2013 Minerals Yearbook

EQUATORIAL GUINEA

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The Mineral Industry of Equatorial Guinea

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Offshore oil and natural gas production dominated Equatorial Guinea's mineral industry activity. In 2011 (the latest year for which data were available), hydrocarbons accounted for an estimated 77% of the gross domestic product at factor cost. Most of the country's hydrocarbon production was exported, although some of the liquefied petroleum gas (LPG) output was consumed locally. Mined clay, gravel, rock, and sand were used by the domestic construction industry (International Monetary Fund, 2013, p. 2).

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.

Production

In 2013, slight increases were estimated for the production of methanol, natural gas, and petroleum. Equatorial Guinea presumably produced gold and a variety of crude construction materials (clay, gravel, rock, and sand) but available information was inadequate to make reliable estimates of output. Data on estimated mineral commodity production are in table 1.

Structure of the Mineral Industry

Crude oil, condensate, 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 2013, condensate production began from the Alen field, which was operated by a subsidiary of Noble Energy, Inc. of the United States.

Commodity Review

Industrial Minerals

Cement.—In 2013, Grupo Abayak AKOGA Cemento S.A., which was a subsidiary of Abayak S.A. of Equatorial Guinea, awarded the contract for the construction of a cement plant to FL Smidth & Company A/S of Denmark. The 3,000-metric-ton-per-day-capacity facility, which was to be built at Akoga on the mainland about 120 kilometers southeast of Bata, was expected to begin production in 2016 (Global Cement, 2013).

Mineral Fuels

Natural Gas and Petroleum.—Exxon Mobil Corp. of the United States reported that in 2013 crude oil production from the Zafiro field on Block B was about 48,000 barrels per day (bbl/d), which was about an 11% decrease compared with output in 2012. Hess Corp. of the United States reported that crude oil output from the Ceiba field and the Okume complex decreased by 8% in 2013 to 44,000 bbl/d. Hess also completed an infill drilling and well workover program on the Ceiba field, and in October, Hess began a 14-well infill drilling program at the Okume complex. The new wells were expected to increase the crude oil output of the joint venture of Hess Equatorial Guinea, Inc., Tullow Equatorial Guinea Ltd., and Guinea Ecuatorial de Petróles (GEPetrol) slightly in 2014 (Exxon Mobil Corp., 2014, p. 36; Hess Corp., 2014, p. 3; Tullow Oil plc, 2014, p. 60).

The consortium of GEPetrol, Marathon Oil Co. of the United States, and Noble Energy Equatorial Guinea Ltd. produced condensate and natural gas from the Alba field. Condensate and liquid petroleum gases were removed at the Alba plant on Bioko Island, and the dry gas was sold to Atlantic Methanol Production Com. L.L.C., which produced methanol, and to Equatorial Guinea LNG Holdings Ltd., which liquefied the gas for shipment. In 2013, Noble Energy, Inc. of the United States and partners started production of condensate and natural gas from the three-well Alen field. Condensate was stripped from the gas stream and the gas was reinjected. At yearend, the Alen field produced condensate at the rate of 28,000 bbl/d and the five-well Aseng field produced crude oil at the rate of about 44,000 bbl/d (Marathon Oil Corp., 2014a, p. 9; PA Resources AB, 2014, p. 15).

In 2013, the Ministerio de Minas, Industria y Energia ratified eight new production-sharing contracts for crude oil and natural gas activity. Six of the contracts were for offshore acreage and two were for acreage on the mainland (Ministry of Mines, Industry and Energy, 2013).

The Government and Keppel Corporation Ltd. of Singapore announced plans to build a 2.5-million-metric-ton-per-year (Mt/yr)-capacity floating LNG plant that would process natural gas production from the Block R field, which was operated by Ophir Energy plc of the United Kingdom. Initial production from the floating LNG plant was scheduled to begin in 2016 or 2017. Subsequently, Marathon Oil and Equatorial Guinea LNG Holdings Ltd. wrote off capitalized costs associated with the development of a second LNG train (LNG–2) that had been proposed to be built adjacent to the LNG–1 plant at Punta Europa. Other countries on the Gulf of Guinea, such as

[1]Deceased.

Cameroon and Nigeria, had been expected to export natural gas to Equatorial Guinea to be processed by LNG–2 (Peng, 2013; Marathon Oil Corp., 2014b).

The proposed 22,000-barrel-per-day-capacity crude oil refinery that was to be built at Mbini on the mainland appeared to have been replaced with a proposed 2.2-million-cubic-meter-capacity oil terminal on Bioko Island that would be used to blend crude oil and store refined petroleum products (International Business Times, 2010; Peng, 2013; Versi and Ford, 2014).

Outlook

Petroleum production from Equatorial Guinea is expected to resume an annual decrease in volume owing to the depletion of producing reservoirs, although the development of additional hydrocarbon resources could potentially offset the decrease in produced oil volume in the short term. Cement imports were expected to be reduced when the new cement plant at Akoga starts production in 2016.

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TABLE 1

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

(Thousand 42-gallon barrels unless otherwise specified)

Commodity[3]		2009	2010	2011	2012	2013
Liquefied petroleum gas		8,000	4,000	7,500	7,500	7,500
Methanol	metric tons	960,000	860,000	1,000,000	1,000,000	1,010,000
Natural gas[4]	million cubic meters	7,900	6,500	7,200	7,800	8,000
Petroleum, crude and condensate		112,000	100,000	91,000	98,000	100,000

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

[2]Table includes data available through May 20, 2014.

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

[4]Represents 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.

TABLE 2
EQUATORIAL GUINEA: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(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	NA
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.	7,700
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%; and Guinea Ecuatorial de Petróleos (GEPetrol), 3%	Alba field, Alba Block	8,000
Petroleum:				
Condensate		Joint venture of Marathon Oil Co., 63%; Noble Energy Equatorial Guinea Ltd., 34%; and Guinea Ecuatorial de Petróleos (GEPetrol), 3%	do.	18,000
Do.		Joint venture of Noble Energy, Inc., 44.65%; Guinea Ecuatorial de Petróleos (GEPetrol), 28.75%; Glencore Exploration (EG) Ltd., 24.94%; Atlas Petroleum International Ltd., 1.38%; and PA Resources AB, 0.28%	Alen field, Block O	13,000
Crude		Joint venture of Hess Equatorial Guinea, Inc., 80.75%; Tullow Equatorial Guinea Ltd., 14.25%; and 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; and Guinea Ecuatorial de Petróleos (GEPetrol), 5% carried interest	Aseng field, Block I	23,000

Do., do. Ditto. NA Not available.
[1]A subsidiary of PA Resources AB.