



2015 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 primarily on the production of crude petroleum, which in 2015 was estimated to account for about 40% of the nominal gross domestic product (GDP). In 2015, the oil industry accounted for an estimated 38% of Government revenue and 73% of exports. International interest in the development of the nonfuel mineral resources of Congo (Brazzaville) had increased in recent years, and much of the focus of multinational mining companies was on the country's gold, iron ore, limestone, and potash resources (Service Économique de Brazzaville, 2015; African Development Bank, 2016, p. 140; International Monetary Fund, 2016, p. 24).

Minerals in the National Economy

In 2015, the nominal GDP of Congo (Brazzaville) was \$979 million. The pace of economic growth, measured by real GDP growth in Congo (Brazzaville), slowed to 1.2% compared with 6.1% growth in 2014. The deceleration in economic growth was largely attributed to low global oil prices throughout 2015. In 2014, mining and quarrying accounted for 60% of the nominal GDP. In 2015, total exports were valued at \$11.7 billion,¹ and exports of crude petroleum accounted for 73% of total exports. Total imports were valued at \$8.8 billion (African Development Bank, 2016, p. 51, 140, 141).

The mineral sector is under the jurisdiction of the Ministère des Mines et de la Géologie. Mining is regulated by the Code Minier (law No. 4–2005), which requires that a Congolese-based company operate under mining (exploitation) licenses. Article 100 of the code entitles the Government to a free-carried equity interest of not less than 10% in mining operations. Decree No. 2007–274 sets the conditions for prospecting, exploration, and exploitation of minerals, and Decree No. 2007–293 addresses quarrying issues. The Ministère des Hydrocarbures oversees activity in the hydrocarbon sector. The sector is regulated by the Code des Hydrocarbures (law No. 24–1994). Procedures for awarding oil and gas exploitation licenses are set out in Decree No. 2008–15. The Ministère du Tourisme et de l'Environnement reviews environmental assessments of mineral development projects. Congo (Brazzaville) was a participant in the Kimberley Process Certification Scheme (KPCS), and in 2013, became a compliant country of the Extractive Industries Transparency Initiative (Extractive Industries Transparency Initiative, 2013, p. 2).

Production

Cement production was estimated to have increased by 52% in 2015 compared with an increase of 84% in 2014, following

¹Because of fluctuating exchange rates, a meaningful conversion from the Bank of the Central African States' Communauté Financière Africaine franc (XAF) to U.S. dollars (US\$) is impractical. At yearend, however, the 2015 average exchange rate was XAF591.02=US\$1.00.

the first full year of production from the FORSPAK International Congo S.A.R.L. plant at Dolisie. Diamond production statistics obtained from the KPCS indicated that output decreased by nearly 25% in 2015 compared with that of 2014. For all other mineral commodities, production was estimated (table 1; Kimberley Process Certification Scheme, 2016).

Structure of the Mineral Industry

Artisanal miners dominated the diamond and gold mining sectors. Small-scale domestic operations quarried construction materials, such as gravel, sand, and stone. Multinational cement companies had started to develop the country's limestone resources, and international construction companies had obtained a number of quarrying permits for sand and stone to support infrastructure construction projects. There was significant exploration activity for nonfuel minerals, with particular focus on gold, iron ore, and potash prospects (Extractive Industries Transparency Initiative, 2013, p. 2).

State-owned Société Nationale des Pétroles du Congo (SNPC) managed the Government's interest in petroleum production and refining and natural gas production and processing. International oil companies operated many of the oilfields (table 2).

Commodity Review

Metals

Iron Ore.—In November 2015, Equatorial Resources Ltd. (Equatorial) of Australia announced the completed sale of the Mayoko-Moussondji project in southwestern Congo (Brazzaville) to Midus Global Ltd. of the United Kingdom. Equatorial relinquished 100% of its ownership; however, it retained a 2% royalty on all future production from the Mayoko-Moussondji project. Equatorial remained the sole owner of the Badondo iron project in the northwestern region of the country and was in the process of upgrading the Badondo exploration license to a 25-year mining license. Badondo had an exploration target of between 370 and 620 million metric tons (Mt) of direct-shipping ore at a grade of between 58% and 67% iron (Equatorial Resources Ltd., 2015a, p. 2; 2015b; 2016, p. 3).

Iron ore exploration took place primarily in the Invindo Massif area, which is located in the Cuvette-Ouest and the Sangha Departments in northwestern Congo (Brazzaville), and in the Massif du Chaillu area, which is located in the Lekoumou and the Niari Departments in southwestern Congo (Brazzaville). In 2015, little exploration and development activity took place, however, owing to the persistently low global prices of iron ore. Most active projects were put on care-and-maintenance status during the year, but they expected to resume operations when prices begin to increase again. These projects included Exxaro Resources Ltd. of South Africa's Mayoko iron ore project, Sundance Resources Ltd. of Australia's Mblama-Nabeba iron

ore project, and the Zanaga iron ore project, which was a joint venture between Glencore plc of Switzerland and Zanaga Iron Ore Company Ltd. of the United Kingdom (Tredway, 2015; Exxaro Resources Ltd., 2016, p. 7; Sundance Resources Ltd., 2016; Zanaga Iron Ore Company Ltd., 2016).

