



2007 Minerals Yearbook

CONGO (BRAZZAVILLE) [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF CONGO (BRAZZAVILLE)

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The economy of the Republic of the Congo, also known as Congo (Brazzaville), was based largely on the production of hydrocarbons (crude petroleum and natural gas). The petroleum sector output was estimated to account for about 92% of the country's exports, about 82% of Government revenues, and about 62% of the country's gross domestic product. Petroleum products also accounted for about 32% of total imports. In 2007, Congo (Brazzaville) ranked eighth among African crude oil producers (BP p.l.c., 2008, p. 8; International Monetary Fund, 2008, p. 20, 21, 23).

The petroleum sector was regulated by the Code des Hydrocarbures (law No. 24-1994). Mining was regulated by the Code Minier (law No. 4-2005).

Production

In May, an accident with fatalities on the offshore Nkossa platform resulted in the suspension of Nkossa oilfield operations until August 1. The 3-month shutdown contributed to the 12% decline in overall crude petroleum production in 2007 and to a significant reduction in the recovery of liquid petroleum gases from the associated natural gas stream, which was done on the Nkossa platform.

In addition to hydrocarbons, cement, clays, gold, lime, sand and gravel, and stone were produced in Congo (Brazzaville). In November 2007, Congo (Brazzaville) was re-admitted as a participant in the Kimberley Process. Official diamond production and trade had been proscribed since 2004 when Congo (Brazzaville) was removed as a participant. To discourage the trade in conflict diamond, Kimberley Process participant nations (which accounted for about 98% of the international diamond trade) were prohibited from trading diamond with nonparticipant nations.

Structure of the Mineral Industry

The mineral sector was regulated by the Ministère des Mines, des Industries Minières et de la Géologie. Most mining activity was artisanal.

The Ministère des Hydrocarbures regulated the hydrocarbon sector. State-owned Société Nationale des Pétroles du Congo (SNPC) managed the Government's interest in petroleum and natural gas. Subsidiaries of SNPC included Congolaise de Raffinage (CORAF), which operated the country's sole petroleum refinery, and Société Nationale de Recherche et d'Exploration Pétrolière, which was SNPC's operations (exploration and production) company.

Total Exploration & Production Congo (a subsidiary of Total S.A. of France) was the major private operator in the petroleum sector of Congo (Brazzaville). Other oilfield operators included Eni Congo S.A. (a subsidiary of Eni S.p.A. of Italy), Likouala S.A. of Congo (Brazzaville), and the Perenco Group of France and the United Kingdom. In 2007, Eni acquired Zetah Maurel & Prom Congo S.A.'s interests in the Kouakouala

and the M'Boundi Fields and initiated production from the Ikalou-Ikalou Sud Field.

Commodity Review

Metals

Magnesium.—In 2007, MagMetals Inc., which was a division of MagIndustries Corp., initiated a scoping study to reevaluate the production of magnesium metal at Kouilou. In 2009, MagMetals planned to update its feasibility study of a 72,000-metric-ton-per-year (t/yr)-capacity plant, which was to be located adjacent to the Kouilou potassium chloride (KCl) plant. The original feasibility study of the magnesium plant was done in 1999, but declining international magnesium metal prices from 1999 until 2006 had limited interest in proceeding with the construction of the plant (MagIndustries Corp., 2006).

Industrial Minerals

Potash.—In 2007, MagMinerals Inc. (which also was a division of MagIndustries) continued work on a bankable feasibility study of the proposed 580,000-t/yr-capacity Kouilou KCl plant. MagMinerals reported measured resources of 104.6 million metric tons (Mt) of carnallite with an average grade of 17.5% KCl and indicated resources of 17.4 Mt of carnallite with an average grade of 19.5% KCl (MagIndustries Corp., 2007).

Mineral Fuels

Natural Gas.—Most of the country's hydrocarbons were produced from offshore fields. Most of the natural gas produced in Congo (Brazzaville) that was associated with crude oil was flared because of the lack of gas-gathering infrastructure. Some of the natural gas produced, however, was diverted to be used as fuel at the Djeno power station, which was located south of Pointe Noire; some was reinjected to maintain oilfield reservoir pressure; and some was stripped of liquids (butane and propane) on the Nkossa platform. MagMinerals proposed to acquire natural gas for use at its potash plant from companies that had previously flared their gas.

Outlook

The petroleum sector is expected to remain the cornerstone of the country's economy for the immediate future. Initial production from Total's offshore Moho-Bilondo Field is expected in 2008; by 2010, the field is expected to account for nearly 30% of the country's crude oil output.

The deepwater Azurite prospect is expected to begin production in 2009. Without the development of additional oilfields, national production of crude oil is expected to peak in 2010. SNPC has projected that by 2013, national production would decline to about 55 million barrels as production exhausts

the recoverable reserves of older oilfields (Société Nationale des Pétroles du Congo, 2007).

In addition to exploration activity in the petroleum sector, prospecting and reconnaissance-stage exploration continued for diamond and gold. The redevelopment of coastal potash and salt deposits was expected to result in the resumption of potash production in 2011.

References Cited

BP p.l.c., 2008, BP statistical review of world energy June 2008: London, United Kingdom, BP p.l.c., 45 p.

International Monetary Fund, 2008, Republic of Congo—Staff-monitored program: Washington, DC, International Monetary Fund country report no. 08/173, June, 58 p.

