



2008 Minerals Yearbook

GABON

THE MINERAL INDUSTRY OF GABON

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Gabon's mineral industry was dominated by the production of crude petroleum and manganese. In 2008, the country ranked 4th among the world's leading producers of manganese, accounting for about 11% of world production. Crude petroleum production accounted for 51% of the country's gross domestic product compared with 49.4% in 2007. Other nonfuel mineral commodities produced in the country included cement, diamond, and gold. Identified mineral resources included iron ore, niobium (columbium), and phosphate rock (International Monetary Fund, 2009, p. 14).

Government Policies and Programs

Gabon was one of the first countries to commit to the Extractive Industries Transparency Initiative (EITI), which is a voluntary global compact established in 2002 that is aimed at strengthening good governance by improving economic transparency and accountability in the mining sector. The Government of Gabon began adopting and implementing the EITI principles in May 2004 by putting into place a tripartite multistakeholder group consisting of representatives from nongovernmental organizations (NGOs), the Government, and mining companies. Gabon published an annual report for the EITI that showed the revenues the Government received from companies engaged in the country's mining sector. In early January 2008, however, the Government announced the suspension of 22 Gabonese NGOs operating in the country, including the groups that comprised the Publish What You Pay (PWYP) Gabon coalition. PWYP was a global coalition that campaigned for transparency in the management of oil, gas, and mining revenues. The Government's suspension of the 22 NGOs was eventually lifted in mid-January (Extractive Industries Transparency Initiative, 2008; Reuters Africa, 2008).

Production

Data on mineral production are in table 1.

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Mineral Trade

Gabon's exports to the United States were valued at about \$2.3 billion in 2008 compared with \$2.2 billion in 2007 and \$1.4 billion in 2006. About \$2.2 billion of these exports was from crude petroleum, \$85.2 million was from nonferrous metals, and \$3.7 million was from petroleum products. Imports from the United States were valued at about \$284 million in 2008 compared with about \$478 million in 2007 and \$135 million in 2006. These included nearly \$152 million worth of drilling and oilfield equipment; \$4.7 million worth of

petroleum products; \$3.0 million worth of excavating machinery; \$1.7 million worth of coal and other fuels; and \$1.6 million worth of iron and steel products (U.S. Census Bureau, 2009a, b).

Commodity Review

Metals

Gold.—SearchGold Resources Inc. of Canada, through its subsidiary Ressources Golden Gram Gabon SARL (REG), continued with its exploration and development program for the Bakoudou-Magnima gold project. In 2008, the company completed a feasibility study for the project's first target area known as Zone A. Measured and indicated resources in Zone A were reported to be about 2.4 million metric tons (Mt) at an average grade of 3.01 grams per metric ton gold. A mining license for the Bakoudou-Magnima project was granted to SearchGold in September 2008. The company planned to build an open pit mine and produce about 1,200 kilograms per year (reported as 40,000 troy ounces per year) of gold for a period of 3.5 years (SearchGold Resources Inc., 2008; 2009, p. 2-5).

Iron Ore.—China National Machinery and Equipment Import & Export Corp. (CMEC) continued with its plan to develop the 500-Mt Belinga iron ore deposit, which is located about 500 kilometers (km) east of Libreville in Ogooue-Ivindo Province. On May 24, the company signed a mining agreement with the Government that provided for the construction of major infrastructure at Belinga, including a new 560-km-long extension to the Trans-Gabon railway that would be used to transport iron ore from the proposed mine to a deepwater port in Santa Clara. Other infrastructure projects included the construction of two hydroelectric powerplants to supply electricity to the mine. The development of the Belinga Mine and associated infrastructure was expected to be completed between 2011 and 2012 and to cost about \$5 billion. The envisioned iron ore production capacity of the mine was estimated to be between 20 million metric tons per year (Mt/yr) and 30 Mt/yr (Africa Mining Intelligence, 2008; Gide Loyrette Nouel, 2008; Steel Guru, 2008).