Industrial Minerals

Cement.—In 2015, cement production was estimated to be 700,000 metric tons (t) compared with 460,000 t in 2014 owing to expansion of production capacity. In February, Société Nouvelle des Ciments du Congo (SONOCC) completed the expansion of the Loutete plant's capacity to 300,000 metric tons per year (t/yr) from about 120,000 t/yr. By midyear, the Dangote Group of Nigeria commenced operation of a 1.5-million-metric-ton-per-year (Mt/yr)-capacity cement plant at Madingou. Diamond Cement Congo S.A., which was a subsidiary of West African Cement S.A. of Ghana, expected initial production at its 600,000-t/yr-capacity cement plant to commence in January 2016. The capacity of the plant at Mindouli could be expanded to 1 Mt/yr (Bede, 2015; China Road and Bridge Corp., 2015; Okereocha, 2015; JournaldeBrazza.com, 2016).

Phosphate Rock.—In June 2015, Cominco Resources S.A., which was a subsidiary of Cominco Resources Ltd. of the United Kingdom, completed a definitive feasibility study on the Hinda project, which is located about 37 kilometers (km) northeast of Pointe Noire. The study estimated Joint Ore Reserves Committee (JORC)-compliant reserves of 404.9 Mt at a grade of 11% phosphorus pentoxide (P_2O_5). Production, after beneficiation was estimated to be 4.1 Mt/yr of phosphate rock grading 32% P_2O_5 . The phosphate rock would be transported along a 42-km slurry pipeline to a facility just north of Pointe-Noire. The mining license was granted on December 7, with construction expected to begin in 2017 and production to commence in 2019 (Cominco Resources Ltd., 2015, 2016).

Mineral Fuels

Petroleum.—In 2015, Société Nationale de Recherche et d'Exploration Pétrolière (SONAREP) completed installation of equipment capable of handling 5,000 barrels per day (bbl/d) in the Kundji field. Total Exploration and Production Congo (a subsidiary of Total S.A. of France) and Chevron Overseas (Congo) Ltd. (a subsidiary of Chevron Corp. of the United States) began production of the Moho Bilondo Phase 1b. The production area fell within the Moho Nord Development and had an expected output of 40,000 bbl/d (Meyers, 2015; Oil & Gas Year, The, 2016).

In November 2015, initial production began at the 40,000 bbl/d Lianzi oilfield. The decision to develop the Lianzi offshore oilfield was approved in July 2012. The Governments of Angola and Congo (Brazzaville) previously had agreed to develop the oilfield, which straddled their international borders, jointly. A project with four producing wells and three water-injector wells was planned. The wells were to be connected to an existing offshore production platform on Block 14 in Angola, which was operated by Cabinda Gulf Oil Company Ltd. (Chevron Corp., 2013, p. 14; Business Wire, 2015).

Outlook

The petroleum sector is expected to remain the cornerstone of the Congo (Brazzaville) economy for the short term partially owing to new deepwater oilfields coming onstream that will add to overall production. Crude petroleum output was expected to peak at about 350,000 bbl/d in 2017, which would be an increase of 35% compared with production in 2015. Multinational cement companies have begun to develop the country's limestone resources to increase production of cement. Cement production capacity in Congo (Brazzaville) was expected to continue to increase significantly during the next 3 to 4 years, and the country was likely to become a cement exporter. The positive results from the definitive feasibility study on the Hinda phosphate project could result in the country being one of the leading producers of phosphate rock in Africa. Depressed commodity prices have temporarily halted exploration and development of iron ore deposits and the redevelopment of coastal potash deposits. When prices increase, however, the country will likely begin to see further diversification of the national economy and a reduction in the country's dependence on petroleum (Stringer, 2014; Bouiti-Viaudo, 2015; Jasinski, 2016).

