

2016 Minerals Yearbook

PAPUA NEW GUINEA

THE MINERAL INDUSTRY OF PAPUA NEW GUINEA

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The economy of Papua New Guinea was largely dependent on world demand for the country's principal mineral export commodities, notably cobalt, copper, and gold (Bank of Papua New Guinea, 2017, p. 13–14). In 2016, the country ranked 14th among the world's leading producers of gold (George, 2018). The legislative framework for the mineral sector in Papua New Guinea is provided by the Mining Act 1992, the Kumul Consolidated Holdings (Amendment) Act 2015, and the Mineral Resources Authority Act 2005. 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 Papua New Guinea 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

Bank of Papua New Guinea, 2017, December 2016 Quarterly Economic Bulletin Bank of Papua 2016: Port Moresby, Papua New Guinea, Bank of Papua New Guinea, May 5, 51 p. (Accessed July 21, 2017, at https://www.bankpng.gov.pg/wp-content/uploads/2017/05/December-2016-Quarterly-Economic-Bulletin-QEB.pdf.)

George, M.W., 2018, Gold: U.S. Geological Survey Mineral Commodity Summaries 2018, p. 70–71.

 ${\bf TABLE~1} \\ {\bf PAPUA~NEW~GUINEA:~PRODUCTION~OF~MINERAL~COMMODITIES}^1 \\$

(Metric tons, gross weight, unless otherwise specified)

- 1: 2	C1:-2		2012	2014	2015	2016
Commodity ²		2012	2013	2014	2015	2016
METALS						
Chromite, mine production		8,250 ^r	92,000 ^r	96,750 ^r	40,000 ^r	40,000 ^e
Cobalt, mine production, nickel cobalt hydroxide, Co	content	469	1,013	2,134	2,505	2,191
Copper, mine production, Cu content		125,348	105,524	75,907	42,894	80,000 e
Gold, mine production, Au content	59,100	54,092	57,939 ^r	60,046	63,000 e	
Nickel:						
Mine production, Ni content, laterite ore		5,283	11,369	20,987	25,582	22,269
Intermediate production, nickel cobalt hydroxide:						
Gross weight		13,777	29,736	57,360	65,286	57,824
Co content		469	1,013	2,134	2,505	2,191
Silver, mine production, Ag content	kilograms	81,300 r	90,192 ^r	91,843 ^r	77,666	98,000
INDUSTRIAL MINERALS	3					
Cement, hydraulic		200,000 e	200,000 e	200,000 e	200,000	200,000 e
MINERAL FUELS AND RELATED M	IATERIALS					
Natural gas liquids	thousand metric tons			4,000	7,400	8,300
Natural gas, marketable	million cubic meters	100	100	160	190 e	220 e
Petroleum, crude	thousand 42-gallon barrels	10,000	10,900	11,000	11,500 e	13,100 e

^eEstimated. ^rRevised. -- Zero.

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¹Table includes data available through November 29, 2017. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, construction materials (common clay, sand and gravel, and stone) may have been produced in Papua New Guinea, but available information was inadequate to make reliable estimates of output.