Manganese.—Compagnie Minière de l'Ogooué S.A. (Comilog), which was a subsidiary of Eramet International of France, mined manganese deposits at Bangombe and operated the Moanda open pit mine. In 2008, the company completed a 4-Mt/yr expansion project for Moanda, which included an environmental plan to address the buildup of discharges into the Moulili River by enriching and reusing fine ore material. In addition to the production expansion at Moanda Mine, Comilog also worked on the refurbishing of 30 km of track of the Trans-Gabon railway and studied the possibility of building a new manganese and silicomanganese metal production plant in the country. Comilog, which also managed the Trans-Gabon railway, held a 75% interest in Moanda Mine; the remaining 25% was held by the Government (Eramet S.A., 2009, p. 22-24, 47).

Mineral Fuels and Related Materials

Petroleum.—Total S.A. held exploration and production operations in Gabon through two locally incorporated companies, Total Gabon S.A. and its subsidiary, Total Participations Pétrolières Gabon. In 2008, Total began the redevelopment of the Anguille oilfield, which is located about 20 km offshore Port-Gentil. The first phase of the project, which began in 2007, included the drilling of thirteen wells. Phase 2, which was to begin in 2009, would include the installation of new offshore infrastructure, the decommissioning of obsolete processing units, the construction of an onshore power generation plant, and the drilling of at least 30 wells. Production from the Anguille oilfield was expected to reach 30,000 barrels per day by 2014 (Total S.A., 2008; 2009, p. 13, 30-31).

Houston-based VAALCO Energy Inc. (VAALCO) operated in Gabon through its two subsidiaries, VAALCO Gabon (Etame) Inc. and VAALCO Production (Gabon). The company produced petroleum from the Avouma, the Ebouri, the Etame, and the South Tchibala oilfields, which are located within the Etame Marin Block offshore Gabon. During 2008, the Avouma, the Etame, and the South Tchibala fields produced a combined 7.8 million barrels of petroleum. The Ebouri oilfield, which was discovered in 2004, had a platform installed in August 2008. The first development well at Ebouri was drilled in late 2008. In November, drilling began on the first of three planned exploration wells. The first of these wells, the North Ebouri, encountered substantial oil-filled Gamba sandstone, reportedly indicating the existence of significant additional reserves north of the originally mapped field development outline. The second well, the North Etame prospect, encountered water-bearing sands and was abandoned. The third prospect, the South East Etame, was scheduled to be drilled during the second or third quarter of 2009. Onshore Gabon, VAALCO held a 100% working interest in the Mutamba Irou Block located near the coast in central Gabon. The company acquired aeromagnetic gravity data in 2008, and together with seismic data acquired from previous operators in 2006 and 2007, began to drill two exploration wells on the block. All VAALCO's crude oil production in Gabon was sold to Total Oil Trading SA. As of December 31, 2008, VAALCO owned a 30.35% interest in the exploration acreage within the Etame Marin Block and a 28.1% interest in the development areas surrounding the Avouma, the Etame, and the South Tchibala oilfields (VAALCO Energy Inc., 2009, p. 2-6, 18).

Uranium.—During 2008, the joint-venture of Canadian companies Cameco Corp., Motapa Diamonds Inc., and Pitchstone Exploration Ltd. conducted a sampling, geologic mapping, and prospecting program and completed a helicopter-borne electromagnetic survey for the Oklo-Mounana uranium property. The purpose of the program was to follow up on identified anomalous areas within the property and to obtain information that would help prioritize target areas. A total

of 338 stream sediment samples and 326 rock samples were collected and analyzed. The company's 2009 exploration plans for Oklo-Mounana were under review as of yearend (Pitchstone Exploration Ltd., 2009, p. 12-13, 19).

Outlook

If plans to develop the Belinga Mine come to fruition, Gabon would rank among the world's top 20 producers of iron ore within the next 4 to 5 years. The Government is likely to benefit from revenues from the Belinga Mine and from ongoing expansions at the Moanda manganese mine in the near future. The country's weak infrastructure is likely to be revamped in the next 5 years if proposed infrastructure developments, which include the construction of roads, railroads, a deepwater port, and hydroelectric powerplants, come to fruition as part of the planned investments in the mineral industry.

