



2015 Minerals Yearbook

BURUNDI [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF BURUNDI

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In 2015, Burundi produced about 1% of the world's production of tantalum. The country also mined small amounts of gold, limestone, niobium (columbium), peat, sand and gravel, tin, and tungsten. Burundi was not a globally significant consumer of minerals. The manufacturing industry accounted for 9% of the gross domestic product in 2015, and the mining and quarrying industry, 0.5%. Mineral fuels accounted for about 20% of Burundi's imports in 2014, and cement, 2% (African Development Bank Group, 2016; Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 239; International Tin Research Institute, 2016; Papp, 2017).

In October 2013, the Government passed the Mining Code of Burundi (law No. 1/21 of October 15, 2013), which partially replaced the Mining and Petroleum Act of 1976 (Decree-Law No. 1/138 of July 17, 1976). The exploration for and mining of minerals and mineral fuels other than petroleum and natural gas were governed by the Mining Code of Burundi. At yearend, the natural gas and petroleum subsector still was governed by the Mining and Petroleum Act of 1976. The Ministry of Energy and Mines was responsible for issuing licenses and regulating the mineral sector.

In July 2010, the U.S. Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act, which contains provisions in Section 1502 concerning the use of minerals to finance military operations in eastern Democratic Republic of the Congo [Congo (Kinshasa), or DRC]. The U.S. Securities and Exchange Commission (SEC) issued regulations in final form in accordance with the Dodd-Frank Act in August 2012.

Under the new regulations, all companies registered with the SEC that sell products containing gold, tantalum, tin, or tungsten were required to disclose whether these minerals originated from Congo (Kinshasa) or countries that share a border with Congo (Kinshasa), including Burundi. Companies that sell products containing gold, tantalum, tin, or tungsten that originated in Congo (Kinshasa) or bordering countries are also required to submit annual reports to the SEC describing the due diligence measures taken, the smelters that processed the minerals, and the companies' efforts to determine the mine of origin. The companies also are required to describe products that contain conflict minerals in their reports and the reports are to be published on the companies' Web sites.

In April 2014, a panel of the U.S. Court of Appeals for the District of Columbia Circuit mostly upheld the SEC's authority to implement the regulations in Section 1502 of the Dodd-Frank Act. The panel ruled that the regulations requiring companies to describe certain products as having been "not found to be DRC conflict free" were unconstitutional on First Amendment grounds. Subsequently, the D.C. Circuit Court of Appeals, sitting in bank, overruled part of the panel's ruling that struck down the disputed Section 1502 regulations. On November 18, 2014, the panel agreed to rehear arguments regarding First Amendment issues in the case. In August 2015,

the panel ruled again that the regulations were unconstitutional (Browning, 2015; Seitzinger and Ruane, 2015).

In April 2014, the Government of Burundi and the International Tin Research Institute (ITRI) started the ITRI Tin Supply Chain Initiative (iTSCI) certification scheme for domestically produced tantalum, tin, and tungsten to meet end users' requirements of the Dodd-Frank Act. All Burundi's cassiterite, columbite-tantalite, and wolframite mine sites were covered by iTSCI at the end of 2015; most mine sites were inactive because of civil unrest related to the disputed election of 2015 and an attempted coup d'etat (BBC News, 2015; Kay Nimmo, Network Leader for Sustainability, International Tin Research Institute, written commun., August 19, 2016).

Production

The production of tungsten increased by an estimated 74%, and cement, by an estimated 36% in 2015. Peat production decreased by 67% in 2015; niobium (columbium) and tantalum, by an estimated 43% each; and tin, by an estimated 31%. Niobium, tantalum, and tin production decreased because of civil unrest. Peat production decreased because of the closure of the Gitanga Mine (table 1; International Monetary Fund, 2015, p. 13; Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 205).

