## **GEMSTONES**<sup>1</sup>

## (Data in million dollars unless otherwise noted)

**Domestic Production and Use:** The combined value of U.S. natural and synthetic gemstone output increased by about 4% in 2011 from that of 2010. The natural gemstone production value increased by 6% from that of 2010, while synthetic gemstone production value increased nearly 4% during the same period. Domestic gemstone production included agate, beryl, coral, garnet, jade, jasper, opal, pearl, quartz, sapphire, shell, topaz, tourmaline, turquoise, and many other gem materials. In decreasing order, Arizona, North Carolina, Oregon, Utah, California, Tennessee, Montana, Colorado, Arkansas, and Idaho produced 86% of U.S. natural gemstones. Laboratory-created gemstones were manufactured by five firms in Florida, New York, Massachusetts, North Carolina, and Arizona, in decreasing order of production. Major gemstone uses were carvings, gem and mineral collections, and jewelry. The apparent consumption for 2011 in the table below is much lower than the actual consumption, owing to the exports, including reexports, which increased significantly during 2011 compared with those of previous years.

Salient Statistics—United States:	2007	2008	2009	<u>2010</u>	<u>2011<sup>e</sup></u>
Production <sup>2</sup>					
Natural <sup>3</sup>	11.9	11.5	9.3	10.0	11
Laboratory-created (synthetic)	73.5	51.4	27.2	30.8	32
Imports for consumption	20,100	20,900	13,600	19,600	22,000
Exports, including reexports <sup>4</sup>	12,300	15,300	10,500	14,900	20,000
Consumption, apparent	7,880	5,670	3,080	4,720	1,900
Price	Variable, depending on size, type, and quality				
Employment, mine, number <sup>e</sup>	1,200	1,200	1,000	1,100	1,100
Net import reliance <sup>5</sup> as a percentage					
of apparent consumption	99	99	99	99	98

**<u>Recycling</u>**: Gemstones are often recycled by being resold as estate jewelry, reset, or recut, but this report does not account for those stones.

**Import Sources (2007–10 by value)**: Israel, 46%; India, 23%; Belgium, 17%; South Africa, 6%; and other, 8%. Diamond imports accounted for 95% of the total value of gem imports.

<u>Tariff</u> : Item	Number	Normal Trade Relations 12-31-11
Pearls, imitation, not strung	7018.10.1000	4.0% ad val.
Imitation precious stones	7018.10.2000	Free.
Pearls, natural	7101.10.0000	Free.
Pearls, cultured	7101.21.0000	Free.
Diamond, unworked or sawn	7102.31.0000	Free.
Diamond, 1/2 carat or less	7102.39.0010	Free.
Diamond, cut, more than ½ carat	7102.39.0050	Free.
Precious stones, unworked	7103.10.2000	Free.
Precious stones, simply sawn	7103.10.4000	10.5% ad val.
Rubies, cut	7103.91.0010	Free.
Sapphires, cut	7103.91.0020	Free.
Emeralds, cut	7103.91.0030	Free.
Other precious stones, cut but not set	7103.99.1000	Free.
Other precious stones	7103.99.5000	10.5% ad val.
Synthetic, cut but not set	7104.90.1000	Free.

Depletion Allowance: 14% (Domestic and foreign).

Government Stockpile: None.

## **GEMSTONES**

**Events, Trends, and Issues:** In 2011, the U.S. market for gem-quality diamonds was estimated to be about \$20.8 billion, accounting for more than 35% of world demand. This was an increase of about 12% compared with that of 2010. The domestic market for natural, nondiamond gemstones was estimated to be about \$995 million, which was a slight decrease from that of 2010. The United States is expected to continue dominating global gemstone consumption.

World Gem Diamond Mine Production <sup>6</sup> and Reserves:					
	Mine p	Mine production			
	2010	<u>2011<sup>e</sup></u>			
Angola	12,500	12,500			
Australia	100	100			
Botswana	25,000	25,000			
Brazil	200	200			
Canada	11,773	11,800			
Central African Republic	250	250			
China	100	100			
Congo (Kinshasa)	5,500	5,500			
Ghana	300	300			
Guinea	550	550			
Guyana	144	144			
Lesotho	460	460			
Namibia	1,200	1,200			
Russia	17,800	17,800			
Sierra Leone	240	240			
South Africa	3,500	3,500			
Tanzania	77	77			
Other countries <sup>8</sup>	<u>    180  </u>	180			
World total (rounded)	79,900	80,000			

World reserves of diamond-bearing deposits are substantial. No reserve data are available for other gemstones.

Reserves<sup>7</sup>

<u>World Resources</u>: Most diamond-bearing ore bodies have a diamond content that ranges from less than 1 carat per ton to about 6 carats per ton. The major gem diamond reserves are in southern Africa, Australia, Canada, and Russia.

**Substitutes:** Plastics, glass, and other materials are substituted for natural gemstones. Synthetic gemstones (manufactured materials that have the same chemical and physical properties as gemstones) are common substitutes. Simulants (materials that appear to be gems, but differ in chemical and physical characteristics) also are frequently substituted for natural gemstones.

<sup>e</sup>Estimated.

<sup>1</sup>Excludes industrial diamond and garnet. See Diamond (Industrial) and Garnet (Industrial).

<sup>2</sup>Estimated minimum production.

<sup>3</sup>Includes production of freshwater shell.

<sup>4</sup>Reexports account for about 78% of the totals.

<sup>5</sup>Defined as imports – exports and reexports + adjustments for Government and industry stock changes.

<sup>6</sup>Data in thousands of carats of gem diamond.

<sup>7</sup>See Appendix C for resource/reserve definitions and information concerning data sources.

<sup>8</sup>In addition to countries listed, Armenia, Cameroon, Congo (Brazzaville), Gabon, India, Indonesia, Liberia, Togo, Venezuela, and Zimbabwe are known to produce gem diamonds.