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TABLE 1
GABON: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

Commodity ³	2004	2005	2006	2007	2008	
Cement and clinker:						
Cement, hydraulic ⁴	metric tons	260,000	260,000	260,000	228,601 ⁵	230,000
Clinker	do.	350,000	350,000	350,000	185,109 ⁵	190,000
Diamond, gem and industrial	carats	500	500	500	500	500
Gold, mine output, Au content	kilograms	300	300	300	300	300
Manganese:						
Metallurgical-grade ore, gross weight (50% to 53% Mn)	thousand metric tons	2,400	2,800	2,925 ⁵	3,200	3,250 ⁵
Pellets, battery- and chemical-grade, gross weight (82% to 85% MnO ₂)	do.	60	59	75	100	100
Total	do.	2,460 ⁵	2,859 ⁵	3,000 ⁵	3,300 ⁵	3,350
Natural gas, gross	million cubic meters	80	80	80	80	80
Petroleum:						
Crude	thousand 42-gallon barrels	87,235 ⁵	85,469 ⁵	84,738 ⁵	84,008 ⁵	85,775 ⁵
Refinery products	do.	6,300	6,000	6,000	6,000	6,000

do. Ditto.

¹Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown.

²Table includes data available through October 9, 2009.

³In 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.

⁴Includes cement produced from imported clinker.

⁵Reported figure.

TABLE 2
GABON: STRUCTURE OF THE MINERAL INDUSTRY IN 2008

(Metric tons unless otherwise specified)

Commodity		Major operating companies and and major equity owners	Location of main facilities	Annual capacity
Cement		Société des Ciments du Gabon (HeidelbergCement Group through Scancem International ANS, 75% and Government, 25%)	Cement-grinding plant at Owendo, south of Libreville	240,000.
Do.		do.	Cement-grinding plant at Franceville, southeastern Gabon	170,000.
Clinker		do.	Clinker plant at N'Toum, 40 kilometers east of Libreville	300,000.
Gold	kilograms	Artisanal miners	Eteke region	300 to 700.
Manganese		Compagnie Minière de l'Ogooué S.A. (Comilog) (Eramet International, 67%; Government, 25%; other, 8%)	Open pit mine at Moanda	4,000,000 ore, gross weight.
Do.		do.	Sintering plant	600,000.
Petroleum:				
Crude	thousand 42-gallon barrels	Total Gabon S.A., 100%	Anguille	NA.
Do.	do.	Total Gabon S.A., 40%	Atora	NA.
Do.	do.	Total Gabon S.A., 57.5%	Avocette	NA.
Do.	do.	Total Gabon S.A., 50%	Baudroie Nord	NA.
Do.	do.	Total Gabon S.A., 100%	Gonelle	NA.
Do.	do.	Total Gabon S.A., 47.5%	Rabi Kounga	NA.
Do.	do.	Total Gabon S.A., 100%	Torpille	NA.
Do.	do.	PanAfrican Energy, 33.90%; Vaalco Gabon (Etame) Inc., 30.35%; Sasol Petroleum International, 30%; Sojitz Corp., 3.225%; Petro Energy Resources Corp., 2.525%	Etame Marine Block, offshore, including: Avouma oilfield	2,400.
Do.	do.	do.	South Tchibala	NA.
Do.	do.	do.	Ebouri oilfield (exploration stage)	NA.
Do.	do.	do.	Etame oilfield	6,570.
Do.	do.	Marathon Oil Corp., 56%; Tullow Oil plc, 25%; Devon Energy Corp. (% ownership unknown)	Tchatamba Marin oilfield	NA
Do.	do.	do.	Tchatamba West oilfield	NA.
Do.	do.	do.	Tchatamba South oilfield	NA.
Do.	do.	PanOcean Energy Corp., operator, 92.5%	Obangue oilfield	1,800.
Do.	do.	do.	Tsiengui oilfield	1,800.
Do.	do.	PanOcean Energy Corp., operator, 90%	Remboue oilfield	NA.
Do.	do.	PanOcean Energy Corp., 31.4%	Etame Marin oilfield	2,300.
Refinery products	do.	Société Gabonaise de Raffinage (Total Gabon S.A., 58%; Government, 25%; other, 17%)	Port Gentil	8,800.

Do., do. Ditto. NA Not available.