Structure of the Mineral Industry

Most mining operations were privately owned. About 20,000 workers were estimated to be involved in artisanal mining in 2014, which included about 10,000 workers producing construction materials and nearly 7,000 workers producing gold. It is likely that mining employment decreased in 2015 because of civil unrest. State-owned Office Nationale de la Tourbe (ONATOUR) was Burundi's only peat producer, and privately owned Burundi Cement Co. (BUCECO) was the country's only cement producer (table 2; Matthysen, 2015, p. 30; Kay Nimmo, Network Leader for Sustainability, International Tin Research Institute, written commun., August 19, 2016).

Commodity Review

Metals

Cobalt, Copper, Iron and Steel, Iron Ore, Nickel, and Platinum-Group Metals.—In June 2014, Burundi Mining Metallurgy International Ltd. (BMM) (a subsidiary of Kermas Group of the United Kingdom) received a mining license for the Musongati nickel-cobalt-copper deposits. By 2019, the company planned to build plants with a total ore-processing capacity of 1 million metric tons per year (Mt/yr). From 1 Mt/yr of ore, BMM planned to produce 416,500 metric tons per year (t/yr) of iron,

11,400 t/yr of nickel, 3,800 t/yr of copper, 1,050 t/yr of cobalt, 1,100 kilograms per year (kg/yr) of palladium, 600 kg/yr of platinum, and 400 kg/yr of gold. Total resources at Musongati were estimated to be about 150 million metric tons grading 1.37% nickel, 0.21% copper, and 0.09% cobalt. The total grade for gold, palladium, and platinum was less than 1 gram per metric ton (Burundi Mining Metallurgy International Ltd., 2011, p. 68–69; Koncar, 2013; McGregor and Nimubona, 2014).

By 2024, BMM planned to increase its ore-processing capacity to 5 Mt/yr from 1 Mt/yr. Power requirements for the mine and refinery at production levels of 5 Mt/yr were estimated to be 800 megawatts, which would be supplied by new hydroelectric and solar plants (Koncar, 2013; McGregor and Nimubona, 2014).

Gold.—Artisanal miners produced an estimated 500 kg/yr of gold in Provinces that included Bujumbura, Cankuzo, Cibitoke, Muyinga, and Ruyigi. Production was limited by nonmechanized mining methods that resulted in low recovery rates. In October 2014, 11 cooperatives of artisanal miners were authorized for gold mining (Matthysen, 2015, p. 13, 27, 30).

Niobium (Columbium), Tantalum, Tin, and Tungsten.—Tantalum Mining Co. (formerly Comptoir Minier des Exploitations du Burundi S.A.) operated the country's largest columbite-tantalite mine at Kivuvu in Kayanza Province. Cooperative d'Exploitation Minière du Burundi operated the largest wolframite mine at Canika in Kirundo Province. Columbite-tantalite output increased to nearly 106,000 kilograms (kg) in 2014 from about 74,000 kg in 2013; cassiterite, to an estimated 75 metric tons (t) from 31 t; and wolframite, to 49 t from 12 t. In 2015, Burundi's production of wolframite increased to 85 t. Columbite-tantalite output decreased to 59,000 kg in 2015; and cassiterite, to 52 t. Most cassiterite, columbite-tantalite, and wolframite mining operations were shut down at yearend because of civil unrest (Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 205; International Tin Research Institute, 2016; Kay Nimmo, Network Leader for Sustainability, International Tin Research Institute, written commun., August 19, 2016).

Industrial Minerals

Cement, Clay, and Gypsum.—In January 2015, Burundi Cement Co. (BUCECO) started an expansion of its capacity to 300,000 t/yr from 100,000 t/yr. The company planned to complete its expansion in January 2016. BUCECO quarried clay domestically and imported clinker and gypsum for use in cement production. All Burundi's cement requirements were imported before BUCECO started production in 2011; imports increased to 107,773 t in 2014 from 96,222 t in 2013 (Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 239; Office Burundais des Recettes, [undated]).

