



2010 Minerals Yearbook

CONGO (BRAZZAVILLE)

THE MINERAL INDUSTRY OF CONGO (BRAZZAVILLE)

By Philip M. Mobbs

The average international price of crude oil continued to increase in 2010 (to about \$79 per 42-gallon barrel) from the lows of late 2008. The increase in the price of oil supported the expansion of the economy of the Republic of the Congo, also known as Congo (Brazzaville). The country's real gross domestic product (GDP) increased by an estimated 8.8% in 2010 compared with a revised preliminary increase of 7.5% in 2009 and 5.6% in 2008. In terms of value, petroleum sector output was estimated to have accounted for about 89% of the country's exports in 2010, and income from petroleum activities accounted for about 79% of Government revenues. In terms of the volume of its output, Congo (Brazzaville) ranked seventh among African crude oil producers in 2010 (BP p.l.c., 2011, p. 10; International Monetary Fund, 2011, p. 14–16).

Production

Most of Congo (Brazzaville)'s hydrocarbons were produced from offshore fields. Most of the natural gas produced was flared because of the lack of gas-gathering infrastructure.

Production statistics obtained from the Kimberley Process Certification Scheme (KPCS) indicated that diamond output increased by 461% in 2010. The notable increase in the estimated refined petroleum output in 2010 was attributed to the rehabilitation of the crude oil refinery of state-owned Congolaise de Raffinage (CORAF). Gold output was estimated to have increased by 50%. Cement and liquid petroleum gas (butane and propane) production was estimated to have decreased significantly. A 113-day strike by employees at the Société Nouvelle des Ciments du Congo (SONOCC) and problems with rail transportation between the cement plant and Brazzaville contributed to the decline in cement output (table 1; Kimberley Process Certification Scheme, 2011).

Structure of the Mineral Industry

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). The Code Minier requires that a Congolese-based company operate exploitation licenses. Article 100 of the Code entitles the Government to a free (carried) equity interest of not less than 10% in mining operations. Amendments to the mining law introduced in the Senate in 2010 included changes to tax rates and changes to the procedures for granting and renewing artisanal mining permits. The establishment of a Center for Geological and Mining Research also was debated. Law 14–2010 codifies the potash investment agreement that MagMinerals Potasses Congo S.A., which was a partnership between MagMinerals (90%) and the Government of Congo (Brazzaville) (10%), had signed with the Government in 2008.

In recent years, mining activity has been accomplished primarily through small-scale domestic operations. International

mining companies were actively evaluating diamond, ferrous and precious metals, and potash occurrences. Congo (Brazzaville) was a participant in the KPCS and was a candidate country of the Extractive Industries Transparency Initiative.

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

Commodity Review

Metals

Copper, Lead, and Zinc.—The Société de Recherche et d'Exploitation Minière, which was a subsidiary of Gerald Metals, Inc. of the United States (90% equity interest) and the Government (10%), continued the development of the Boko Songo copper and Yanga Koubanza lead-zinc mines in Bouenza Department. NGEx Resources Inc. of Canada continued exploration of the Kingouala and the Reneville copper-lead-zinc licenses.

Gold.—Compagnie Minière du Chaillu, which was a subsidiary of Mexivada Mining Corp. of Canada, continued to explore the Moussondji permit. In October, Zamarat Mining Ltd. of the United Kingdom agreed to an option to acquire up to 70% interest in Mexivada's gold exploration and prospecting permits.

Iron Ore.—Many of the iron ore deposits in Congo (Brazzaville) originally had been explored in the 1930s, the early 1970s, and the mid-1980s, but had been inactive until the past few years. In 2010, some of the ongoing iron ore exploration programs in Congo (Brazzaville) progressed from early stage exploration activity (such as airborne geophysics, preliminary drilling programs, sampling of soils and rocks, and reconnaissance geologic mapping) to intermediate exploration activities, such as prefeasibility studies, estimating the mineral resources contained in the permit areas, and initiating environmental and transportation studies.

Core Mining Congo S.A.R.L., which was a subsidiary of Core Mining Ltd. of the United Kingdom, drilled the Avima project in Sangha Department and planned to start a feasibility study in 2011. In June, Equatorial Coal Ltd. of Australia acquired Congo Mining Ltd. from Geominex Resources Ltd. of the United Kingdom. Equatorial Coal subsequently changed its name to Equatorial Resources Ltd. and, by yearend, had completed an airborne geophysical survey and collected rock chip samples from the Mayoko-Moussondji prospect in Niari Department. Equatorial also started an airborne geophysical survey of the Balondo prospect in Sangha Department.

Sterling Minerals Ltd. of Australia agreed to acquire DMC Mining Ltd. from Cape Lambert Resources Ltd. of Australia. DMC Mining held 80% interest in DMC Iron Congo S.A.R.L., which continued its exploration of the Mayoko project. In early January 2011, Sterling Minerals changed its name to African Iron Ltd. and completed the acquisition of DMC Mining.

