



# 2016 Minerals Yearbook

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**BURMA [ADVANCE RELEASE]**

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# THE MINERAL INDUSTRY OF BURMA

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In 2016, the production of mineral commodities—notably antimony, cement, coal, copper, jade, lead, manganese, natural gas, nickel, petroleum, petroleum products, precious and semiprecious stones, tin, tungsten, and zinc—represented a major part of the economy of Burma, also known as Myanmar (Central Statistical Organization, 2018). The legislative framework for the mineral sector in Burma is provided by the Myanmar Mines Amendments (law No. 72/2015) of December 24, 2015, which amends the Myanmar Mines Law of 1994 (Platts, 2016). Data on mineral production are in table 1. Table 2 is a list of major mineral industry facilities. More-extensive coverage of the mineral industry of Burma

can be found in previous editions of the U.S. Geological Survey Minerals Yearbook, volume III, Area Reports—International—Asia and the Pacific, which are available at <https://www.usgs.gov/centers/nmic/asia-and-pacific>.

## References Cited

- Central Statistical Organization, 2018, Selected monthly economic indicators—Table 1.6, export of principal commodities: Nay Pyi Taw, Myanmar, Central Statistical Organization, March. (Accessed January 16, 2018, at <http://www.csostat.gov.mm/S1.6MA0206.htm>.)
- Platts, Tom, 2016, Myanmar mines law amendments: Yangon, Burma, Stephenson Harwood Legal LLP, March 14. (Accessed January 19, 2018, at <http://www.shlegal.com/news-insights/myanmar-mines-law-amendments>.)

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

(Metric tons, gross weight, unless otherwise specified)

Commodity <sup>2</sup>	2012	2013	2014	2015	2016	
<b>METALS</b>						
Antimony, mine production, Sb content <sup>3</sup>	5,900	7,400 <sup>r</sup>	3,600 <sup>r</sup>	3,000	2,000	
Copper, leaching, electrowon	19,000 <sup>e</sup>	25,000	33,200	46,900	75,000	
Gold, refinery production <sup>4</sup>	kilograms	787	893	1,315	1,692	1,000
Lead, mine production, Pb content <sup>e,5</sup>	9,800 <sup>6</sup>	11,700	18,000 <sup>r</sup>	13,600 <sup>r</sup>	14,000	
Manganese, mine production:						
Mn content	114,500	157,500	96,700	28,100	117,000	
Gross weight	286,300	393,800	241,800	70,720 <sup>r</sup>	293,000	
Nickel:						
Mine production, Ni content, ore <sup>e</sup>	5,000	9,000	21,000	26,400	11,800	
Ferronickel: <sup>6</sup>						
Gross weight	--	4,800	59,000	60,000	33,600	
Ni content	--	1,200	15,300	15,600	8,700	
Tin, mine production, Sn content <sup>e,7</sup>	5,000	19,000	35,000	58,000	95,000	
Tungsten, mine production, W content: <sup>7</sup>						
Tin-tungsten concentrate	130	140	108	54 <sup>r</sup>	66	
Tungsten concentrate <sup>e</sup>	1	--	3	5	2	
Zinc, mine production, Zn content <sup>e,5</sup>	10,000	4,800	6,100	4,800 <sup>r</sup>	6,500	
<b>INDUSTRIAL MINERALS</b>						
Barite <sup>4</sup>	21,539	31,295	23,060	2,836 <sup>r</sup>	3,215	
Cement, hydraulic <sup>4</sup>	922,074	1,120,783	1,317,163	902,887 <sup>r</sup>	2,603,477	
Clay and shale, bentonite	--	1,522	NA	700	700 <sup>e</sup>	
Gemstones: <sup>4</sup>						
Jade	kilograms	19,080,442	15,061,927	16,684,386	35,979,000 <sup>r</sup>	34,652,000
Precious and semiprecious stones	do.	13,108,159	16,310,221	11,039,783	13,483,378	10,147,048
Gypsum <sup>4</sup>	38,579	60,510	104,994	99,860	338,492	
Salt, rock, crude <sup>4</sup>	207,261	169,109	187,616	129,478	221,270	
Stone, sand, and gravel:						
Stone, crushed, limestone <sup>e</sup>	thousand metric tons	5,500	6,700	7,900	5,400 <sup>r</sup>	15,600
Stone, dimension, dolomite <sup>4</sup>	170	400	2,200	2,200	2,200	
<b>MINERAL FUELS AND RELATED MATERIALS</b>						
Coal, lignite <sup>4</sup>	471,022	380,272	386,732	419,862	549,839	
Natural gas <sup>4</sup>	million cubic meters	13,225	13,657	18,499	19,697 <sup>r</sup>	18,489
Petroleum: <sup>4</sup>						
Crude	thousand 42-gallon barrels	6,197	6,115	5,851	4,706 <sup>r</sup>	4,298
Refinery production	do.	4,029	3,054	3,090	2,403	2,582

