



2006 Minerals Yearbook

EQUATORIAL GUINEA

THE MINERAL INDUSTRY OF EQUATORIAL GUINEA

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Offshore oil and natural gas production dominated Equatorial Guinea's mineral industry. Hydrocarbons accounted for more than 90% of the gross domestic product. In 2006, the country ranked seventh (based on production volume) of all African crude oil producers (BP p.l.c., 2007, p. 8).

Mineral resources were the property of the Government. In 2006, law No. 9/2006, which was the new Mining Law, replaced law No. 9/1981. Law No. 7/2003 and amendments formed the Environmental Law. Law No. 8/2006, which was the new Hydrocarbon Law, replaced law No. 7/1981 and its amendments. Contracts for hydrocarbon exploration and production were administered by the Ministerio de Minas, Industria y Energia. Existing production-sharing contracts were expected to be subject to renegotiation in order to make the existing contacts conform to the new Hydrocarbon Law. The Ministry also promoted the development of the Rio Muni enclave's mineral deposits, which included bauxite, diamond, gold, and niobium (columbium) and tantalum.

In 1999, the Governments of Angola, Cameroon, the Democratic Republic of the Congo, Equatorial Guinea, Gabon, Nigeria, the Republic of the Congo, and Sao Tome e Principe had established the Gulf of Guinea Commission. The Commission, which became active in 2006, was expected to enhance coordination between the petroleum exploration and production policies of its member states.

Production

Production of mineral fuels, such as condensate, crude oil, and natural gas, dominated the country's mineral sector. Natural gas production from the Alba Field was processed at a facility at Punta Europa on Bioko Island, where the condensate and liquefied petroleum gases (LPG) were stripped from the wet gas stream and the dry gas piped to the adjacent methanol plant. Some artisanally-produced gold and crude construction materials, such as clay, gravel, sand, and volcanic rock, also were produced.

Condensate and crude oil, which was produced from offshore fields, was exported. In 2006, the United States and China, respectively, were the leading destinations of the oil exports; other significant recipients were Canada, France, and Spain. Produced methanol was exported, as was some of the LPG.

Structure of the Mineral Industry

Compañía Nacional de Petróleos de Guinea Ecuatorial (GEPetrol), which was the national oil company, managed the state's interest in crude oil production operations and promoted other investment opportunities in the nation's petroleum sector. Sociedad Nacional de Gas de Guinea Ecuatorial (SONAGAS, G.E.) managed the Government's interest in natural gas-related

projects, such as those for liquefied natural gas (LNG), LPG, and methanol. Exploration and production were governed by production-sharing contracts held by joint ventures of international oil companies and the Government companies.

Commodity Review

Mineral Fuels

Natural Gas and Petroleum.—Hess Equatorial Guinea, Inc. [a subsidiary of Hess Corp. of the United States (formerly Amerada Hess Corp.)] developed and operated the multireservoir offshore Okume oilfield complex for joint venture partners Energy Africa Equatorial Guinea Ltd. (a subsidiary of Tullow Oil plc of the United Kingdom) and GEPetrol. Two tension-leg platforms were set in water depths of 275 meters (m) and 535 m. Additional shallow water (45 m to 70 m) fixed platforms supported a central processing facility and drilling and production facilities. Production from the Okume Complex, which began in December 2006, was piped to the *Sendje Ceiba* floating production, storage, and offloading vessel, which was stationed 24 kilometers from the central processing facility.

Initial production from a 3.7-million-metric-ton-per-year (Mt/yr)-capacity LNG plant, which was under construction at Punta Europa, was expected to begin in 2007. The LNG plant's ownership, which comprised Marathon Equatorial Guinea Production Ltd. of the Cayman Islands (60%), Government-owned SONAGAS, G.E. (25%), Mitsui & Co. Ltd. of Japan (8.5%), and Marubeni Corp. of Japan (6.5%), also evaluated the construction of an additional 4.4-Mt/yr-capacity LNG train 2 at Punta Europa (Marathon Oil Corp., 2007, p. 11).