Sundance Resources Ltd. of Australia drilled the Nabela deposit and reported an inferred resource of 200 million metric tons (Mt) of hematite with an average grade of 63.1% iron, 2.5% silica dioxide, and 0.09% phosphorus. In 2010, Sundance started a feasibility study of the Mbalam project in Cameroon. The Nabela deposit, which is located in Sangha Department in northwestern Congo (Brazzaville), was expected to be developed as part of the Mbalam project (Sundance Resources Ltd., 2010, p. 8–14).

Waratah Gold Ltd. of Australia acquired 90% equity interest in Afriresources Congo S.A., which held the exploration rights to the Youkou iron ore project, which is located in Cuvette-Ouest Department. Afriresources Congo expected to complete an airborne geophysical survey of the prospect in early 2011.

Zanaga Iron Ore Company Ltd. of the British Virgin Islands owned Jumelles Ltd. of the United Kingdom, which in turn owned 100% equity interest in Mining Project Development Congo S.A.U. (MPD). MPD was the local operating company for the Zanaga iron ore project (ZIOP), which is located about 300 km northeast of Pointe Noire in Lekoumou Department. In 2009, Xstrata plc of Switzerland agreed to fund exploration of the ZIOP, which included the Zanga-Bambama and the Zamba-Madzoumou exploration licenses, for the option to acquire 50% plus 1 share equity interest in Jumelles Ltd. In 2010, MPD continued exploration of the ZIOP and initiated an environmental and social impact assessment study and a prefeasibility study. The prefeasibility study was expected to be completed in early 2011. The inferred mineral resource of the ZIOP was estimated to be 3.34 billion metric tons of iron ore with an average grade of 32.7% iron, 43.43% silica dioxide, and 0.046% phosphorus (Zanaga Iron Ore Company Ltd., 2010, p. 102).

Industrial Minerals

Cement.—In April, workers of the 210,000-metric-ton-per-year (t/yr)-capacity SONOCC, which was located at Loutete, began a strike over compensation issues. The strike ended in August. Also in 2010, SONOCC restructured itself as a joint venture. Because the output of SONOCC did not meet the domestic demand for cement, Cementos La Union of Spain proposed to construct a 500,000-t/yr-capacity cement plant at Point Noire (Les Dépêches de Brazzaville, 2010a, b).

Diamond.—Diamond production exceeded 380,000 carats in 2010 compared with 68,000 carats in 2009 when the international demand for diamond was adversely affected by the global economic crisis. In 2010, Zamarat Mining also agreed to an option to acquire up to 70% interest in Mexivada's diamond exploration and prospecting permits, which included the Bitsandou, the Camp Socobois the Malambani, the Mbinda, and the Nzambi, diamond permits. Other companies exploring for

diamond included La Société Congo Trading and Development, which was a subsidiary of a Chinese company; and Congolese companies La Congolaise de Recherche et d'Exploitation Minière and La Société Motaba Mining (table 1; Kimberley Process Certification Scheme, 2011).

Potash.—MagMinerals Inc., which was a division of MagIndustries Corp. of Canada, continued negotiations to secure financing for the development of the Mengo exploitation permit and the Kouilou potash processing facility. MagMinerals Potasses Congo S.A. was expected to operate the potash project.

Sintoukola Potash S.A. drilled the Sintoukola potash exploration license, which was located about 55 km northwest of Point Noire. Elemental Minerals Ltd. of Australia held 93% of the equity in Sintoukola Potash with partners Les Etablissements Congolais MGM (5%), and Tanaka Resources (Proprietary) Ltd. (2%).

Outlook

Despite the continued decline in production from older oilfields, the petroleum sector is expected to remain the cornerstone of the country's economy for the immediate future in part because of new deepwater oilfields coming onstream. The redevelopment of the coastal potash deposits is expected to result in the resumption of potash production in the near future. Additionally, successful development of copper, diamond, gold, and iron ore deposits could lead to diversification of the national economy from its dependence on petroleum (Ministry of Planning and Territorial Development, 2010, p. 18–29).

