

THE MINERAL INDUSTRY OF

GABON

By George J. Coakley

The equatorial African nation of Gabon has an area of 257,670 square kilometers and supported a population of about 1.2 million in 1999, with a gross domestic product (GDP) per capita of \$6,500 based on 1999 purchasing power parity data. The mineral industry was dominated by crude petroleum production, which accounted for about 60% of Government revenues and more than 40% of the GDP. Following petroleum and timber, manganese and uranium were the major exports. As estimated by the U.S. Energy Information Administration, approximately 316,000 barrels per day of petroleum out of a daily production of 341,000 barrels were exported. Based on an estimated average oil price of \$17.23 per barrel for 1999, the value of petroleum exports was about \$2 billion (U.S. Energy Information Agency, April 2000, Gabon—Country analysis briefs, accessed December 12, 2000, at URL <http://eia.doe.gov/emeu/cabs/gabon.html>). Shipments of manganese ore were valued at \$491 million in 1999. Resources of columbium (niobium), gold, iron ore, and phosphate were known.

In November 1999, Cluff Mining Plc. of the United Kingdom acquired a 35% interest in Niobium Resources Plc., which owned the Mabounié carbonatite complex near Lambaréné in the west-central portion of the country. Cluff reported an indicated resource of 21.6 million metric tons (Mt), at a grade of 1.6% columbium (niobium) oxide containing 350 metric tons (t) of columbium (niobium) metal. This mineral resource was the basis for a feasibility study to be completed by 2001 examining the potential to produce 6,000 metric tons per year (t/yr) of ferroniobium (ferrocolumbium) (Cluff Mining Plc., February 7, 2001, Gabon—Mabounié, accessed February 10, 2001, at URL <http://www.cluff-mining.com>).

Eramet Manganese, which was a division of the Eramet Group of France (61%), operated the Compagnie Minière de l'Ogooué S.A. (Comilog) Moanda manganese mine near Franceville. In 1999, manganese production remained level

with that of 1998 at 2.09 Mt; owing to weak metal markets, sales of 2.02 Mt, valued at \$491 million, declined from the 2.05 Mt, valued at \$595 million in 1998. More than 50% of sales went to Comilog's in-house subsidiaries. Construction work continued on Comilog's \$70 million (French franc 500 million) manganese ore enrichment and sintering plant in Gabon. The plant, which is located at Moanda, will have a production capacity of 600,000 t/yr of sintered manganese ore. The new plant will extend the life of the mine by allowing the processing of manganese fines and will provide a direct feed to Eramet's ferroalloy plants. The plant was expected to be operational by early 2001 (Eramet Group, April 4, 2000, Eramet Manganese—Annual report of the Eramet Group for 1999, accessed November 11, 2000, at URL http://www.eramet.fr/anglais/actionnaires_f.htm).

Following 40 years of mining and depletion of ore reserves at the Mounana uranium mine in Haut Ogooué Province, Compagnie des Mines d'Uranium de Franceville (COMUF) closed its mining operations in May 1999. COMUF produced 763 t of uranium oxide in 1998, its last full year of operations (Mbendi Information Services (Pty.) Ltd., November 20, 2000, Gabon—Mining—Uranium mining, accessed February 1, 2001, at URL <http://mbendi.co.za/indy/mining/urnm/af/ga/p0005.htm>).

The outlook for the future of minerals development in Gabon is modest and contingent on future market conditions and exploration successes. The economy is likely to be dominated by the petroleum sector for the foreseeable future with the focus of new exploration on deep water basins. Although uranium mining is phasing out, the potential for new developments in columbium (niobium), manganese, and possibly phosphate suggests a continued role for mining in the economy. The lack of adequate infrastructure in many areas of the country inhibits new grassroots exploration and remains a major cost constraint on development of the well-defined iron ore deposit at Belinga.

