



2019 Minerals Yearbook

PAPUA NEW GUINEA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF PAPUA NEW GUINEA

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In 2019, the economy of Papua New Guinea was largely dependent on exports of cobalt, copper, gold, and nickel (Bank of Papua New Guinea, 2020, p. 2, 5, 24, 35). In 2019, the country ranked 8th among the world's leading producers of cobalt and 15th among the world's leading producers of gold (Sheaffer, 2021; Shedd 2021). The legislative framework for the mineral sector in Papua New Guinea is provided by the Mining Act 1992, the Mineral Resources Authority Act 2005, and the Kumul Consolidated Holdings (Amendment) Act 2015. 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, 2020, Statutory financial statements for the year ended 31 December 2019: Port Moresby, Papua New Guinea, Bank of Papua New Guinea, June 30, 36 p. (Accessed February 15, 2021, at https://www.bankpng.gov.pg/wp-content/uploads/2020/09/2020-0630-Audit-ReportCertified_FS31_Dec19.pdf.)
- Sheaffer, K.N., 2021, Gold: U.S. Geological Survey Mineral Commodity Summaries 2021, p. 70–71.
- Shedd, K.B., 2021, Cobalt: U.S. Geological Survey Mineral Commodity Summaries 2021, p. 50–51.

TABLE 1
PAPUA NEW GUINEA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons, gross weight, unless otherwise specified)

Commodity ²	2015	2016	2017	2018	2019	
METALS						
Chromium, mine, chromite	100,000 ^r	53,000 ^r	78,000 ^r	92,139 ^r	90,000 ^e	
Cobalt, mine, nickel cobalt hydroxide, Co content	2,505	2,191	3,308	3,275	2,911	
Copper, mine, concentrates, Cu content	45,185	80,022	105,000	97,300 ^r	99,400	
Gold, mine, Au content	kilograms	60,046	62,293	64,000 ^e	67,000 ^e	73,900
Nickel:						
Mine, ore:						
Gross weight	2,784,000	2,270,000	3,601,000	3,700,000 ^e	3,370,000 ^e	
Ni content	25,582	22,269	34,666	35,355	32,720	
Nickel cobalt hydroxide	65,286	57,824	89,947	90,000 ^e	82,000 ^e	
Silver, mine, Ag content	kilograms	77,666	90,498	86,700 ^r	114,900 ^r	147,000
MINERAL FUELS AND RELATED MATERIALS						
Liquefied natural gas ^e	million metric tons	7	8	8	9	9
Natural gas, marketable ^e	million cubic meters	9,800	11,000	11,200	10,000 ^r	10,000
Petroleum, crude ^e	thousand 42-gallon barrels	19,300	20,400	18,300	13,100 ^r	13,100

^eEstimated. ^rRevised.

¹Table includes data available through February 19, 2021. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, cement and construction materials (common clay, 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 2019

(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-Taiheiyu Cement Ltd., 100%	Lae, Morobe Province	200
Chromite		MCC Ramu NiCo Ltd., 85%; Nickel 28 Capital Corp., 8.56%; Government of Papua New Guinea and landowners, 6.44%	Kurumbukari Mine, Basamuk beneficiation plant, Madang Province	NA
Cobalt		do.	do.	3,500
Copper, mine, Cu content	thousand metric tons	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, mine, Au content		Asidokona Mining Resources Pte. Ltd., 100%	Tolukuma Hill open pit, Central Province, 100 km north of Port Moresby	2
Do.		Harmony Gold Mining Co. Ltd., 100%	Hidden Valley open cut, Morobe Province, 90 km southwest of Lae	8
Do.		Newcrest Mining Ltd., 100%	Lihir open cut, Niolam Island, New Ireland Province, 900 km northeast of Port Moresby	26
Do.		New Guinea Gold Corp., 90%, and Niugini Holdings Pty Ltd., 10%	Sinivit open pit, East New Britain Province, about 50 km south southwest of Rabaul	1
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 Resource Enga (MRE) Ltd., 5%]	Porgera open pit mine, underground mine, and beneficiation plant, Enga Province, 620 km northwest of Port Moresby	22
Do.		St. Barbara Ltd., 100%	Simberi Island open cut, 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 Co. Ltd. (Government), 2.8%]	Liquefied natural gas plant, Central Province, 20 km northwest 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 Co. 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 Co. Ltd. (Government), 2%	South East Gobe field, Southern Highlands Province	340
Do.	do.	Oil Search Ltd., 100%	Hides GTE plant and associated wells, Hela Province	175
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	670
Do.	do.	Oil Search Ltd., 60%; Merlin Petroleum Co. Inc., 18.7%; Exxon Mobil Corp., 14.5%; Mineral Resources Development Co. 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 Co. Ltd. (Government), 2.8%]	Agogo field, Southern Highlands Province	670
Do.	do.	do.	Hides Conditioning plant and eight associated wells, Hela Province	10,200

See footnotes at end of table.

TABLE 2—Continued
PAPUA NEW GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities ¹	Annual capacity ^e
Nickel, mine, Ni content	thousand metric tons	MCC Ramu NiCo Ltd., 85%; Nickel 28 Capital Corp., 8.56%; Government of Papua New Guinea and landowners, 6.44%	Kurumbukari Mine, Basamuk beneficiation plant, Madang Province	35
Petroleum, crude	thousand 42-gallon barrels	Merlin Petroleum Co. Inc., 73.5%; Exxon Mobil Corp., 14.5%; Oil Search Ltd., 10%; Mineral Resources Development Co. Ltd. (Government), 2%	Gobe Main field, Southern Highlands Province	130
Do.	do.	Oil Search Ltd., 100%	Hides GTE plant and associated wells, Hela Province	1,100
Do.	do.	Oil Search Ltd., 49.5%; Exxon Mobil Corp., 14.5%; Kumul Petroleum Holdings Ltd. (Government), 11.3%; Merlin Petroleum Co. Inc., 8.3%; Mineral Resources Development Co. 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 Co. 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 Co. 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 Co. Ltd. (Government), 2.8%]	Agogo field, Southern Highlands Province	2,300
Do.	do.	do.	Hides Conditioning plant and eight associated wells, Hela Province	11,000
Silver, mine, Ag content		Harmony Gold Mining Co. Ltd., 100%	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 and 390 km southwest of Wewak	30
Do.		Porgera Joint Venture [Barrick (Niugini) Ltd., 95%, and Mineral Resources Enga (MRE) Ltd., 5%]	Porgera open cut and underground mines, Enga Province, 620 km northwest of Port Moresby	4

^eEstimated. Do., do. Ditto.

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