



2010 Minerals Yearbook

GABON [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF GABON

By Yadira Soto-Viruet

Gabon's mineral industry was dominated by the production of manganese and petroleum. In 2010, the country ranked 4th among the world's leading producers of manganese, accounting for about 11% of world production. Crude petroleum production accounted for about 75% of the country's total exports, 60% of Government revenue, and 40% of the country's gross domestic product. Other nonfuel mineral commodities produced in Gabon included cement, diamond, and gold. Identified mineral resources included niobium (columbium), iron ore, and phosphate rock (Corathers, 2011; Extractive Industries Transparency Initiative, 2011).

Government Policies and Programs

On March 2010, the Government of Gabon applied for an extension to their deadline for submitting its Extractive Industries Transparency Initiative (EITI) validation report. The EITI 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 EITI board granted the extension, and the Government submitted the validation report in July. In October, the board designated Gabon, as an EITI candidate that was "close to compliant." The board applies this designation in cases in which the candidate country made meaningful progress and is likely to achieve compliance within a short period. The Government was granted 6 months to complete the corrective actions needed to achieve compliance (Extractive Industries Transparency Initiative, 2011).

Production

In 2010, estimated production of manganese increased by 64% to 3.2 million metric tons (Mt) and that of cement decreased by 20% to 200,000 metric tons (t). Reported production of crude petroleum production increased by 6.5% to 89,425 barrels (bbl) from 83,950 bbl produced in 2009. Data on mineral production are in table 1.

Structure of the Mineral Industry

Most of the mineral industry facilities in Gabon are privately owned, although the Government held minority interests. Small amounts of gold were also produced in the Eteke region by artisanal miners. Table 2 is a list of major mineral industry facilities.

Mineral Trade

Gabon's exports to the United States were valued at about \$2.2 billion in 2010 compared with \$1.2 billion in 2009. About 96% of these exports was petroleum valued at \$2.1 billion and about 3% was nonferrous metals valued at \$71 million. Imports

from the United States were valued at about \$243 million in 2010 compared with about \$171 million in 2009. These included nearly \$42 million worth of drilling and oilfield equipment; \$5.2 million worth of excavating machinery; \$4.6 million worth of coal and other fuels; \$2.1 million worth of petroleum products; and \$2.0 million worth of iron and steel products (U.S. Census Bureau, 2011a, b).

Commodity Review

Metals

Gold.—The joint venture between Africa-based Management International A.G. (63%) and SearchGold Resources Inc. of Canada (27%) held exploration and mining rights for the development of the Bakoudou-Magnima gold project, which is located about 55 kilometers (km) southwest of Franceville and covers an area of 2,934 square kilometer (km²). As of 2008, measured and indicated resources in Zone A were estimated to be 0.53 Mt at an average grade of 2.84 grams per metric ton (g/t) gold and 1.87 Mt at an average grade of 3.06 g/t gold, respectively. The joint venture planned to build an open pit mine and produce about 1,300 kilograms per year of gold for a period of 3.5 years. The project was expected to be in operation in 2011 (SearchGold Resources Inc., 2010).

Iron Ore.—In May, OAO Severstal Resources of Russia acquired 16.5% interest in Core Mining Ltd. of the British Virgin Islands. Core through its subsidiary Core Mining Gabon SRL held 100% interest in the Kango project, which is located about 85 km east of Libreville. The project had access to the Kinguele hydroelectric dam, the Komo River, the Port of Owendo, the main N1 highway, and the Trans-Gabon railway, which is located about 20 km from Kango and had the capacity to transport 10 million metric tons per year (Mt/yr). The company began an initial drilling program in the first half of 2010. A definitive feasibility study at Kango was expected to be completed by 2012. Core envisioned that initial production at the mine would be 1 Mt/yr within 18 months and would increase to 5 Mt/yr thereafter. Production at Kango was projected to be up to 20 Mt/yr by 2015 (Core Mining Ltd., 2010a, b; 2011).

