THE MINERAL INDUSTRIES OF EQUATORIAL GUINEA AND SAO TOME AND PRINCIPE

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EQUATORIAL GUINEA

In 2003, the Republic of Equatorial Guinea had an estimated population of about 523,000. Its total area of 28,051 square kilometers (km²) comprised a number of islands and islets, which included Bioko in the Gulf of Guinea, and the Rio Muni enclave on the African mainland. The gross domestic product (GDP) of Equatorial Guinea was estimated to be about $3.0 billion. Petroleum accounted for more than 85% of GDP and more than 80% of Government revenue. Oil revenues included the Government’s share of profits from oil production joint ventures, royalties, corporate income tax on oil companies, and sales taxes on oil contractors (International Monetary Fund, 2003, p. 25, 35; 2004§; U.S. Central Intelligence Agency, 2004§).

Mineral resources were the property of the state. Natural gas and oil exploration and production contracts were administered by the Ministry of Mines and Energy, which also promoted the development of Rio Muni’s mineral occurrences. Compañía Nacional de Petróleos de Guinea Ecuatorial (GEPetrol), which was the national oil company, managed the Government’s interest in crude oil production operations and promoted other investment opportunities in the nation’s petroleum sector. Most of the produced oil was exported and much of the produced natural gas was reinjected after liquids were stripped from the gas stream. In addition to liquefied petroleum gases, methanol, natural gas, and oil, some crude construction materials (clay, gravel, sand, and volcanic rock) and gold were produced. The nation’s other mineral commodity requirements were met through imports.


Commodity Review

Offshore oil and natural gas production dominated the country’s mineral industry and, in 2003, Equatorial Guinea ranked seventh (based on production volume) of all African crude oil producers (BP p.l.c., 2004§). On the Alba Field, Marathon Equatorial Guinea Production Ltd. (a subsidiary of Marathon Oil Corp.), Noble Energy Equatorial Guinea Ltd. (a subsidiary of Noble Energy, Inc.), and GEPetrol successfully drilled the Deep Luba well and discovered an additional natural-gas-laden sand package that was about 330 meters deeper than the producing field’s reservoirs (Noble Energy, Inc., 2003). The joint venture also increased condensate production to 30,000 barrels per day (bbl/d) from 18,000 bbl/d, which was attributed to the Phase 2A expansion project of the Alba Field. The Government approved the proposal by Marathon and GEPetrol to build a more-than-3.4-million-metric-ton-per-year-capacity liquefied natural gas (LNG) plant at Punta Europa (Ministry of Mines and Energy, 2003; Clark, 2004).

The joint venture of Mobil Equatorial Guinea Inc., which was a subsidiary of Exxon Mobil Corp. (71.25% participating interest); Ocean Equatorial Guinea Corp. (a subsidiary of Devon Energy Corp.) (23.75%); and the Government (5%) continued the development of block B. Initial production from the Zafiro Southern Expansion Area on block B began in July, which was months ahead of schedule. Several wells were connected to processing facilities on the floating, production, storage, and offloading vessel (FPSO) Serpentina, which was designed to process 1.84 million cubic meters per day of natural gas, 150,000 bbl/d of water, and 110,000 bbl/d of crude oil and to store 1.9 million barrels of oil. Combined with the 110,000-bbl/d-crude-oil-capacity FPSO Zafiro Producer and the 80,000-bbl/d-crude-oil-capacity Jade platform, the FPSO Serpentina increased the Zafiro Field’s production capacity to 300,000 bbl/d (DeLuca, 2003).

On block D, Marathon and the SK Corp. drilled a natural gas discovery well on the Bococo Prospect. Exploration wells drilled on block F by the partnership of Energy Africa Ltd. and Triton Equatorial Guinea, Inc. [a subsidiary of Amerada Hess Corp. (AHC)] were unsuccessful, but about 21 kilometers south of the Ceiba Field on block G, the G-13-2 well confirmed the reservoir discovered in the G-13 well. Additional wells (G-13-3 and Okume-5 and appraisal wells in shallow water near the Elon prospect) were drilled in 2003 with mixed results. The partnership had a three-dimensional seismic survey conducted across part of block G. Production problems with the partnership’s Ceiba Field continued with the failure of a gravel pack on one well and a subsea pump on another. The water injection program that had been initiated to maintain reservoir pressure in the Ceiba Field, however, was reported to be successful—the water injection rate was increased by nearly 300% in 2003, and AHC anticipated increased average daily petroleum production from the field in 2004. Development plans for the Elon, the Okume, and the Oveng prospects on

1 References that include a section mark (§) are found in the Internet References Cited sections.
References Cited


Internet References Cited


Major Source of Information

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SAO TOME AND PRINCIPE

Situated offshore Gabon between Equatorial Guinea’s Annobon and Bioko islands, the Democratic Republic of Sao Tome and Principe consists of the islands of Sao Tome and Principe and several islets in the Gulf of Guinea that encompass a total area of 1,001 km². In 2003, the nominal GDP of Sao Tome and Principe was estimated to be $59 million, and the population was estimated to be about 176,000 (U.S. Central Intelligence Agency, 2003§; International Monetary Fund, 2004§).
In 2003, an abortive bloodless military coup and the negotiations for the 10 deepwater oil blocks tendered by the Nigeria-São Tomé and Príncipe Joint Development Authority dominated the news about São Tomé and Príncipe. The mineral industry was administered by the Ministry of Public Works, Infrastructure, Natural Resources, and Environment. Some clay and volcanic rock were produced; however, all other mineral product requirements were imported.

The Nigeria-São Tomé and Príncipe Joint Development Authority placed nine blocks in the joint development zone (JDZ) up for bid. Each successful bid on a JDZ block would require a signature fee; $30 million was designated as the minimum offer. Each block was subject to postbid acquisition of partial working interest by Environmental Remediation Holding Corp. of the United States (which was doing business as Chrome Energy Corp.) and ExxonMobil. Both companies had been awarded rights to the area by the Government of São Tomé and Príncipe prior to the formation of the JDZ.

Internet References Cited


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1 Revised. -- Zero.
2 Includes data available through July 8, 2004.
3 Estimated data are rounded to no more than three significant digits.
4 In addition to the commodities listed, Equatorial Guinea presumably produced a variety of crude construction materials (clay, gravel, and sand).
5 Reported.
6 Marketed gas estimate.