



# 2005 Minerals Yearbook

---

## EQUATORIAL GUINEA

---

# THE MINERAL INDUSTRY OF EQUATORIAL GUINEA

By Philip M. Mobbs

Offshore oil and natural gas production dominated Equatorial Guinea's mineral industry. In 2005, the country ranked seventh (based on production volume) of all African crude oil producers. Mineral resources were the property of the Government. Contracts for natural gas and oil exploration and production were administered by the Ministerio de Minas, Industria y Energia. 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. In 2005, the Government formed the Sociedad Nacional de Gas de Guinea Ecuatorial (SONAGAS, G.E.) to manage the Government's interest in natural gas-related projects, such as liquefied natural gas (LNG), liquefied petroleum gases (LPG), and methanol. The Ministerio de Minas, Industria y Energia also promoted the development of Rio Muni's mineral occurrences, which included bauxite, columbium (niobium)-tantalum, diamond, and gold (BP p.l.c., 2006, p. 8).

The Republic of Equatorial Guinea supported a Government-estimated population of about 1,138,000 (although other estimates of the country's population ranged from about 500,000 to 586,000). The total area of the country was 28,051 square kilometers, which included Bioko Island in the Gulf of Guinea and the Rio Muni enclave on the African mainland (Itam and others, 2006, p. 4; U.S. Central Intelligence Agency, 2005<sup>1</sup>; U.S. Department of State, 2005§; World Bank Group, 2006§).

In 2005, the real gross domestic product (GDP) of Equatorial Guinea increased by 6% compared with a 34.2% increase in 2004. The nominal GDP was estimated to be about \$6.8 billion, and the GDP at purchasing power parity was about \$18.8 billion. Hydrocarbons accounted for more than 94% of Government revenue and about 93% of the GDP. In 2005, Government oil revenues derived from profit sharing exceeded royalties for the first time (Itam and others, 2006, p. 91, 100; International Monetary Fund, 2006§).

Most of the crude oil produced in Equatorial Guinean territorial waters was exported. Natural gas production from the Alba Field was processed on Bioko, where the liquids were stripped from the wet gas stream at Punta Europa and the dry gas piped to the methanol plant. The remaining dry natural gas not used at the methanol plant was reinjected into the Alba Field. In addition to LPG, methanol, crude oil, and natural gas, there was some production of crude construction materials, such as clay, gravel, sand, and volcanic rock, for domestic use, and gold.

## Trade

The increase in international oil prices and the increase in domestic oil production resulted in a rise in the value of

---

<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

Equatorial Guinean petroleum exports to about \$7 billion in 2005 compared with a revised value of petroleum exports in 2004 of almost \$4.5 billion. Equatorial Guinean petroleum exports to the United States were valued at \$1.4 billion in 2005 compared with a revised \$981 million in 2004. Equatorial Guinean chemical exports (primarily methanol) to the United States dropped to \$151 million in 2005 compared with a revised figure of \$173.7 million in 2004. Mineral fuels accounted for about 90% of total Equatorial Guinean exports to the United States (Itam and others, 2006, p. 104; U.S. International Trade Commission, 2006§).

## Commodity Review

### *Mineral Fuels*

**Natural Gas and Petroleum.**—In 2005, exploration for petroleum continued in Equatorial Guinea. Mobil Equatorial Guinea Inc. of the United States and partners Devon OEI Operating, Inc. of the United States and GEPetrol announced the discovery of hydrocarbons on the Esmeralda prospect on Block B. Devon drilled the Venus oil prospect on Block P for partners Atlas Petroleum International Ltd. of Nigeria, DNO ASA of Norway, and Petronas Carigali Equatorial Guinea of Malaysia. Noble Energy, Inc. of the United States discovered condensate and natural gas with the O-1 exploration well on Block O. Nexen Inc. of Canada abandoned the K-2 exploration well as a dry hole.

In 2005, Alba Plant LLC of the Cayman Islands completed the expansion of the capacity of its LPG plant at Punta Europa to about 67,000 barrels per day (bbl/d) from 15,000 bbl/d. In 2004, Marathon Equatorial Guinea Production Ltd. of the Cayman Islands and GEPetrol began the construction of a \$1.4 billion 3.4-million-metric-ton-per-year-capacity LNG plant next to the LPG plant at Punta Europa. In June 2005, Mitsui & Co. Ltd. of Japan acquired 8.5% interest in the venture and Marubeni Corp. of Japan also acquired 6.5% interest. LNG production was expected to begin in 2007. BG Gas Marketing Ltd contracted to purchase the first 17 years of production (Marathon Oil Corp., 2006, p. 6, 16).