References Cited

- BP p.l.c., 2011, BP statistical review of world energy June 2011: London, United Kingdom, BP p.l.c., 45 p.
- International Monetary Fund, 2011, Republic of Congo—Fifth and sixth reviews under the three-year arrangement under the extended credit facility and financing assurances review in Republic of Congo—Fifth and sixth reviews under the three-year arrangement under the extended credit facility and financing assurances review—Staff report; Staff statement and supplement; Press release on the executive board decision; and statement by the executive director for the Republic of Congo: Washington, DC, International Monetary Fund country report no. 11/255, August, 35 p.
- Kimberley Process Certification Scheme, 2011, Annual global summary—2010 production, imports, exports, and KPC counts: Kimberley Process Certification Scheme, 1 p. (Accessed August 5, 2011, at <https://kimberleyprocessstatistics.org/static/pdfs/AnnualTables/2010GlobalSummary.pdf>.)
- Les Dépêches de Brazzaville, 2010a, Industrie—Une société espagnole construit une usine de transformation de ciment à Pointe-Noire: Les Dépêches de Brazzaville, February 9. (Accessed September 28, 2011, at http://www.brazzaville-adiac.com/index.php?action=depeche&dep_id=36625&cat_id=4&oldaction=home®pay_id=0.)
- Les Dépêches de Brazzaville, 2010b, Vie des entreprises—La société nouvelle des ciments du Congo révisé à la baisse son capital et se dote d'un nouveau statut juridique: Les Dépêches de Brazzaville, April 24. (Accessed September 28, 2011, at http://www.brazzaville-adiac.com/index.php?action=depeche&dep_id=38691&cat_id=4&oldaction=home®pay_id=0/.)
- Ministry of Planning and Territorial Development, 2010, Republic of Congo—Poverty reduction strategy paper—Annual progress report: Washington, DC, International Monetary Fund country report no. 10/69, 81 p.
- Sundance Resources Ltd., 2010, Annual report 2010: Perth, Western Australia, Australia, Sundance Resources Ltd., October, 84 p.
- Zanaga Iron Ore Company Ltd., 2010, Admission document: London, United Kingdom, London Stock Exchange Ltd., 353 p.

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

| Commodity ³ | 2006 | 2007 | 2008 | 2009 | 2010 | |
|-------------------------------------|----------------------------|-----------------|---------------------|----------------------|---------------------|----------------------|
| Cement | metric tons | 100,000 | 100,000 | 105,000 | 110,000 | 80,000 |
| Diamond | carats | -- ⁴ | 22,000 ⁵ | 110,000 ⁵ | 68,000 ⁵ | 381,242 ⁵ |
| Gold, mine output, Au content | kilograms | 100 | 100 | 100 | 100 | 150 |
| Lime | metric tons | 400 | 400 | 400 | 400 | 400 |
| Liquid petroleum gas ^{5,6} | thousand 42-gallon barrels | 2,960 | 1,016 | 1,610 | 2,469 | 1,300 |
| Petroleum: | | | | | | |
| Crude ⁵ | do. | 93,261 | 80,692 | 85,037 | 99,348 | 107,000 |
| Refined | do. | 3,500 | 3,500 | 2,500 | 3,000 | 5,000 |

do. Ditto. -- Zero.

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

²Table includes data available through September 13, 2011.

³In addition to the commodities listed, copper, crude construction materials (for example, clay, sand and gravel, and stone), lead, and zinc 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, although there may have been artisanal production.

⁵Reported figure.

⁶Includes butane and propane.

TABLE 2
CONGO (BRAZZAVILLE): STRUCTURE OF THE MINERAL INDUSTRY IN 2010

(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 (SONOCC) (Société National Chinoise des Travaux des Ponts et Chaussées, 56%, and Government, 44%) | Loutete | 210,000 |
| 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 & 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 | | CMS NOMECCO 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. | | Congorep [Perenco Group, 51%, and Société Nationale des Pétroles du Congo (SNPC), 49%] | Emeraude field, offshore | 4,400 |
| Do. | | Eni Congo S.A., 100% | Ikalou/Ikalou Sud fields, offshore | 3,000 |
| Do. | | Eni Congo S.A., 90% | Awa/Paloukou field, offshore | 4,000 |
| Do. | | Eni Congo S.A., 75% | Kouakouala field, onshore | 500 |
| Do. | | Eni Congo S.A., 74%; Korea National Oil Co., 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 Société Nationale des Pétroles du Congo (SNPC), 35% | Djambala, Foukanda, and Mwafi fields, offshore | 7,300 |
| Do. | | Eni Congo S.A., 65%, and Total Exploration & Production Congo, 35% | Zatchi field offshore | 7,600 |
| Do. | | Eni Congo S.A., 50%, and Total Exploration & Production Congo, 50% | Loango field, offshore | 6,500 |
| Do. | | Likouala S.A., 65%, and Eni Congo S.A., 35% | Likouala field, offshore | 3,800 |
| Do. | | Murphy Oil Corp., 50%; PA Resources AB, 35%; Société Nationale de Recherche et d'Exploration Pétrolière (SNPC), 15% | Azurite field, offshore | 12,000 |
| Do. | | Total Exploration & 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 & Production Congo, 65%, and Eni Congo S.A., 35% | Kombi, Likalala, Tchibeli, and Tchibouela fields, offshore | 25,000 |
| Do. | | do. | Tchendo field, offshore | 3,000 |
| 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 |
| 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.