Manganese.—Compagnie Minière de l'Ogooué S.A. (Comilog) was owned jointly by Eramet Group of France (67.25% interest), the Government (25.4% interest), and a private investor (7.35% interest). In October, Eramet and the Government reached an agreement to increase the Government interest by 10% in several stages by 2015, which would bring the Government's interest to 35.4%. Eramet began construction of the Moanda manganese plant, which would have the capacity to produce 20,000 metric tons per year (t/yr) of manganese metal and 65,000 t/yr of silicomanganese metal. The plant would be located 400 km east of the capital city of Libreville. The complex was to benefit from the construction

of the Poubara hydroelectric powerplant, which was a project that the Government was undertaking to improve the supply of electricity in the country. The 160-megawatt-capacity powerplant was scheduled to be in operation by 2013 (Eramet Group, 2010; Kwatsi, 2010; Lawson, 2011).

Citic Resources Holdings Ltd. of China through its subsidiary Compagnie Industrielle et Commerciale des Mines de Huazhou (CICMHZ) signed a mining rights agreement with the Government for the development of the M'Bembele manganese mine, which is located about 200 km southeast of Libreville. The company expected to produce about 800,000 t/yr of manganese in the first 2 years of operation and to increase output to 1.0 Mt/yr thereafter for a period of about 30 years (Radio Netherlands Worldwide, 2010; SteelOrbis Electronic Marketplace Inc., 2010).

Industrial Minerals

Cement.—Heidelberg Cement Group of Germany, which held a 75% interest in Société des Ciments du Gabon (Cimgabon), was the country's only cement producer. Cimgabon operated two cement grinding plants, one of which was located south of Libreville and the other of which was located in Franceville. The company also operated a clinker plant located in N'Toum. Heidelberg planned to increase production capacity to 700,000 t/yr; however, no further details as to when this expansion would take place were available (Gaboneco, 2009; 2010a, b).

Mineral Fuels and Related Materials

Petroleum.—In August 2010, Total S.A. through its subsidiary Total Gabon S.A. signed a farmout agreement with Texas-based VAALCO Energy, Inc., under which Total would acquire 50% interest in the Mutamba Irou exploration license. The joint venture planned to reprocess about 500 km of two-dimensional seismic data in 2011 and to drill one exploration well by the first half of 2012. In November, Total signed an agreement with United Kingdom-based Perenco Group (operator) for the acquisition of a 30% interest in the DE7 exploration license and a 20% interest in the Nziembou exploration license. The DE7 license was located in the Omboué region in central Gabon and covers an area of about 2,200 km². Total reported that studies were underway at the DE7 license to determine the location of the next exploration well. The Nziembou license was located near the Rabi field and covers an area of about 1,000 km² (Total S.A., 2010; Total Gabon S.A., 2011; VAALCO Energy, Inc., 2011, p. 7, 22).

In the first half of 2010, Total acquired 6,000 km² of three-dimensional seismic data on the Diaba deep offshore license and expected interpretation of the seismic data by yearend 2011. On the Anguille field, five development wells were drilled from the existing platform and the company planned to construct a new platform. In 2010, Total's equity share of operated and nonoperated fields produced an average of 52,800 barrels per day (bbl/d) of petroleum, which was a 7% decrease from the 56,500 bbl/d that the company had produced in 2009. Such a decrease was attributable to the natural decline in output from

certain oilfields, notably Anguille, Baudroie Nord Marine, and Grondin (Total S.A., 2010; Total Gabon S.A., 2011).

Other petroleum companies were also operating in Gabon. Bowleven plc of the United Kingdom held a 100% equity interest in the EOV Block offshore and a 50% equity interest in the Epaemeno Block onshore. VAALCO held a 28.1% interest in the exploration acreage within the Etame Marine Block and a 28.1% interest in the development areas surrounding the Avouma, the Etame, and the South Tchibala oilfields.

Outlook

The designation of Gabon as an EITI candidate suggests that the country is on its way to establishing a transparent investment climate, which is likely to attract foreign direct investment in the mineral sector. In the longer run, new projects in the nonfuel mineral sector, such as the development of a new manganese plant, the expansion of the country's only cement producer, and the possibility of developing gold, iron ore, and manganese deposits are likely to provide significant revenue to the Government. The country's infrastructure is likely to be revamped in the next 5 years if proposed infrastructure developments, which include the construction of a hydroelectric powerplant, a railroad, and roads, come to fruition as part of the planned investments in the mineral industry. These projects will likely increase consumption of construction materials, including cement, crushed stone, and sand and gravel.

