## **GOLD**

(Data in metric tons<sup>1</sup> of gold content unless otherwise noted)

<u>Domestic Production and Use</u>: Gold was produced at about 50 lode mines, a few large placer mines (all in Alaska), and numerous smaller placer mines (mostly in Alaska and in the Western States). In addition, a small amount of domestic gold was recovered as a byproduct of processing base metals, chiefly copper. Thirty operations yielded more than 99% of the gold produced in the United States. In 2008, the value of mine production was about \$6.7 billion. Commercial-grade refined gold came from about 2 dozen producers. A few dozen companies, out of several thousand companies and artisans, dominated the fabrication of gold into commercial products. U.S. jewelry manufacturing was heavily concentrated in New York, NY, and Providence, RI; areas with lesser concentrations include California, Florida, and Texas. Estimated uses were jewelry and arts, 80%; electrical and electronics, 8%; dental and other. 12%.

Salient Statistics—United States:	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008 <sup>e</sup>
Production:			<del></del>		
Mine	258	256	252	238	230
Refinery:					
Primary	222	195	181	176	170
Secondary (new and old scrap)	92	81	89	135	120
Imports <sup>2</sup>	283	341	263	170	230
Exports <sup>2</sup>	257	324	389	519	595
Consumption, reported	185	183	185	180	180
Stocks, yearend, Treasury <sup>3</sup>	8,140	8,140	8,140	8,140	8,140
Price, dollars per ounce <sup>4</sup>	411	446	606	699	900
Employment, mine and mill, number <sup>5</sup>	7,550	7,910	8,350	9,130	9,200
Net import reliance <sup>6</sup> as a percentage of					
apparent consumption	8	4	E	E	E

Recycling: 120 tons of new and old scrap, equal to about 67% of reported consumption, was recycled in 2008.

Import Sources (2004-07): Peru, 35%; Canada, 30%; Mexico, 9%; Chile, 8; and other, 18%.

**<u>Tariff</u>**: Most imports of unwrought gold, including bullion and doré, enter the United States duty free.

Depletion Allowance: 15% (Domestic), 14% (Foreign).

<u>Government Stockpile</u>: The U.S. Department of the Treasury maintains stocks of gold (see salient statistics above), and the U.S. Department of Defense administers a Governmentwide secondary precious-metals recovery program.

**Events, Trends, and Issues:** Domestic gold mine production in 2008 was estimated to be 3% less than the level of 2007. Reduced production from several mines in Nevada and one mine in Colorado accounted for much of the decrease. These decreases were partially offset by increases in production from one mine in Alaska, one in California, and a few in Nevada. Despite the decrease in production, the United States rose to the third leading gold-producing nation and was a net exporter of gold.

Power generation problems, coupled with the continuing increase in costs at South African gold mines and continuing labor problems, has caused several mines to curtail production and expansion projects. Other mines were closed owing to safety concerns, and some operations were temporarily closed in order to divert electricity to other facilities. Australian gold producers faced similar production declines and also had power problems; however, the main reasons for the drop in production were the lower average grades and rising costs. Indonesia saw drastic drops in production owing to lower grades and heavy rainfall. With the production decreases in the major gold-producing nations and China's increased gold production, China remained the leading gold-producing nation, followed by South Africa, the United States, and Australia.

Jewelry consumption continued to drop as the price of gold continued to increase. The estimated price in 2008 was 29% higher than the price in 2007. During the first 9 months of 2008, Engelhard Corp.'s daily price of gold ranged from an alltime high of \$1,011 per troy ounce on March 17 to a low of about \$741 per troy ounce in early September.

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With the increase in price and the worldwide economic slowdown, investment in gold has increased. Gold Exchange-Traded Funds (ETFs) have gained popularity with investors. According to some industry analysts, investing in gold in the traditional manner is not as accessible and carries higher costs owing to insurance, storage, and higher markups. The claimed advantage of the ETF is that the investor can purchase gold ETF shares through a stockbroker without being concerned about these problems. Each share represents one-tenth of an ounce of allocated gold.

<u>World Mine Production, Reserves, and Reserve Base</u>: Reserves and reserve base estimates were revised, excluding Australia and China, based on a commercially available database of reserves and resources of mines and potential mines.

	Mine production 2007 2008 <sup>e</sup>		Reserves <sup>7</sup>	Reserve base <sup>7</sup>
United States	238	230	3,000	5,500
Australia	246	225	5,000	6,000
Brazil	40	40	2,000	2,500
Canada	101	100	2,000	4,200
China	275	295	1,200	4,100
Chile	42	42	2,000	3,400
Ghana	84	84	1,600	2,700
Indonesia	118	90	3,000	6,000
Mexico	39	41	1,400	3,400
Peru	170	175	1,400	2,300
Papua New Guinea	65	65	1,300	2,300
Russia	157	165	5,000	7,000
South Africa	252	250	6,000	31,000
Uzbekistan	85	85	1,700	1,900
Other countries	<u>471</u>	440	<sup>8</sup> 10,000	<sup>8</sup> 22,000
World total (rounded)	2,380	2,330	47,000	100,000

<u>World Resources</u>: An assessment of U.S. gold resources indicated 33,000 tons of gold in identified (15,000 tons) and undiscovered (18,000 tons) resources. Nearly one-quarter of the gold in undiscovered resources was estimated to be contained in porphyry copper deposits. The gold resources in the United States, however, are only a small portion of global gold resources.

<u>Substitutes</u>: Base metals clad with gold alloys are widely used in electrical and electronic products, and in jewelry to economize on gold; many of these products are continually redesigned to maintain high-utility standards with lower gold content. Generally, palladium, platinum, and silver may substitute for gold.

## Excludes:

- a. Waste and scrap.
- b. Official monetary gold.
- c. Gold in fabricated items.
- d. Gold in coins. In 1991, the last year for which estimates are available, net imports amounted to 3.5 tons.
- e. Net bullion flow (in tons) to market from foreign stocks at the New York Federal Reserve Bank: 3 (2004), 0 (2005), 0 (2006), 189 (2007), and 250 (2008 estimate).

<sup>&</sup>lt;sup>e</sup>Estimated. E Net exporter.

<sup>&</sup>lt;sup>1</sup>One metric ton (1,000 kilograms) = 32,150.7 troy ounces.

<sup>&</sup>lt;sup>2</sup>Refined bullion, doré, ores, concentrates, and precipitates.

<sup>&</sup>lt;sup>3</sup>Includes gold in Exchange Stabilization Fund. Stocks were valued at the official price of \$42.22 per troy ounce.

<sup>&</sup>lt;sup>4</sup>Engelhard Corporation's average gold price quotation for the year.

<sup>&</sup>lt;sup>5</sup>Data from Mine Safety and Health Administration.

<sup>&</sup>lt;sup>6</sup>Defined as imports – exports + adjustments for Government and industry stock changes.

<sup>&</sup>lt;sup>7</sup>See Appendix C for definitions.

<sup>&</sup>lt;sup>8</sup>Reserves and reserve base for the "Other countries" category does not include some countries for which reliable data were not available.

<sup>&</sup>lt;sup>9</sup>U.S. Geological Survey National Mineral Resource Assessment Team, 2000, 1998 assessment of undiscovered deposits of gold, silver, copper, lead, and zinc in the United States: U.S. Geological Survey Circular 1178, 21 p.