Rare-Earths.—In February 2015, Rainbow Rare Earths Ltd. was awarded a mining license for the Gakara rare-earth deposits in Bujumbura Province. Rainbow also signed a 10-year offtake agreement with ThyssenKrupp Metallurgical Products GmbH of Germany for the purchase of 5,000 t/yr of rare-earth concentrates or downstream rare-earth products processed from Gakara's concentrates. The company planned to reopen Gakara,

which was shut down in 1978 because of inconsistent ore grades in the deposit, and start pilot production in the first quarter of 2016. Rainbow continued exploration at Gakara; the company hoped to identify resources to prolong the life of the mine (Cornish and Kotze, 2015).

Mineral Fuels and Related Materials

Peat.—ONATOUR's peat production decreased to 11,376 t in 2014 from 19,256 t in 2013 because of the early arrival of rainfall. The decrease was broadly based, with lower production at all mines in 2014. The Gitanga Mine produced 4,001 t in 2014; the Gisozi Mine, 3,883 t; the Buyongwe Mine, 1,756 t; and the Matana Mine, 1,736 t. In 2015, output decreased further to 3,800 t as ONATOUR's customers substituted wood for peat. The company's production was consumed by the Burundian military (Agence Burundaise de Presse, 2016; Institut de Statistiques et d'Etudes Economiques du Burundi, 2016, p. 205).

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TABLE 1
BURUNDI: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²		2011	2012	2013	2014	2015 ^c
METALS						
Gold, mine output, Au content ^c	kilograms	400	500	400	500	500
Niobium (columbium) and tantalum, ore and concentrate:						
Concentrate, gross weight	do.	158,782	258,578	73,518	105,547	59,000
Nb content ^c	do.	31,000	51,000	14,000	21,000	12,000
Ta content ^c	do.	31,000	51,000	14,000	21,000	12,000
Tin, mine output:						
Cassiterite concentrate, gross weight		52	117	31	75	52
Sn content ^c		22	50	13	32	22
Tungsten, mine output:						
Wolframite concentrate, gross weight		505	565	12	49	85 ³
W content ^c		200	270	6	23	40
INDUSTRIAL MINERALS						
Cement ^c		34,500 ³	70,500 ³	100,000	70,000	95,000
MINERAL FUELS AND RELATED MATERIALS						
Peat		7,973	19,641	19,256	11,376	3,800 ³

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

¹Table includes data available through September 22, 2016.

²In addition to the commodities listed, brick and other clay, limestone, and sand and gravel were produced, but available information was inadequate to make reliable estimates of output.

³Reported figure.

TABLE 2
BURUNDI: STRUCTURE OF THE MINERAL INDUSTRY IN 2015

(Metric tons unless otherwise specified)

Commodity		Major operating companies	Location of main facilities	Annual capacity
Cement		Burundi Cement Co. (BUCECO)	Plant in Cibitoke Province	100,000
Clay		do.	NA	NA
Gold	kilograms	Artisanal miners	Various sites in Bujumbura, Cankuzo, Cibitoke, Muyinga, and Ruyigi Provinces	500 ^c
Niobium (columbium) and tantalum, columbite-tantalite ore and concentrate		Various producers, including the following: Tantalum Mining Co. (TAMINCO) do. do. Artisanal miners	Kivuvu Mine in Kayanza Province Ndona Mine in Cibitoke Province Muhere Mine in Kirundo Province Various sites in Kayanza, Kirundo, Muyinga, and Ngozi Provinces	260 ^c
Peat		Office Nationale de la Tourbe (ONATOUR)	Buyongwe, Gisozi, Gitanga, and Matana	20,000
Tin, cassiterite ore and concentrate		Various producers, including the following: Tantalum Mining Co. (TAMINCO) Artisanal miners	Kivuvu Mine in Kayanza Province Various sites in Cibitoke, Kayanza, Kirundo, Muyinga, and Ngozi Provinces	100 ^c
Tungsten, wolframite ore and concentrate		Various producers, including the following: Cooperative d' Exploitation Minière du Burundi Artisanal miners	Canika Mine in Kirundo Province Various sites in Kirundo and Muyinga Provinces	600 ^c

^cEstimated. do. Ditto. NA Not available.