MagIndustries Corp., 2006, MagMinerals prepares to develop Kouilou potash project: Toronto, Ontario, Canada, MagIndustries Corp., October 24, 2 p.

MagIndustries Corp., 2007, MagMinerals reports potash resource for the Kouilou project: Toronto, Ontario, Canada, MagIndustries Corp., November 20, 3 p.

Société Nationale des Pétroles du Congo, 2007, La SNPC vers de nouveaux horizons en exploration et production pétrolières [The SNPC moves towards new horizons in oil exploration and production]: Société Nationale des Pétroles du Congo, 55 p. (Accessed August 20, 2007, at http://www.snpc-group.com/pdf_presse/CAPE_III.ppt.)

TABLE 1
CONGO (BRAZZAVILLE): ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

Commodity ³		2003	2004	2005	2006	2007
Cement	metric tons	--	--	100,000	100,000	100,000
Diamond	carats	30,000	50,000	-- ^{r,4}	-- ^{r,4}	-- ⁴
Gold, mine output, Au content	kilograms	175	160	120	100	100
Lime	metric tons	390	400	400	400	400
Liquid petroleum gas, propane	thousand 42-gallon barrels	1,900	919 ⁵	766 ⁵	2,960 ⁵	1,000
Petroleum:						
Crude	do.	81,646 ⁵	82,069 ⁵	92,550 ⁵	93,261 ⁵	81,700 ⁵
Refined	do.	2,700	2,700	3,000	3,500	3,500

^rRevised. do. Ditto. -- Zero.

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

²Table includes data available through June 16, 2008.

³In addition to the commodities listed, crude construction materials (for example, clay, sand and gravel, and stone) were produced, but available information is inadequate to make reliable estimates of output.

Natural gas is also produced, but output is flared, reinjected, or vented.

⁴No official diamond production was reported. Artisanal production and diamond exploration continued.

⁵Reported figure.

TABLE 2
CONGO (BRAZZAVILLE): STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Thousand 42-gallon barrels unless otherwise specified)

Commodity		Major operating companies and and major equity owners	Location of main facilities	Annual capacity ^c
Cement	metric tons	Société Nouvelle des Ciments du Congo (Société National Chinoise des Travaux des Ponts et Chaussées, 56%, and Government, 44%)	Loutete	250,000
Diamond	carats	Artisanal production	Kouilou, Lekoumou, Likouala, Niari, and West Cuvette regions	50,000
Gold	kilograms	do.	Various locations	100
Liquefied petroleum gas		Total Exploration & Production Congo, 51%; Chevron Overseas (Congo) Ltd., 20%; Société Nationale des Pétroles du Congo (SNPC), 15%; Energy Africa Congo Ltd., 4%	Nkossa Field, offshore	3,000
Petroleum:				
Crude		do.	do.	25,000
Do.		Total Exploration & Production Congo, 65%, and Eni Congo S.A., 35%	Kombi, Likalala, Tchibeli, and Tchibouela Fields offshore	25,000
Do.		Eni Congo S.A., 43.1%; Tacoma Resources Ltd., 30.6%; Energy Africa Congo Ltd., 11%; Société Nationale des Pétroles du Congo (SNPC), 8.8%	M'Boundi Field, onshore	20,000
Do.		Eni Congo S.A., 35.75%; Société Nationale des Pétroles du Congo (SNPC), 35%; Chevron Overseas (Congo) Ltd., 29.25%	Kitina Field, offshore	15,000
Do.		Eni Congo S.A., 65%, and Total Exploration & Production Congo, 35%	Zatchi Field, offshore	12,000
Do.		Total Exploration & Production Congo, 55.25%; Eni Congo S.A., 29.75%; Société Nationale des Pétroles du Congo (SNPC), 15%	Sendji and Yanga Fields, offshore	9,500
Do.		Eni Congo S.A., 65%, and Société Nationale des Pétroles du Congo (SNPC), 35%	Djambala, Foukanda, and Mwafi Fields, offshore	7,300
Do.		Congorep [Perenco Group, 51%, and Société Nationale des Pétroles du Congo (SNPC), 49%]	Emeraude and Yombo Fields, offshore	6,500
Do.		Likouala S.A., 65%, and Eni Congo S.A., 35%	Likouala Field, offshore	3,800
Do.		CMS NOMECONO Congo [Société Nationale de Recherche et d'Exploration Pétrolière, 50%; Perenco Group, 25%; Nuevo Congo Co., 18.75%; Kuwait Foreign Petroleum Exploration Co. (K.S.C.), 6.25%]	Yombo Field, offshore	3,600
Do.		Total Exploration & Production Congo, 65%, and Eni Congo S.A., 35%	Tchendo Field, offshore	3,000
Do.		Eni Congo S.A., 66.67%, and Tacoma Resources Ltd., 33.3%	Kouakouala Field, onshore	500
Do.		Eni Congo S.A.	Ikalou-Ikalou Sud Field	NA
Do.		Prestoil Kouilou, 45%; Société Nationale des Pétroles du Congo (SNPC), 35%; Zetah Maurel & PromCongo S.A., 20%	Tilapia Field, offshore	100
Do.		Société Africaine Oil Corp.	Pointe-Indienne Field, onshore	50
Refined products		Congolaise de Raffinage (CORAF) [Société Nationale des Pétroles du Congo (SNPC), 100%]	Pointe Noire	7,600

^cEstimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto.