



# 2005 Minerals Yearbook

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## PHILIPPINES

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# THE MINERAL INDUSTRY OF THE PHILIPPINES

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The Republic of the Philippines is located in southeastern Asia between Taiwan to the north and Indonesia to the south and is bordered by the Philippine Sea to the east and the South China Sea to the west. The country is an archipelago made up of more than 7,100 islands with a land area of approximately 300,000 square kilometers (km<sup>2</sup>); the major island groupings are the Luzon islands in the north, the central Visayan Islands, and the Mindanao islands in the south. The country had an estimated population of 83.1 million in 2005 (World Bank Group, 2005<sup>§</sup>; U.S. Central Intelligence Agency, 2006<sup>§</sup>). According to the International Monetary Fund (2005<sup>§</sup>), the Philippines gross domestic product (GDP) based on purchasing power parity was estimated to be \$409.5 billion, and the GDP per capita based on purchasing power parity was estimated to be about \$4,770.

Mineral resources of the Philippines included cement, chromium, copper, gold, marine salt, nickel, and silver. During 2005, exports from the Philippines totaled about \$41.26 billion, and imports totaled about \$47.42 billion. Mineral exports of cathodes, sections of cathodes of refined copper, and petroleum products totaled \$946.87 million, which represented about 2.3% of the total exports during 2005. For the same period, imports of iron and steel, and mineral fuels and related materials totaled \$7.66 billion, which was equivalent to about 16.15% of the total imports (National Statistics Office of the Philippines, 2005<sup>§</sup>).

In December 2004, the Philippines achieved a major success in its effort to revitalize the mining industry when the Supreme Court of the Philippines reversed an earlier (January 2004) decision and confirmed the legality of the 1995 Philippine Mining Act, including the Financial or Technical Assistance Agreement (FTAA), which regulates the mineral resources development, maintains an inventory of mineral reserves, and promotes direct investments in mineral exploration and development activities in the Philippines. The act also promotes the revitalization of the mining industry by providing fiscal reforms and incentives. It allows 100% foreign equity in mining projects through FTAA's and the participation of foreign corporations in mineral development, exploration, and processing. Preceding the December 2004 decision, in 1997, a group of nongovernmental organizations (NGOs) had asked the Supreme Court to nullify the 1995 Philippine Mining Act and the FTAA, which allowed the direct participation of foreign-owned corporations in the mining industry of the Philippines. The NGOs claimed that the Act's provisions were unconstitutional. In late 2003, the President of the Philippines announced that the Philippine Government would promote the development of the mining industry; as a result, in January 2004, the President issued an executive order that provided for a policy framework to revitalize the industry. The Government proposed a Minerals Action Plan (MAP), which simplifies the mining permit process to reduce the length of time needed

for investors to receive the approvals for a mineral production agreement in this country. The average waiting period of 3 to 5 years was reduced to 6 months (Mining Journal, 2005a; 2006b).

By late January 2005, the Supreme Court had ruled with finality on the constitutionality of the 1995 Philippine Mining Act. In February 2005, the Philippine Chamber of Mines organized an international investment mining conference to promote the revitalization of the mining sector by announcing the resolution of the constitutionality of the country's mining act and the changes in regulatory requirements for mining prospectors. The conference resulted in 29 memorandums of understanding and letters of intent with local and international partners, and generated commitments of an estimated \$5 billion in new investment (Mining Journal, 2005a, p. 20; 2005b, p. 24).