<sup>e</sup>Estimated. <sup>r</sup>Revised. do. Ditto. NA Not available. -- Zero.

<sup>1</sup>Table includes data available through January 19, 2018. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

<sup>2</sup>In addition to the commodities listed, copper matte, construction aggregates, diamond, feldspar, iron and steel, lead (antimonial and refined), nitrogen (ammonia), sand and gravel, silica sand, silver, and tin (smelter production) were produced, but available information was inadequate to make reliable estimates of output.

<sup>3</sup>Data estimated from the United Nations Comtrade database for antimony ores and concentrates imported from Burma by China, India, Vietnam, and Thailand.

<sup>4</sup>Data are for fiscal year ending March 31 of the following year.

<sup>5</sup>Data are for production by the state-owned mining enterprises under the Ministry of Mines.

<sup>6</sup>Data estimated from the United Nations Comtrade database for ferronickel imported from Burma by China, the Netherlands, and Singapore.

<sup>7</sup>Data estimated from the United Nations Comtrade database for tin ores and concentrates imported from Burma by China, Malaysia, the Republic of Korea, Singapore, and Thailand.

TABLE 2  
BURMA: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>e</sup>
Cement	AAA Cement International Co. Ltd.	Cement plant in Kyaukse, Mandalay Region	180,000.
Do.	Dragon Cement Co., Ltd.	Cement plant in Pinlaung, Shan State	180,000.
Do.	Mandalay Cement Industries Co. Ltd.	Cement plant in Kyaukse, Mandalay Region	135,000.
Do.	Max Cement (Subsidiary of Max Myanmar Holding Co. Ltd.)	Cement plant in Aung Nan Cho Village, Lewe, Naypyidaw Township, Mandalay Region	150,000.
Do.	Myanma Ceramic Industries	Cement plant in Kyangin, Ayeyarwady Region	363,000.
Do.	do.	Cement plant in Kyaukse, Mandalay Region	120,000.
Do.	do.	Cement plant in Thayet, Magway Region	170,000.
Do.	Myanmar Conch Cement Co. Ltd. (Joint venture of Myint Investment Group Co. Ltd. of Burma and Anhui Conch Cement of China)	No. 33 Kyaukse cement plant located in Kyaukse, Mandalay division	110,000.
Do.	Myanmar Economic Corp. Myaing Galay 1	Cement plant in Hpa An, Kayin State	240,000.
Do.	Myanmar Economic Corp. Myaing Galay 2	do.	1,200,000.
Do.	Naypyidaw Development Committee	Cement plant in Naypyidaw Township, Mandalay Region	150,000.
Do.	Tiger Head Cement (Myanmar)	Cement plant in Kyaukse, Mandalay Region	90,000.
Do.	Tun Thwin Mining Co. Ltd.	Kalay Cement Plant in Indinggyi Village, Kalay Township, Sagaing Division	NA.
Do.	Union of Myanmar Economic Holdings Ltd. Sin Min 1	Cement plant in Kyaukse, Mandalay Region	330,000.
Do.	Union of Myanmar Economic Holdings Ltd. Sin Min 2	do.	NA.
Do.	Yangon City Development Committee	Myodaw cement plant in Thazi, Mandalay Region	150,000.
Coal	Tun Thwin Mining Co. Ltd. and Mining Enterprise No. 3 (ME-3)	Paluzawa coal mine located in Kalewa area in Sagaing Division, near Kalewa in Sagaing Region.	100,000.
Copper	No. 1 Mining Enterprise, 51%, and Myanmar Yang Tse Copper Ltd. (Wanbao Mining Ltd.) and Union of Myanmar Economic Holding Ltd., 49%	Monywa copper project, S&K Mine, and Monywa solvent extraction-electrowinning plant in Monywa region	40,000.
Fertilizer, urea	Myanma Petrochemical Enterprise (Government, 100%)	No. 1 fertilizer plant at Sale, 190 kilometers southwest of Mandalay Region	170,000.
Do.	do.	No. 2 fertilizer plant at Kyun Chaung, Magway Division	75,600.
Do.	do.	No. 3 fertilizer plant at Kyawzwa, Magway Division	219,000.
Do.	do.	No. 4 fertilizer plant at Myaungdaga	183,000.
Do.	do.	No. 5 fertilizer plant at Kangyidauk Township	183,000.