Outlook

Improved deepwater production technology, additional exploration, and the increased international demand for crude oil and natural gas has transformed the area around Equatorial Guinea into an interesting hydrocarbon prospect. The planned LNG plant and the production and export of commodities associated with natural gas, such as LPG and methanol, have provided the impetus for the development of the infrastructure necessary to capture natural gas, despite the very limited local market. As a result, the volume of natural gas that would have been flared has been significantly reduced.

References Cited

- BP p.l.c., 2007, Statistical review of world energy: London, United Kingdom, BP p.l.c., June, 45 p.
- Marathon Oil Corp., 2007, 2006 annual report: Houston, Texas, Marathon Oil Corp., 60 p.

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

(Thousand 42-gallon barrels unless otherwise specified)

Commodity ³	2002	2003	2004	2005	2006
Petroleum, crude and condensate	90,144 ⁴	102,000	137,000	144,000	145,000
Gold kilograms	100	100	150	200	200
Liquefied petroleum gases	700	800	875	3,000	2,800
Methanol metric tons	719,000	825,000	913,000	1,100,000	750,000
Natural gas ⁵ million cubic meters	1,050	1,220	1,390	2,300	2,000

¹Estimated data are rounded to no more than three significant digits.

²Table includes data available through July 31, 2007.

³In addition to the commodities listed, Equatorial Guinea presumably produced a variety of crude construction materials (clay, gravel, and sand).

⁴Reported figure.

⁵Produced natural gas not used to produce methanol by Atlantic Methanol Production Co. L.L.C. or as rig or processing plant fuel was reinjected.

TABLE 2
EQUATORIAL GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(42-gallon barrels unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Gold kilograms	Artisanal placer operations	Aconibe, Coro, and Mongomo	500
Liquefied natural gas metric tons	Equatorial Guinea LNG Holdings Ltd. (Marathon Oil Co., 60%; Sociedad Nacional de Gas de Guinea Ecuatorial, 25%; Mitsui & Co. Ltd., 8.5%; Marubeni Corp., 6.5%)	Punta Europa	3,700,000 ¹
Liquefied petroleum gas	Alba Plant LLC (Marathon Oil Co., 52%; Noble Energy Equatorial Guinea Ltd., 28%; Sociedad Nacional de Gas de Guinea Ecuatorial, ² 20%)	do.	6,000,000
Methanol metric tons	Atlantic Methanol Production Co. L.L.C. (Marathon Equatorial Guinea Methanol Ltd., 45%; Samedan Methanol, 45%; Sociedad Nacional de Gas de Guinea Ecuatorial, 10%)	do.	1,100,000
Natural gas million cubic meters	Joint venture of Marathon Oil Co., 63%; Noble Energy Equatorial Guinea Ltd., 34%; Compañía Nacional de Petróleos de Guinea Ecuatorial, 3%	Alba Field, Alba Block	2,300 ³
Petroleum:			
Crude	Joint venture of Mobil Equatorial Guinea Inc., 71.25%; Devon O.E.I. Operating Inc., 23.75%; Compañía Nacional de Petróleos de Guinea Ecuatorial, 5%	Zafiro Field, Block B	102,000,000
Do.	Joint venture of Hess Equatorial Guinea, Inc., 80.75%; Energy Africa Equatorial Guinea Ltd., 14.25%; Compañía Nacional de Petróleos de Guinea Ecuatorial, 5%	Ceiba Field, Block G	12,500,000
Do.	do.	Okume Complex (includes the Ebano, the Elon, the Okume, and the Oveng reservoirs), Block G	7,300,000 ⁴
Crude and condensate	Joint venture of Marathon Oil Co., 63%; Samedan of North Africa Inc., 34%; Compañía Nacional de Petróleos de Guinea Ecuatorial, 3%	Alba Field, Alba Block	16,800,000

¹Under construction. Processing train 1 is expected to open in late 2007.

²In 2005, the Government's interest was transferred to Sociedad Nacional de Gas de Guinea Ecuatorial from Guinea Ecuatorial Oil and Gas Marketing Ltda.

³Much of the natural gas produced from the Alba Field was reinjected into the field pending the completion of the liquefied natural gas plant at Punta Europa.

⁴Production from the Okume Complex began in December 2006. Peak production of about 22 million barrels per year is expected in 2008.