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TABLE 1
CONGO (BRAZZAVILLE): PRODUCTION OF MINERAL COMMODITIES¹

Commodity ²	2011	2012	2013	2014	2015
Cement metric tons	70,000	150,000	250,000	460,000	700,000 ^e
Diamond carats	76,548	51,588	56,495	53,163	40,057
Gold, mine output, Au content ^e kilograms	150	150	150	150	150
Natural gas, gross thousand cubic meters	151,091	218,521	226,188	241,524 ^r	250,000 ^e
Liquid petroleum gas ^{e,3} thousand 42-gallon barrels	1,400	1,400	1,300	1,300	1,300
Petroleum:					
Crude do.	108,000	99,000	88,338	91,522	94,268
Refinery products:					
Natural gas liquids do.	3,203	5,377 ^r	6,250 ^r	7,592 ^r	8,000 ^e
Naphtha do.	58	83	91 ^r	83 ^r	80 ^e
Liquefied petroleum gas do.	81	81 ^r	93 ^r	93 ^r	90 ^e
Motor gasoline do.	802	682 ^r	597 ^r	665 ^r	700 ^e
Jet kerosene do.	309	531 ^r	444 ^r	476 ^r	500 ^e
Kerosene do.	170	155 ^r	162 ^r	155 ^r	150 ^e
Diesel do.	1,424	1,774 ^r	2,015 ^r	1,971 ^r	1,900 ^e
Fuel oil do.	1,470	2,029 ^r	2,395 ^r	2,477 ^r	2,500 ^e
Total do.	7,517	10,712^r	12,047^r	13,511^r	13,900^e

^eEstimated. ^rRevised. do. Ditto.

¹Table includes data available through August 10, 2016. Estimated data are rounded to no more than three significant digits; may not add to totals shown.

²In addition to the commodities listed, copper ore, crude construction materials (for example, clay, sand and gravel, and stone), lead ore, lime, limestone for cement, and zinc ore were produced, but available information was inadequate to make reliable estimates of output.

³Includes butane and propane.

TABLE 2
CONGO (BRAZZAVILLE): STRUCTURE OF THE MINERAL INDUSTRY IN 2015

(Thousand 42-gallon barrels unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity ^c
Cement	metric tons	FORSPAK International Congo S.A.R.L.	Dolisie	300,000
Do.	do.	Dangote Cement Plc (Dangote Group)	Madingou	1,500,000
Do.	do.	Société Nouvelle des Ciments du Congo (SONOCC) (Société Nationale Chinoise des Travaux des Ponts et Chaussées, 56%, and Government, 44%)	Loutete	300,000
Diamond	carats	Artisanal production	Kouilou, Lekoumou, Likouala, Niari, and West Cuvette Departments	400,000
Gold	kilograms	do.	Various locations	150
Liquefied petroleum gas		Total Exploration and Production Congo, 53.5%; Chevron Overseas (Congo) Ltd., 31.5%; Société Nationale des Pétroles du Congo (SNPC), 15%	Nkossa platform, offshore	3,000
Petroleum:				
Crude		Eni Congo S.A., 90%	Awa/Paloukou field, offshore	4,000
Do.		Murphy Oil Corp., 50%; PA Resources AB, 35%; Société Nationale de Recherche et d'Exploration Pétrolière (SNPC), 15%	Azurite field, offshore	(1)
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 field, offshore	8,000
Do.		Eni Congo S.A., 100%	Ikalou/Ikalou Sud fields, offshore	3,000
Do.		Eni Congo S.A., 65%, and Société Nationale des Pétroles du Congo (SNPC), 35%	Kitina field, offshore	15,000
Do.		Total Exploration and Production Congo, 65%, and Eni Congo S.A., 35%	Kombi, Libondo, Likalala Tchibeli, and Tchibouela fields, offshore	25,000
Do.		Eni Congo S.A., 75%	Kouakouala field, onshore	NA
Do.		Total Exploration and Production Congo, 26.75%; Chevron Overseas (Congo) Ltd., 15.75%; Cabinda Gulf Oil Company Ltd., 15.5%; Angola Block 14 BV, 10%; Eni Congo S.A., 10%, Sonangol E.P., 10%; Société Nationale des Pétroles du Congo (SNPC), 7.5%; Galp, 4.5%	Lianzi field, offshore	14,600
Do.		Congorep [joint venture of Perenco Group, 51%, and Société Nationale des Pétroles du Congo (SNPC), 49%], 65%, and Eni Congo S.A., 35%	Likouala field, offshore	5,000
Do.		Eni Congo S.A., 50%, and Total Exploration and Production Congo, 50%	Loango field, offshore	6,500
Do.		Eni Congo S.A., 85%	Loufika and Zingali fields, onshore	NA
Do.		Eni Congo S.A., 83%; and Tullow Oil plc, 11%	M'Boundi field, onshore	20,000
Do.		Total Exploration and Production Congo, 53.5%; Chevron Overseas (Congo) Ltd., 31.5%; Société Nationale des Pétroles du Congo (SNPC), 15%	Moho-Bilondo field, offshore	32,000
Do.		do.	Nkossa and Nsoko fields, offshore	18,000
Do.		Total Exploration and 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.		Total Exploration and Production Congo, 65%, and Eni Congo S.A., 35%	Tchendo field, offshore	3,000
Do.		CMS NOMECO 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.		Eni Congo S.A., 65%, and Total Exploration and Production Congo, 35%	Zatchi field, offshore	7,600
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. NA Not available.

¹Production ceased in 2013. Field abandonment underway.