# 2012 Minerals Yearbook

## EQUATORIAL GUINEA

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# The Mineral Industry of Equatorial Guinea

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Equatorial Guinea's offshore oil and natural gas production accounted for about 75% of the gross domestic product. Mineral resources are the property of the Government, and contracts for hydrocarbon and mineral exploration and production are administered by the Ministerio de Minas, Industria y Energia. Hydrocarbon and mineral exploration and production activity are governed by the Mining Law (law No. 9/2006) and the Hydrocarbon Law (law No. 8/2006). Law No. 7/2003 and amendments form the Environmental Law (International Monetary Fund, 2013, p. 5).

Most of the country's hydrocarbon production was exported, although some of the liquefied petroleum gas (LPG) output was consumed locally. The value of crude oil and natural gas condensate exports was projected by the International Monetary Fund to be $14.6 billion in 2012 compared with an estimated $14.1 billion in 2011. The value of liquefied natural gas (LNG) exports was projected to be about $3.3 billion in 2012, and methanol exports, $439 million. The value of Equatorial Guinea's other exports was estimated to be $198 million in 2012, and the value of imports was projected to be $7.8 billion (International Monetary Fund, 2013, p. 23–24).

Mined clay, gravel, sand, and volcanic rock were used by the domestic construction sector. Construction activity, which in recent years has dominated the Government's capital expenditures, included the development of the Sipopo convention center, which was located about 10 kilometers west of Malabo, the expansion of Equatorial Guinea's road network, and the modernization of airports and ports (International Monetary Fund, 2013, p. 12).

## Production

Data for most of Equatorial Guinea's mineral production were estimated. In 2012, slight increases were estimated for the production of natural gas and petroleum. Data on estimated mineral commodity production are in table 1.

## Structure of the Mineral Industry

Crude oil and natural gas were produced from offshore fields. 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. In 2012, crude oil production began from the Akom North field, which was operated by Hess Equatorial Guinea Inc.

## Commodity Review

### *Metals*

Ivory Resources Inc., which was a subsidiary of Brilliant Resources Inc. of Canada, submitted a technical report to the Government that included an interpretation of its 67,518-line-kilometer MEGATEM® airborne electromagnetic survey. Ivory began negotiations with the Government concerning several exploration license contracts (Brilliant Resources Inc., 2012).

### *Mineral Fuels*

**Natural Gas and Petroleum.**—Exxon Mobil Corp. of the United States reported that, in 2012, crude oil production from the Zafiro field on Block B was about 53,000 barrels per day (bbl/d), which was an annual decrease of about 16% compared with production in 2011. Other sources reported significantly higher output (Exxon Mobil Corp., 2013, p. 50; Quinlan, 2013).

In 2012, Hess Corp. of the United States reported an 11% decrease in crude oil output to 48,000 bbl/d from the Ceiba field and the Okume complex. During the year, Hess drilled three new production wells at Ceiba and brought two wells online. Initial production began from the Akom North field, which was piped to the Okume complex. A 10-well infill drilling program at the Okume complex was scheduled to begin in late 2013 (Hess Corp., 2013, p. 3, 6; Tullow Oil plc, 2013, p. 63).

The five-well Aseng field, which Noble Energy Inc. of the United States brought online in November 2011, completed a full year of production in 2012 at an average output of 62,000 bbl/d. In 2012, production from the new field more than offset the declines in the production volumes attributed to older oilfields that were operated by ExxonMobil and Hess. Noble expected to start production from the three-well Alen field in late 2013 (Noble Energy Inc., 2013, p. 14–15).

Ophir Energy plc of the United Kingdom drilled three additional exploration wells on Block R in 2012. The company proposed to add a joint-venture partner to develop the natural gas field (Ophir Energy plc, 2013, p. 26).

## Outlook

Use of natural gas from fields that currently (2012) flare gas remained under consideration. The Government and international oil companies began evaluating the construction of a second LNG train; an investment decision was expected to be made in 2014. Petroleum production from Equatorial Guinea, however, is expected to resume an annual decrease in volume, although the development of additional hydrocarbon reservoirs could potentially offset the decrease in produced oil volume in the short term (Ophir Energy plc, 2013, p. 27).

## References Cited


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Tullow Oil plc, 2013, 2012 annual report and accounts: London, United Kingdom, Tullow Oil plc, 192 p.


TABLE 1

EQUATORIAL GUINEA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES[1, 2]

(Thousand 42-gallon barrels unless otherwise specified)

| Commodity[3] | | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| Liquefied petroleum gas | | 8,000 | 8,000 | 4,000 | 7,500 r | 7,500 |
| Methanol | metric tons | 795,000 | 960,000 | 860,000 r | 1,000,000 | 1,000,000 |
| Natural gas[4] | million cubic meters | 6,800 | 7,900 | 6,500 | 7,200 | 7,800 |
| Petroleum, crude and condensate | | 127,600 [5] | 112,000 r | 100,000 r | 91,000 r | 98,000 |

rRevised.

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

2Table includes data available through May 22, 2013.

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

4Represents sales. At the Alba field, liquid hydrocarbons were removed from gross natural gas production; unsold gas was reinjected into the reservoir for pressure maintenance. Produced natural gas from other offshore fields was flared or reinjected.

5Reported figure.

TABLE 2
EQUATORIAL GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2012

(Thousand 42-gallon barrels unless otherwise specified)

| Commodity | | Major operating companies and major 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 |
| 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 |
| Do. | | do. | Okume complex (includes the Akom North, the Ebano, the Elon, the Okume, and the Oveng fields), Block G | 20,000 |
| Do. | | Joint venture of Mobil Equatorial Guinea Inc., 71.25%, and Guinea Ecuatorial de Petróleos (GEPetrol), 28.75% | Zafiro field, Block B | 102,000 |
| Do. | | Joint venture of Noble Energy Inc., 40% working interest; Atlas Petroleum International Ltd, 29% working interest; Glencore Exploration (EG) Ltd., 25% working interest; Osborne Resources Ltd.,[1] 6% working interest; Guinea Ecuatorial de Petróleos (GEPetrol), 5% carried interest | Aseng field, Block I | 23,000 |

Do., do. Ditto.
[1]A subsidiary of PA Resources AB.