TABLE 1
GABON: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity 2/	1995	1996	1997 e/	1998 e/	1999 e/
Cement:					
Clinker	132,398	162,000	176,000	180,000	180,000 3/
Cement, hydraulic 4/	153,953	185,000	205,000 r/	196,000 r/ 3/	175,000
Diamond, gem and industrial e/	500	500	500	500	500
Gas, natural, gross	150	100	99	99	99
Gas, natural, gross	million cubic meters				
Gold, mine output, Au content e/ 5/	70	70	70	70	70
Gold, mine output, Au content e/ 5/	kilograms				
Manganese:					
Metallurgical-grade ore, gross weight (50% to 53% Mn)	1,844	1,933	1,860	2,044	2,044
Metallurgical-grade ore, gross weight (50% to 53% Mn)	thousand metric tons				
Pellets, battery- and chemical-grade, gross weight (82% to 85% MnO ₂)	86	50	44	48	48
Pellets, battery- and chemical-grade, gross weight (82% to 85% MnO ₂)	do.				
Total	1,930	1,983	1,904 3/	2,092 3/	2,092 3/
Total	do.				
Petroleum:					
Crude	133,000	134,000	134,000	132,000	124,500
Crude	thousand 42-gallon barrels				
Refinery products	5,466 r/	6,043	6,315 3/	6,200 3/	6,315
Refinery products	do.				
Uranium, content of concentrate	653	623	472 3/	862 3/	347 6/

e/ Estimated. r/ Revised.

1/ Table includes data available through December 2000.

2/ In addition to the commodities listed, a variety of crude construction materials (clays, sand and gravel, and stone) is also produced, but output is not reported, and available information is inadequate to make reliable estimates of output levels.

3/ Reported figure.

4/ Includes cement produced from imported clinker.

5/ Gold production figures do not include production smuggled out of the country, which in recent years was estimated to exceed 400 kilograms per year.

6/ Moanda uranium mine depleted and closed in 1999.

TABLE 2
GABON: STRUCTURE OF THE MINERAL INDUSTRY IN 1999

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement:			
Cement	Ciments du Gabon (Scancem International (Sweden), 75%; private shareholders, 25%)	Cement-grinding plant at Owendo	270
Do.	do.	Cement-grinding plant at Franceville	130
Clinker	do.	Clinker plant at N'Toum, 40 kilometers east of Libreville	350
Manganese, ore	Compagnie Minière de l'Ogooué S.A. (Eramet, 61%; Government, 28%; and others, 11%)	Open-pit mine at Moanda	2,600
Petroleum, crude	Elf Gabon (Société Nationale Elf Aquitaine 75%; Government, 25%)	Anguille, Barbier, Baudroie, Brème, Gonelle, Grondin Marine, Mandaros, and Torpille offshore fields	30,000
Do.	do.	Avocette, Coucal, and Hylia fields	25,000
Do.	Shell Gabon (Royal Dutch-Shell, 75%; Government, 25%), 42.5% interest in field	Rabi Kounga field, 100 kilometers north of Gamba	75,000
Do.	do.	Gamba-Ivinga field, onshore Gamba	4,000
Do.	Perenco Plc., 45% interest in field	Oguendjo offshore field, 85 kilometers south-east of Port Gentil	3,000
Do.	Perenco Plc., 75% and Government, 25% joint venture	Lucina Marine offshore field, 15 kilometers south of Mayumba	2,000
Do.	Perenco Plc., 50% and London and Scottish Marine, 50% joint venture	Obando, Octopus, and Pelican offshore fields, 60 kilometers southwest of Port Gentil	5,000
Petroleum products	Société Gabonaise de Raffinage (Government, 25%; Elf Gabon, 18.7%; Total, 18.7%; Agip, 6.2%; BP, 6.2%; Fina, 6.2%; Mobil, 6.2%; Shell, 6.2%; and Texaco, 6.2%)	Refinery at Port Gentil	8,760
Uranium, oxide (metal content)	Compagnie des Mines d'Uranium de Franceville (Compagnie Française de Mokta, 39.2%; Compagnie Générale des Matières Nucléaires, 18.8%; Government, 24.7%; Minatom, 13%; and others, 4.3%)	Two mines near Mounana (closed May 1999)	1,500
Uranium, oxide (metal content)	metric tons		