



2010 Minerals Yearbook

EQUATORIAL GUINEA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF EQUATORIAL GUINEA

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Offshore oil and natural gas production dominated Equatorial Guinea's mineral industry. Most of Equatorial Guinea's hydrocarbon production was exported; some of the liquefied petroleum gas (LPG) output was consumed locally. Clay, gravel, sand, and volcanic rock output was used by the domestic construction sector.

Mineral resources are the property of the Government. Mineral exploration and production activity are governed by law No. 9/2006, which is the Mining Law, and law No. 8/2006, which is the Hydrocarbon Law. Contracts for hydrocarbon exploration and production are administered by the Ministerio de Minas, Industria y Energia. Law No. 7/2003 and amendments form the Environmental Law.

Production

Data for most of Equatorial Guinea's mineral production were estimated. Data on estimated mineral commodity production are in table 1.

Structure of the Mineral Industry

Hydrocarbon exploration and production activity was governed by production-sharing contracts held by joint ventures of international oil companies and the Government. Guinea Ecuatorial de Petróleos (GEPetrol), which was the national oil company, operated some exploration-stage production-sharing contracts and managed the state's interest in other crude oil exploration and production contracts. Sociedad Nacional de Gas de Guinea Ecuatorial (Sonagas), which was the Government's natural gas company, managed the Government's interest in products derived from natural gas output, such as liquefied natural gas (LNG), LPG, and methanol.

Commodity Review

Mineral Fuels

Natural Gas and Petroleum.—Exxon Mobil Corp. reported that crude oil production from the Zafiro field on Block B again decreased compared with that of previous years. In 2010, crude oil production decreased by about 4% compared with that of 2009 and was about 51% that of 2006. After additional drilling and production well completions that increased production from the Zafiro field in 2004, ExxonMobil reported annual double-digit decline rates from the field until 2007. Mobil Equatorial Guinea Inc., which was a subsidiary of ExxonMobil, started a new drilling program at Zafiro in 2010 and continued discussions with the Government about the development of the field's natural gas resources. SONAF G.E. S.A., which was a joint venture of Gasol plc of the United Kingdom and Sonagas, had been established to collect, process, and sell natural gas

from Block B of the Zafiro Development Area (Exxon Mobil Corp., 2008, p. 60; 2011, p. 57, 62).

In 2010, Hess Corp. (2011, p. 3) of the United States reported a slight (1%) decrease in crude oil output from the Ceiba Field and Okume Complex and Marathon Oil Corp. (2011, p. 13) of the United States reported that the sale of condensate from the Alba natural gas field decreased by about 11% in 2010 compared with that of 2009. Natural gas from the Alba field was stripped of condensate and LPG at the Alba plant. The LNG plant and the methanol plant used portions of the resultant dry gas (after the extraction of the liquids) as feedstock. Any remaining gas was piped back to the Alba field and reinjected.

In 2010, Noble Energy Inc. of the United States drilled 5 production wells and 3 water-injection wells on the Aseng prospect on Block I. A 120,000-barrel-per-day (bbl/d)-capacity floating production, storage, and offloading (FPSO) vessel was under construction and was expected to be onsite in 2012. Noble also planned to develop the Alen condensate and natural gas project (formerly the Belinda prospect), with initial production to begin in 2013 (Noble Energy Inc., 2011, p. 11-12).

The Government completed a feasibility study of a crude oil refinery. A 20,000-bbl/d-capacity refinery was proposed to be built at Mbini (International Business Times, 2010).

Outlook

In the past two decades, improved deepwater production technology, increased petroleum exploration, and the international demand for crude oil and natural gas have transformed the area around Equatorial Guinea into a notable hydrocarbon region. The international demand for LNG and methanol have provided the impetus for the development of the infrastructure necessary to produce and process natural gas, despite the very limited local market. Petroleum production from Equatorial Guinea is expected to continue to decline in the short term, but the development of known hydrocarbon discoveries has the potential to offset the decline partially by 2013.

References Cited

- Exxon Mobil Corp., 2008, 2007 financial & operating review: Irving, Texas, Exxon Mobil Corp., 98 p.
- Exxon Mobil Corp., 2011, 2010 financial & operating review: Irving, Texas, Exxon Mobil Corp., 102 p.
- Hess Corp., 2011, 10-K-2010: U.S. Securities and Exchange Commission, 106 p.
- International Business Times, 2010, Equatorial Guinea refinery to cost 300 mln euros: International Business Times, May 27. (Accessed February 14, 2011, at <http://uk.ibitimes.com/articles/25403/20100527/equatorial-guinea-refinery-to-cost-300-mln-euros.htm>.)
- Marathon Oil Corp., 2011, Form 10-K-2010: U.S. Securities and Exchange Commission, 131 p.
- Noble Energy Inc., 2011, Form 10-K-2010: U.S. Securities and Exchange Commission, 127 p.

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

(Thousand 42-gallon barrels unless otherwise specified)

| Commodity ³ | | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------------------------|----------------------|----------------------|------------------------|----------------------|---------------------|---------|
| Gold | kilograms | 200 | 200 | 200 | 200 | 200 |
| Liquefied petroleum gas | | 7,562 ⁴ | 8,022 ⁴ | 8,000 | 8,000 | 8,000 |
| Methanol | metric tons | 752,000 | 1,098,000 ⁴ | 795,000 | 960,000 | 900,000 |
| Natural gas, net | million cubic meters | 438 ⁴ | 4,100 | 6,800 | 7,900 | 6,500 |
| Petroleum, crude and condensate | | 125,400 ⁴ | 128,100 ⁴ | 127,600 ⁴ | 90,000 ^r | 74,000 |

^rRevised.

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

²Table includes data available through June 7, 2011.

³In addition to the commodities listed, Equatorial Guinea presumably produced a variety of crude construction materials (clay, gravel, and sand), but available information is inadequate to make reliable estimates of output.

⁴Reported figure.

TABLE 2
EQUATORIAL GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2010

(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 Equatorial Guinea Production Ltd., 60%; Sociedad Nacional de Gas de Guinea Ecuatorial (Sonagas), 25%; Mitsui & Co. Ltd., 8.5%; Marubeni Corp., 6.5%] | Punta Europa | 3,700,000 |
| Liquefied petroleum gas | | Alba Plant LLC [Marathon Oil Co., 52%; Noble Energy Equatorial Guinea Ltd., 28%; Sociedad Nacional de Gas de Guinea Ecuatorial (Sonagas), 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 (Sonagas), 10%] | do. | 1,100,000 |
| Natural gas | million cubic meters | Joint venture of Marathon Oil Co., 63%; Noble Energy Equatorial Guinea Ltd., 34%; Guinea Ecuatorial de Petróleos (GEPetrol), 3% | Alba field, Alba Block | 8,000 |
| Petroleum: | | | | |
| Condensate | | do. | do. | 18,000,000 |
| Crude | | Joint venture of Hess Equatorial Guinea, Inc., 80.75%; Tullow Equatorial Guinea Ltd., 14.25%; Guinea Ecuatorial de Petróleos (GEPetrol), 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 | 20,000,000 |
| Do. | | Joint venture of Mobil Equatorial Guinea Inc., 71.25%, and Guinea Ecuatorial de Petróleos (GEPetrol), 28.75% | Zafiro field, Block B | 102,000,000 |

Do., do. Ditto.