In December 2004, the total number of operating mines and quarries in the Philippines was tallied at 2,311. They included two large-scale gold mines, the Teresa and the Victoria, which were owned by Lepanto Consolidated Mining Corporation; four medium-scale gold mines, which included the Acupan (owned by SSM Operations and Benguet Corp.), the Banahaw (owned by Philsaga Mining Corp.), the Canatuan (owned by TVI Resources Philippines, Inc.), and the Diwalwal (owned by NRMDC, a direct state development project); one large-scale copper mine, the Padcal (owned by Philex Mining Corporation); four medium-scale nickel mines, which included the Cagdianao (owned by Cagdianao Mining Corp.), the Palawan (owned by Rio Tuba Mining Corp.), the South Dinagat (owned by Hinatuan Mining Corp.), and the Taganito (owned by Taganito Mining Corp.); and four medium-scale chromite mines, which included the Dinagat (owned by Krominco), the Homonhon (owned by Heritage Resources Mining Corp.), the Masinloc (owned by Benguet Corp.), and the Omasdang (owned by Crau Minerals). By December 31, 2005, a total of 762 mining rights were issued by the Government of the Philippines. During the past few years, the Philippines has seen significant progress in the mining exploration sector that has resulted in the discovery of important deposits, such as the Boyangan and the Tampakan deposits for copper and the Far Southeast deposit for copper and gold (Mining Journal, 2006a).

## Outlook

The development of the mining industry in the Philippines is likely to increase in 2006 and during the next few years given the new interest in the industry since the Philippines started its mining revitalization process.

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Mining Journal, 2005b, Philippines—Legal move reopens opportunity: Mining Journal, July 22, p. 24-26.  
Mining Journal, 2006a, Philippines—Mining—A wealth of history and experience: Mining Journal Special Publication, March, p. 3.

<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

## Internet References Cited

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TABLE 1  
 PHILIPPINES: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2001 <sup>e</sup>	2002 <sup>e</sup>	2003 <sup>e</sup>	2004	2005
<b>METALS</b>					
Chromium, chromite, gross weight	27,930 <sup>r,3</sup>	22,000 <sup>r,3</sup>	33,780 <sup>r,3</sup>	42,140 <sup>r</sup>	36,070
Copper:					
Mine output, Cu content	20,322 <sup>3</sup>	18,364 <sup>3</sup>	20,414 <sup>3</sup>	15,984	16,320
Metal:					
Smelter	216,634 <sup>3</sup>	137,800 <sup>3</sup>	111,600 <sup>3</sup>	120,000 <sup>r</sup>	170,000
Refined	164,530 <sup>3</sup>	144,315 <sup>3</sup>	171,152 <sup>3</sup>	174,628	172,000
Gold, mine output, Au content kilograms	33,840 <sup>3</sup>	35,850 <sup>3</sup>	37,844 <sup>3</sup>	35,464	37,490
Iron and steel, steel, crude <sup>e</sup> thousand metric tons	530 <sup>3</sup>	530	550	550	550
Lead, metal, secondary refined	24,000	26,000 <sup>r,3</sup>	27,000 <sup>r,3</sup>	29,000 <sup>r</sup>	30,000
Nickel, mine output, Ni content	23,100 <sup>3</sup>	24,148 <sup>3</sup>	19,537 <sup>3</sup>	16,973	22,560
Silver, mine output, Ag content kilograms	33,600	8,800	9,533 <sup>3</sup>	9,315	19,150
<b>INDUSTRIAL MINERALS</b>					
Cement, hydraulic thousand metric tons	8,653 <sup>3</sup>	13,400 <sup>r,3</sup>	13,067 <sup>r,3</sup>	13,346	15,494
Clays:					
Bentonite	5,128 <sup>3</sup>	5,500	5,500	3,560 <sup>r</sup>	--
Red	4,983 <sup>3</sup>	5,000	5,000	8,920 <sup>r</sup>	3,530
White	5,111 <sup>3</sup>	5,000	5,000	13,310 <sup>r</sup>	12,220
Other <sup>e</sup>	800	800	800	6,500 <sup>r</sup>	13,400
Feldspar	33,122 <sup>3</sup>	30,000	30,000	32,110 <sup>r</sup>	11,850
Lime <sup>e</sup>	9,000	9,000	9,000	9,000	9,000
Perlite <sup>e</sup>	6,000	6,000	6,000	5,510 <sup>r,3</sup>	4,410 <sup>3</sup>
Phosphate rock <sup>e</sup>	450,000	400,000	400,000	400,000	400,000
Pyrite and pyrrhotite, including cuprous, gross weight <sup>e</sup>	300,000	300,000	300,000	300,000	300,000
Salt, marine	600,000	600,000	429,160 <sup>3</sup>	427,620 <sup>r</sup>	420,950
Sand and gravel:					
Silica sand thousand metric tons	170 <sup>r</sup>	170 <sup>r</sup>	170 <sup>r</sup>	237 <sup>r</sup>	224
Other <sup>e,4</sup> thousand cubic meters	15,000	15,000	15,000	36,133 <sup>r,3</sup>	36,792 <sup>3</sup>
Stone: <sup>e</sup>					
Dolomite	802,189 <sup>3</sup>	800,000	750,000	1,408,870 <sup>r,3</sup>	874,730 <sup>3</sup>
Limestone <sup>5</sup> thousand metric tons	23,000	20,000	16,432 <sup>3</sup>	20,959 <sup>r,3</sup>	21,236 <sup>3</sup>
Marble, dimension, unfinished cubic meters	15,000	15,000	15,000	4,740 <sup>r,3</sup>	5,120 <sup>3</sup>
Volcanic cinder do.	2,000	2,000	2,000	8,470 <sup>r,3</sup>	8,660 <sup>3</sup>
Tuff	1,500	1,500	1,500	19,250 <sup>r,3</sup>	17,850 <sup>3</sup>
Quartz	50,000	50,000	50,000	50,000 <sup>e</sup>	50,000 <sup>e</sup>
Crushed, broken, other <sup>6</sup> thousand cubic meters	2,500	2,500	2,500	2,500 <sup>e</sup>	2,500 <sup>e</sup>
Sulfur, all forms <sup>e</sup>	170,000	180,000	180,000	180,000	180,000