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

Commodity ³	2006	2007	2008	2009	2010	
Cement and clinker:						
Cement, hydraulic ⁴	metric tons	260,000	228,601 ⁵	230,000	250,000 ^r	200,000
Clinker	do.	350,000	185,109 ⁵	190,000	NA	NA
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	2,925 ⁵	3,200	3,150 ⁵	1,950 ⁵	3,200
Pellets, battery- and chemical-grade, gross weight (82% to 85% MnO ₂) ^e	do.	75	100	100	50	100
Total	do.	3,000 ⁵	3,300 ⁵	3,250 ⁵	2,000 ⁵	3,300
Mn content	do.	1,393 ⁵	1,532 ⁵	1,441 ⁵	881 ⁵	1,500
Natural gas, gross	million cubic meters	80	80	80	NA	NA
Petroleum:						
Crude	thousand 42-gallon barrels	85,775 ^{r,5}	83,950 ^{r,5}	85,775 ⁵	83,950 ^{r,5}	89,425 ⁵
Refinery products	do.	6,000	6,000	6,000	NA	NA

do. Ditto. NA. Not available. ^rRevised.

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

²Table includes data available through August 30, 2011.

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 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 2010

(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 (Cimgabon) (Heidelberg Cement 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 S.A., 67.25%; Government, 25.4%; other, 7.35%)	Open pit mine at Moanda	4,000,000 ore, gross weight.
Do.		do.	Sintering plant	600,000.
Petroleum:				
Crude	thousand 42-gallon barrels	China Petrochemical Corp. (Sinopec) through Addax Petroleum Corp., 92%	Remboue oilfield	NA.
Do.	do.	China Petrochemical Corp. (Sinopec) through Addax Petroleum Corp., 92.5%, and Tullow Oil plc, 3.75%	Obangue oilfield	1,800.
Do.	do.	do.	Tsiengui oilfield	1,800.
Do.	do.	China Petrochemical Corp. (Sinopec) through Addax Petroleum Corp., 31.36%; Vaalco Energy Inc., operator, 28.07%; Sasol Petroleum International, 27.75%; Sojitz Corp., 2.98%; PetroEnergy Resources Corp., 2.34%; Tullow Oil plc, 7.5%	Etame marine block, offshore: Avouma oilfield	2,400.
Do.	do.	do.	South Tchibala	NA.
Do.	do.	do.	Ebouri oilfield	NA.
Do.	do.	do.	Etame oilfield	6,570.
Do.	do.	Bowleven plc, 100%	EOV Block	NA.
Do.	do.	Maurel & Prom S.A., 100%	Banio	NA.
Do.	do.	Maurel & Prom S.A., 85%; AIC-Petrofi Ltd., 7.5%; Tullow Oil plc, 7.5%	Onal	NA.
Do.	do.	do.	Omko	NA.
Do.	do.	Perenco Group, 56.25%; Tullow Oil plc, 25%; Orange-Nassau Energie B.V. (18.75%)	Tchatamba Marin oilfield	NA.
Do.	do.	do.	Tchatamba West oilfield	NA.
Do.	do.	do.	Tchatamba South oilfield	NA.
Do.	do.	Royal Dutch Shell plc, 94.3%	Toucan	NA.
Do.	do.	Total Gabon S.A., 100%	Anguille	NA.
Do.	do.	do.	Gonelle	NA.
Do.	do.	do.	Torpille	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., 47.5%, and Royal Dutch Shell plc, 52.5%	Rabi Kounga	NA.
Do.	do.	Total Gabon S.A., 40%, and Royal Dutch Shell plc, 60%	Atora	NA.
Do.	do.	Total Gabon S.A., 50%, and Vaalco Energy Inc., 50%	Mutamba Iroru	NA.
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.