## Outlook

Improved deepwater production technology, intensive exploration, and the international demand for crude oil and natural gas has transformed the Equatorial Guinean region from a marginal natural gas province to an interesting hydrocarbon prospect. In 2006, continuing negotiations with international oil companies were expected to result in the Government signing production-sharing contracts on Blocks R and S. The Government also expected to offer to investors 24 additional oil blocks in a new licensing round. The ongoing development of Equatorial Guinea's third oilfield (the Okume complex, which

is located offshore Rio Muni) by Amerada Hess Equatorial Guinea, Inc. and its partners was expected to be completed in early 2007.

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., 2006, Statistical review of world energy: London, United Kingdom, BP p.l.c., June, 45 p.
- Itam, Samuel, Franken, Helmut, Loukoianova, Elena, Klueh, Ulrich, and Carvalho, Naly, 2006, Republic of Equatorial Guinea—Selected issues and statistical appendix: Washington, DC, International Monetary Fund Country Report No. 06/237, June, 120 p.
- Marathon Oil Corp. 2006, 2005 annual report: Houston, Texas, Marathon Oil Corp., 57 p.

## Internet References Cited

- International Monetary Fund, 2006 (April), Equatorial Guinea, World Economic Outlook Database, accessed April 19, 2006, via URL <http://www.imf.org/external/pubs/ft/weo/2006/01/data/dbcseim.cfm?G=2001>.
- U.S. Central Intelligence Agency, 2005, Equatorial Guinea, World Factbook 2005, accessed July 5, 2006, at URL <http://www.babylon.com/definition/EquatorialGuineaPeople/English>.

- U.S. Department of State, 2005 (November 8), Equatorial Guinea—International Religious Freedom Report 2005, accessed July 6, 2006, at URL <http://www.state.gov/g/drl/rls/irf/2005/51469.htm>.
- U.S. International Trade Commission, 2006, U.S. imports for consumption at customs value from Eq Guinea, accessed June 30, 2006, at URL [http://dataweb.usitc.gov/scripts/cy\\_m3\\_run.asp?Fl=m&Phase=HTS2&cc=7380&cn=Eq+Guinea](http://dataweb.usitc.gov/scripts/cy_m3_run.asp?Fl=m&Phase=HTS2&cc=7380&cn=Eq+Guinea).
- World Bank Group, 2006, Equatorial Guinea—World development indicators, accessed July 5, 2006, via URL <http://devdata.worldbank.org/data-query>.

## Major Source of Information

Ministerio de Minas, Industria y Energia  
 Departamento de Minas y Hidrocarburos  
 Calle 12 de Octubre  
 Malabo, Bioko Norte  
 Equatorial Guinea  
 Telephone: +(240) 9-3567  
 Fax: +(240) 9-3353  
 Internet: <http://www.equatorialoil.com>

## Major Publication

Ministerio de Minas y Energia, 2002, Hydrocarbons and Mining in Equatorial Guinea: Malabo, Equatorial Guinea, Ministerio de Minas y Energia, 21 p.

TABLE 1  
 EQUATORIAL GUINEA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES<sup>1,2</sup>

(Thousand 42-gallon barrels unless otherwise specified)

Commodity <sup>3</sup>		2001	2002	2003	2004	2005
Gold	kilograms	100 <sup>r</sup>	100 <sup>r</sup>	100 <sup>r</sup>	150 <sup>r</sup>	200
Liquefied petroleum gases		800	700	800	875	3,000
Methanol	metric tons	600,000	719,000	825,000	913,000	1,100,000
Natural gas <sup>5</sup>	million cubic meters	790	1,050	1,220	1,390	2,300
Petroleum, crude and condensate		74,855 <sup>4</sup>	90,144 <sup>4</sup>	102,000 <sup>r</sup>	137,000 <sup>r</sup>	144,000

<sup>r</sup>Revised.

<sup>1</sup>Estimated data are rounded to no more than three significant digits.

<sup>2</sup>Table includes data available through July 4, 2006.

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

<sup>4</sup>Reported.

<sup>5</sup>Produced 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 2005

(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%; Compañía Nacional de Petróleos de Guinea Ecuatorial, 25%; Mitsui & Co. Ltd., 8.5%; Marubeni Corp., 6.5%)	Punta Europa	3,400,000 <sup>1</sup>
Liquefied petroleum gas		Alba Plant LLC (Marathon Oil Co., 52%; Noble Energy Equatorial Guinea Ltd., 28%; Sociedad Nacional de Gas de Guinea Ecuatorial, <sup>2</sup> 20%)	Alba liquefied petroleum gas plant, Punta Europa	6,000,000 <sup>3</sup>
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%)	Punta Europa	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 <sup>4</sup>
<b>Petroleum:</b>				
Crude		Joint venture of Amerada 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	11,500,000
Do.		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
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

<sup>1</sup>Under construction. Processing train 1 is expected to open in late 2007.

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

<sup>3</sup>Expansion completed in 2005.

<sup>4</sup>About 60% of natural gas produced from the Alba Field is reinjected.