See footnotes at end of table.

TABLE 2—Continued  
BURMA: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>c</sup>
Gold	kilograms	National Prosperity Gold Production Group	Modi Momi Mine within the Modi Taung (Block 10), located about 385 kilometers north of Yangon	1,700
Natural gas	million cubic meters	Total E&P Myanmar, 31.2%; Chevron Corp., 28.26%; PTT Exploration and Production Public Co. Ltd. (PTTEP), 25.5%; Myanma Oil and Gas Enterprise (MOGE), 15%	Yadana gasfield in Moattama, Gulf of Martaban	8,600.
Do.	do.	Petronas Carigali Myanmar Inc., 40.91%; Myanma Oil and Gas Enterprise (MOGE), 20.45%; PTT Exploration and Production Public Co. Ltd. (PTTEP), 19.32%; Nippon Oil Exploration (Myanmar) Ltd., 19.32%	Yetagun gasfield in Tanintharyi, Gulf of Martaban	4,600.
Do.	do.	Myanmar Petroleum Resources Ltd. and Myanma Oil and Gas Enterprise (MOGE)	Mann oilfield, south of Yangon, Yangon Region	40.
Do.	do.	Daewoo International, 51%; Oil and Natural Gas Corp. (ONGC) Videsh Ltd., 17%; Myanma Oil and Gas Enterprise (MOGE), 15%; Gas Authority of India Ltd. (GAIL), 8.5%; Korea Gas Corp. (KOGAS), 8.5%	Shwe gasfield off of Rakhine State coast	4,100.
Do.	do.	Petroleum Authority of Thailand Exploration and Production International (PTTEP International), 80%, and Myanma Oil and Gas Enterprise (MOGE), 20%	Zawtika natural gas project (Gawthaka, Kakonna, and Zawtika offshore gasfields) in the Gulf of Martaban	3,100.
Nickel		China Nonferrous Metal Mining (Group) Co. Ltd. and Taiyuan Iron & Steel (Group) Co. Ltd.	Tagaung Taung (Dagongshan) nickel ore project (mine and smelter) at Thabeikying, Mandalay Division	25,000 nickel; 85,000 ferronickel.
Petroleum:				
Crude	thousand 42-gallon barrels	Myanmar Petroleum Resources Ltd. and Myanma Oil and Gas Enterprise (MOGE)	Mann oilfield, south of Yangon, Yangon Region	880.
Refined	do.	Myanma Petrochemical Enterprise (Government, 100%)	No. 1 refinery at Thanlyin (near Yangon)	7,300.
Do.	do.	do.	No. 2 refinery at Chauk, Magway Division	2,190.
Do.	do.	do.	No. 3 refinery at Thanbayakan	9,100.
Steel		Myanmar Posco Steel Co. Ltd. (POSCO, 70%, and Government, 20%)	POSCO steel plant at Mingalardon Township, Yangon Region	30,000.
Tin, ore and concentrate		No. 2 Mining Enterprise	NA	NA.
Tungsten, ore and concentrate		do.	NA	NA.
Zinc		No. 1 Mining Enterprise and Win Myint Mo Industrial Co. Ltd.	Namtu-Bawdwin lead-zinc mine located in Namtu Township, Kyaukme District in Northern Shan State	NA.

<sup>c</sup>Estimated. Do., do. Ditto. NA Not available.