180	100
Electronics	200	210	210	255	325	300	340	270	255	265
Jewellery	35	35	35	30	30	30	50	50	50	45
Other	10	15	10	25	20	20	25	25	25	20
Totals	620	675	680	885	1,340	1,525	1,840	1,985	2,095	2,430
Japan										
Autocatalyst: gross	95	85	90	125	145	180	245	480	600	505
recovery	(30)	(35)	(30)	(30)	(25)	(30)	(45)	(50)	(55)	(50)
Chemical	25	20	20	20	20	20	20	20	20	20
Dental	420	450	500	550	580	600	620	590	545	470
Electronics	1,160	1,130	1,280	1,400	1,600	990	1,390	1,060	980	990
Jewellery	120	120	120	120	115	115	110	105	105	95
Other	10	10	10	15	10	10	10	10	10	15
Totals	1,800	1,780	1,990	2,200	2,445	1,885	2,350	2,215	2,205	2,045
North America										
Autocatalyst: gross	220	320	450	525	950	1,230	1,680	2,820	3,490	2,800
recovery	(55)	(60)	(70)	(75)	(85)	(110)	(105)	(115)	(125)	(155)
Chemical	80	65	65	60	70	70	70	70	75	65
Dental	400	400	400	410	410	410	415	390	350	230
Electronics	425	405	420	450	545	490	550	460	405	465
Jewellery	5	0	5	5	5	5	10	10	10	10
Other	20	25	25	55	65	90	55	55	50	5
Totals	1,095	1,155	1,295	1,430	1,960	2,185	2,675	3,690	4,255	3,420
Rest of the World										
Autocatalyst: gross	35	45	50	65	55	90	175	220	260	425
recovery	0	0	0	0	0	0	(5)	(5)	(5)	(10)
Chemical	50	45	40	45	55	85	80	75	80	80
Dental	45	45	45	50	50	55	55	40	35	20
Electronics	70	85	105	125	150	240	270	285	350	420
Jewellery	50	50	50	50	50	65	90	70	70	50
Other	25	10	10	20	15	20	50	25	25	20
Totals	275	280	300	355	375	555	715	710	815	1,005



Rhodium Supply and Demand

'000 oz	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Supply										
South Africa	220	278	278	330	342	359	377	400	410	457
Russia	110	80	80	80	80	110	240	110	65	290
North America	18	19	17	15	13	5	16	16	18	16
Others	0	1	1	1	1	2	3	4	8	3
Total Supply	348	378	376	426	436	476	636	530	501	766
Demand By Application										
Autocatalyst: gross	301	305	356	379	464	424	418	483	509	793
recovery	(16)	(22)	(25)	(34)	(37)	(45)	(49)	(57)	(65)	(78)
Chemical	25	18	11	10	13	21	36	31	34	35
Electrical	10	7	9	8	8	9	9	6	6	6
Glass	12	7	3	14	17	53	43	34	35	42
Other	14	13	12	11	9	9	10	10	9	9
Total Demand	346	328	366	388	474	471	467	507	528	807
Movements in Stocks	2	50	10	38	(38)	5	169	23	(27)	(41)
	348	378	376	426	436	476	636	530	501	756
Demand By Region										
Europe	101	119	127	129	139	154	165	175	178	200
Japan	99	63	68	68	59	64	70	75	84	154
North America	111	110	127	139	224	170	137	177	167	331
Rest of the World	35	36	44	52	52	83	95	80	99	122
Total Demand	346	328	366	388	474	471	467	507	528	807