${\it TABLE~2}$ PAPUA NEW GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities ¹	Annual capacity ^e	
Cement thou	sand metric tons	PNG-Taiheiyo Cement Ltd., 100%	Lae, Morobe Province	200	
Cobalt	do.	MCC Ramu NiCo, Ltd., 85%; Highlands Pacific Ltd., 8.56%; PNG Government and landowners, 6.44%	Kurumbukari Mine, Basamuk beneficiation plant, Madang Province Kurumbukari Mine	3	
Copper	do.	Ok Tedi Mining Ltd. (Government, 100%)	Ok Tedi open cut, Western Province, 20 km northwest of Tabubil and 390 km southwest of Wewak	170	
Gold		Newcrest Mining Ltd., 100%	Lihir open cut, Niolam Island, New Ireland Province, 700 km northeast of Port Moresby	26	
Do.		St Barbara Ltd., 100%	Simberi Island open cut, New Ireland Province	<u>3</u>	
Do.		Harmony Gold Mining, 100%	Hidden Valley open cut, Morobe Province, 90 km southwest of Lae	8	
Do.		Ok Tedi Mining Ltd. (Government, 100%)	Ok Tedi open cut, Western Province, 20 km northwest of Tabubil and 390 km southwest of Wewak	17	
Do.		Porgera Joint Venture [Barrick (Niugini) Ltd., 95%, and Mineral Resources Development Corp., 5%]	Porgera open cut and underground mines, Enga Province, 620 km northwest of Port Moresby	22	
Do.		New Guinea Gold Corp., 90%, and Niugini Holdings Pty Ltd., 10%	Sinivit open pit, East New Britain, about 50 km south southwest of Rabaul	1	
Do.		Asidokona Mining Resources Pte. Ltd., 100%	Tolukuma Hill open pit, 100 km north of Port Moresby	2	
Liquefied natural g	gas million	ExxonMobil PNG Ltd. (operator), 33.2%; Oil Search	Southern Highlands, Hela, Western,	7	
	metric tons	Ltd., 29%; Kumul Petroleum Holdings Ltd., 16.6%; Santos Ltd., 13.5%; JX Nippon Oil and Gas Exploration, 4.7%; Mineral Resources Development Co. (landowners), 2.8%; Petromin PNG Holdings Ltd., 0.2%	Gulf and Central Provinces		
Natural gas	million	Oil Search Ltd., 100%	Hides GTE, Southern Highlands	160	
	cubic meters		Province, 80 km northwest of Kutubu		
Nickel	thousand metric tons	MCC Ramu NiCo, Ltd., 85%; Highlands Pacific Ltd., 8.56%; PNG Government and landowners, 6.44%	Kurumbukari Mine, Basamuk beneficiation plant, Madang Province	32	
Petroleum, crude	million 42-gallon barrels	Oil Search Ltd. (operator and manager for license 2), 49.51%; Exxon Mobil Corp. (operator and manager for license 5), 26.82%; Eda Oil Ltd., 11.28%; Merlin Petroleum Co., 8.31%; Petroleum Resources Kutubu Ltd., 2.97%; Petroleum Resources Moran Ltd., 1.10%; Petroleum Resources North West Moran Ltd., 0.02%	Central Moran oilfield, Southern Highlands Province (includes Agogo and Iaqufi-Hedinia fields). Onshore Papuan Basin, petroleum development licenses 2 and 5	2	
Do.	thousand 42-gallon barrels	Merlin Petroleum Co., 73.48%; Exxon Mobil Corp., 14.52%; Oil Search Ltd. (operator), 10%; Petroleum Resources (Gobe) Ltd., 2.0%	Gobe Main oilfield, Southern Highlands Province. Onshore Papuan Basin, petroleum development license 4	50	
Do.	million 42-gallon barrels	Oil Search Ltd., 60.05% (operator and manager); Merlin Petroleum Co., 18.69%; Exxon Mobil Corp., 14.52%; Petroleum Resources (Kutubu) Ltd., 6.75%	Kutubu oilfield, Southern Highlands Province. Onshore Papuan Basin, petroleum development license 2	4	
Do.	thousand 42-gallon barrels	Oil Search Ltd., 36.36%; Southern Highlands Petroleum Ltd., 40.15%; Santos (operator), 15.92%; Cue PNG Oil Co Ltd., 5.57%; Petroleum Resources (Gobe) Ltd., 2.0%	South East Gobe oilfield, Gulf and Southern Highlands Provinces. Onshore Papuan Basin	200	
Silver		Porgera Joint Venture [Barrick (Niugini) Ltd., 95%, and Mineral Resources Development Corp., 5%]	Porgera open cut and underground mines, Enga Province, 620 km northwest of Port Moresby	4	
Do.		Newcrest Mining Ltd., 50%, and Harmony Gold Mining Co. Ltd., 50%	Hidden Valley open cut, Morobe Province, 90 km southwest of Lae	124	
Do.		Ok Tedi Mining Ltd. (Government, 100%)	Ok Tedi open cut, Western Province, 20 km northwest of Tabubil 390 km southwest of Wewak	30	

^eEstimated. Do., do. Ditto.

 $^{^1\}mbox{Abbreviations}$ used for units of measure in this table include the following: km, kilometer.