



2017–2018 Minerals Yearbook

PAPUA NEW GUINEA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF PAPUA NEW GUINEA

By Spencer D. Buteyn

In 2017 and 2018, the economy of Papua New Guinea was largely dependent on world demand for the country's principal mineral export commodities, notably cobalt, copper, gold, and nickel (Bank of Papua New Guinea, 2019, p. 15–17). In 2017 and 2018, the country was the 8th ranked producer of cobalt and the 14th- and 15th ranked producer, respectively, of gold in the world (George, 2019, 2020; Shedd, 2019, 2020). The legislative framework for the mineral sector in Papua New Guinea was 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, 2019, Annual report and financial statements 31 December 2018: Port Moresby, Papua New Guinea, Bank of Papua New Guinea, September 16, 88 p. (Accessed November 1, 2019, at <https://www.bankpng.gov.pg/wp-content/uploads/2019/09/BPNG-AnnReport-2018-Web.pdf>.)
- George, M.W., 2019, Gold: U.S. Geological Survey Mineral Commodity Summaries 2019, p. 70–71.
- George, M. W., 2020, Gold: U.S. Geological Survey Mineral Commodity Summaries 2020, p. 70–71.
- Shedd, K.B., 2019, Cobalt: U.S. Geological Survey Mineral Commodity Summaries 2019, p. 50–51.
- Shedd, K. B., 2020, Cobalt: U.S. Geological Survey Mineral Commodity Summaries 2020, p. 50–51.

TABLE 1
PAPUA NEW GUINEA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons, gross weight, unless otherwise specified)

Commodity ²	2014	2015	2016	2017	2018
METALS					
Chromium, mine, chromite	96,750	102,273 ^r	53,182 ^r	78,341	80,000 ^e
Cobalt, mine, nickel cobalt hydroxide, Co content	2,134	2,505	2,191	3,308	3,275
Copper, mine, concentrates, Cu content	75,901 ^r	45,185 ^r	80,022 ^r	105,000	96,000
Gold, mine, Au content	57,939	60,046	62,293 ^r	64,000 ^e	67,000 ^e
Nickel:					
Mine, ore:					
Gross weight	2,273,000	2,784,000	2,270,000	3,601,000	3,700,000 ^e
Ni content	20,987	25,582	22,269	34,666	35,355
Nickel cobalt hydroxide	57,360	65,286	57,824	89,947	90,000 ^e
Silver, mine, Ag content	91,843	77,666	90,498 ^r	90,000 ^e	90,000 ^e
INDUSTRIAL MINERALS					
Cement, hydraulic ^e	200,000	200,000	200,000	200,000	200,000
MINERAL FUELS AND RELATED MATERIALS					
Liquefied natural gas ^e	4	7	8	8	9
Natural gas, marketable ^e	4,800 ^r	9,800 ^r	11,000 ^r	11,200	11,300
Petroleum, crude ^e	13,100 ^r	19,300 ^r	20,400 ^r	18,300	16,400

^eEstimated. ^rRevised.

¹Table includes data available through September 9, 2019. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits; may not add to totals shown.