See footnotes at end of table.

TABLE 1--Continued  
PHILIPPINES: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2001 <sup>e</sup>	2002 <sup>e</sup>	2003 <sup>e</sup>	2004	2005
<b>MINERAL FUELS AND RELATED MATERIALS</b>					
Coal, all grades	1,230 <sup>3</sup>	1,665 <sup>3</sup>	2,029 <sup>3</sup>	2,727 <sup>r</sup>	3,165
thousand metric tons					
Petroleum:					
Crude	475 <sup>3</sup>	2,020 <sup>3</sup>	2,000	139 <sup>r</sup>	208
thousand 42-gallon barrels					
Refinery products: <sup>e</sup>					
Liquefied petroleum gas	6,000	25,200	25,200	30,600 <sup>r,3</sup>	31,000
Gasoline	19,000	79,800	79,800	127,600 <sup>r,3</sup>	128,000
Jet fuel	7,000	29,400	29,400	45,800 <sup>r,3</sup>	46,000
Kerosene	5,000	21,000	21,000	17,700 <sup>r,3</sup>	18,000
Distillate fuel oil	40,000	168,000	168,000	170,000	170,000
Residual fuel oil	47,000	215,000	215,000	234,200 <sup>r,3</sup>	234,000
Refinery fuel and losses	5,000	230,000	230,000	230,000	230,000
Other	10,000	225,000	225,000	225,000	225,000
Total	139,000	993,000 <sup>r</sup>	993,000	996,000	1,100,000

<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. <sup>r</sup>Revised. -- Zero.

<sup>1</sup>Table includes data available through February 2007.

<sup>2</sup>In addition to the commodities listed, the Philippines produces platinum-group metals as byproducts of other metal production, but available information is inadequate to make estimates of output.

<sup>3</sup>Reported.

<sup>4</sup>Includes "pebbles" and "soil" not further described.

<sup>5</sup>Excludes limestone for road construction.

<sup>6</sup>Includes materials described as rock, crushed or broken; stones, cobbles, and boulders; rock aggregates; and broken adobe.