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

TABLE 2
PAPUA NEW GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2018

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities ¹	Annual capacity ^c
Cement	thousand metric tons	PNG-Taiheiyo Cement Ltd., 100%	Lae, Morobe Province	200
Chromite	do.	MCC Ramu NiCo, Ltd., 85%; Highlands Pacific Ltd., 8.56%; PNG Government and landowners, 6.44%	Kurumbukari Mine, Basamuk beneficiation plant, Madang Province	NA
Cobalt		do.	do.	3,500
Copper	thousand metric tons	Ok Tedi Mining Ltd. (Government, 100%)	Ok Tedi open pit, Western Province, 20 km northwest of Tabubil and 390 km southwest of Wewak	170
Gold		Asidokona Mining Resources Pte. Ltd., 100%	Tolukuma Hill open pit, 100 km north of Port Moresby	2
Do.		Harmony Gold Mining Co. Ltd., 100%	Hidden Valley open pit, Morobe Province, 90 km southwest of Lae	8
Do.		Newcrest Mining Ltd., 100%	Lihir open pit, Niolam Island, New Ireland Province, 700 km northeast of Port Moresby	26
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.		Ok Tedi Mining Ltd. (Government, 100%)	Ok Tedi open pit, 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 pit and underground mines, Enga Province, 620 km northwest of Port Moresby	22
Do.		St. Barbara Ltd., 100%	Simberi Island open pit, New Ireland Province	3
Liquefied natural gas	thousand metric tons	PNG LNG project [Exxon Mobil Corp., 33.2%; Oil Search Ltd., 29%; Kumul Petroleum Holdings Ltd. (Government), 16.8%; Santos Ltd., 13.5%; JX Nippon Oil & Gas Exploration Corp., 4.7%; Mineral Resources Development Company Ltd. (Government), 2.8%]	LNG plant, 20 km northwest of Port Moresby	9,000
Natural gas	million cubic meters	Merlin Petroleum Co., Inc., 73.5%; Exxon Mobil Corp., 14.5%; Oil Search Ltd., 10%; Mineral Resources Development Company Ltd. (Government), 2%	Gobe Main field, Southern Highlands Province	340
Do.	do.	Merlin Petroleum Co., Inc., 39.1%; Oil Search Ltd., 22.3%; Kumul Petroleum Holdings Ltd. (Government), 21.4%; Exxon Mobil Corp., 7.7%; Barracuda Ltd., 7.5%; Mineral Resources Development Company Ltd. (Government), 2%	South East Gobe field, Southern Highlands Province	340
Do.	do.	Oil Search Ltd., 100%	Hides GTE plant and associated well	175
Do.		Oil Search Ltd., 49.5%; Exxon Mobil Corp., 26.8%; Kumul Petroleum Holdings Ltd. (Government), 11.3%; Merlin Petroleum Co., Inc., 8.3%; Mineral Resources Development Company Ltd. (Government), 4.1%	Moran field, Southern Highlands Province	670
Do.	do.	Oil Search Ltd., 60%; Merlin Petroleum Co., Inc., 18.7%; Exxon Mobil Corp., 14.5%; Mineral Resources Development Company Ltd. (Government), 6.8%	Kubutu field, Southern Highlands Province	1,860
Do.	do.	PNG LNG project [Exxon Mobil Corp., 33.2%; Oil Search Ltd., 29%; Kumul Petroleum Holdings Ltd. (Government), 16.8%; Santos Ltd., 13.5%; JX Nippon Oil & Gas Exploration Corp., 4.7%; Mineral Resources Development Company Ltd. (Government), 2.8%]	Agogo field, Southern Highlands Province	670
Do.	do.	do.	Hides conditioning plant and eight associated wells	10,200
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

See footnotes at end of table.

TABLE 2—Continued
 PAPUA NEW GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2018

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities ¹	Annual capacity ^c
Petroleum, crude	thousand 42-gallon barrels	Merlin Petroleum Co., Inc., 73.5%; Exxon Mobil Corp., 14.5%; Oil Search Ltd., 10%; Mineral Resources Development Company Ltd. (Government), 2%	Gobe Main field, Southern Highlands Province	130
Do.	do.	Oil Search Ltd., 100%	Hides Gas to Electricity plant and associated well	1,100
Do.	do.	Oil Search Ltd., 49.5%; Exxon Mobil Corp., 26.8%; Kumul Petroleum Holdings Ltd. (Government), 11.3%; Merlin Petroleum Co., Inc., 8.3%; Mineral Resources Development Company Ltd. (Government), 4.1%	Moran field, Southern Highlands Province	630
Do.	do.	Oil Search Ltd., 60%; Merlin Petroleum Co., Inc., 18.7%; Exxon Mobil Corp., 14.5%; Mineral Resources Development Company Ltd. (Government), 6.8%	Kutubu oilfield, Southern Highlands Province	2,700
Do.	do.	Merlin Petroleum Co., Inc., 39.1%; Oil Search Ltd., 22.3%; Kumul Petroleum Holdings Ltd. (Government), 21.4%; Exxon Mobil Corp., 7.7%; Barracuda Ltd., 7.5%; Mineral Resources Development Company Ltd. (Government), 2%	South East Gobe Field, Southern Highlands Province	160
Do.	do.	PNG LNG project [Exxon Mobil Corp., 33.2%; Oil Search Ltd., 29%; Kumul Petroleum Holdings Ltd. (Government), 16.8%; Santos Ltd., 13.5%; JX Nippon Oil & Gas Exploration Corp., 4.7%; Mineral Resources Development Company Ltd. (Government), 2.8%]	Agogo field, Southern Highlands Province	2,300
Do.	do.	do.	Hides Conditioning plant and eight associated wells	11,000
Silver		Harmony Gold Mining Co. Ltd., 100%	Hidden Valley open pit, Morobe Province, 90 km southwest of Lae	124
Do.		Ok Tedi Mining Ltd. (Government, 100%)	Ok Tedi open pit, Western Province, 20 km northwest of Tabubil and 390 km southwest of Wewak	30
Do.		Porgera Joint Venture [Barrick (Niugini) Ltd, 95%, and Mineral Resources Development Corp., 5%]	Porgera open pit and underground mines, Enga Province, 620 km northwest of Port Moresby	4

^cEstimated. Do., do. Ditto. NA Not available.

¹Abbreviations used for units of measure in this table are as follows: km—kilometers.