



2013 Minerals Yearbook

SENEGAL

THE MINERAL INDUSTRY OF SENEGAL

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Senegal was among the world's leading producers of phosphate rock. Other commodities produced in the country included attapulgitite, basalt, cement, gold, gravel, laterite, lead (refined), lime, limestone, natural gas, petroleum (crude), petroleum refinery products, salt, and sand. In addition to these mineral commodities, Senegal could begin producing mineral sands in 2014, when the Grande Côte Mineral Sands project (GCMS) comes online. The GCMS Mine, which was being developed by Mineral Deposits Ltd. (MDL) of Australia and ERAMET S.A. of France, through their joint-venture company TiZir Ltd., was expected to be commissioned in March 2014 and to employ 660 people. Once in operation, the mine would produce an average of about 85,000 metric tons per year (t/yr) of zircon, 575,000 t/yr of ilmenite, and small amounts of rutile and leucoxene. The ilmenite produced by GCMS was to be transported by rail to the Port of Dakar and then shipped to the Tyssedal smelter in Norway for the production of titanium slag. Titanium slag was to be sold as a feedstock for the production of titanium dioxide pigments. The high-purity pig iron coproduct recovered from the smelting process was to be sold to foundry operators (ERAMET Group, 2014, p. 5, 14, 19; Mineral Deposits Ltd., 2014, p. 12, 14).

Senegal also had the potential to become an iron ore producer when the Faleme iron ore project comes online. The project remained on hold in 2013 owing to an unresolved dispute between the Government and Luxembourg-based ArcelorMittal Holdings AG, which held the mining rights to the project. In September, an arbitral tribunal within the Court of Arbitration of the International Chamber of Commerce in Paris ruled in favor

of the Government of Senegal, which claimed that ArcelorMittal had breached its contract regarding the development of the Faleme project. A new arbitration phase to determine the potential liability of ArcelorMittal was scheduled for late 2015; ArcelorMittal reported that it would continue to defend its position. In 2011, the parties had engaged in a conciliation procedure in an attempt to reach mutually acceptable terms to solve the dispute, but were unable to reach an agreement, which led to the Government's claim before the Court of Arbitration in 2012 (ArcelorMittal, 2014, p. 32, 143).

Table 1 provides data on the principal mineral commodities produced in Senegal from 2009 to 2013, and table 2 provides a list of major mineral industry facilities in 2013. More-extensive coverage of the mineral sector of Senegal can be found in the 2011 and 2012 U.S. Geological Survey Minerals Yearbook, volume III, Area Reports—International—Africa and the Middle East, which are available at <http://minerals.usgs.gov/minerals/pubs/country/>.

References Cited

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- ERAMET Group, 2014, Annual report 2013—People-driven performance: Paris, France, ERAMET Group, 44 p. (Accessed September 26, 2014, at http://www.eramet.com/sites/default/files/publications/pdf/eramet_annual_report_2013_en.pdf.)
- Mineral Deposits Ltd., 2014, Full year report for the year ended December 31, 2013: Melbourne, Victoria, Australia, Mineral Deposits Ltd., 70 p. (Accessed September 26, 2014, at <http://www.mineraldeposits.com.au/wp-content/uploads/2014/02/13.12-MDL-Annual-Report.pdf>.)

TABLE 1
SENEGAL: PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Thousand metric tons unless otherwise specified)

Commodity ³	2009	2010	2011	2012	2013
Basalt ⁴	1,321	1,167	1,415	2,328	2,300 ^e
Cement, hydraulic	3,320	4,066	4,677	4,689	5,191
Clay, fuller's earth (attapulgitite)	181	204	181	181 ^e	235
Gold, mine output, Au content kilograms	5,055	4,381	4,089	6,666	6,445
Laterite ⁴	103	226	1,035	2,386	2,400 ^e
Lead, secondary metric tons	NA	NA	NA	NA	2,607
Lime	46	24	26	36	40 ^e
Limestone ⁴	1,415	1,248	1,093	2,407	2,400 ^e
Natural gas ^c thousand cubic meters	17,500	24,000	36,000	-- ^r	--
Petroleum: ⁵					
Crude thousand 42-gallon barrels	249	398	403	57	117
Refinery products	739	617	738	818	751
Phosphate rock and related products:					
Phosphate rock	949	1,079	1,411	1,381	882
Phosphoric acid, P ₂ O ₅ content	283	312	362	363	259
Calcium phosphate-based fertilizers	44	45	37	36	26
Salt	222	232	258	237	243
Sand ⁴	2,065	2,040	1,706	1,468	1,500 ^e

^eEstimated; estimated data are rounded to no more than three significant digits. ^rRevised. NA Not available. --Zero.

¹Table includes data available through January 5, 2015.

²In addition to the commodities listed, Senegal also produced sand and gravel and stone for local construction purposes, but information was inadequate to make reliable estimates of output.

³Major source of information: Agence National de la Statistique et de la Démographie.

⁴Values converted from cubic meters to metric tons. Specific gravity, in grams per cubic centimeter—basalt, 2.8; laterite, 2.55; limestone, 2.6; and sand, 2.6.

⁵Crude petroleum values have been converted from metric tons to 42-gallon barrels using a conversion factor of 7.4 barrels of crude petroleum per metric ton.

TABLE 2
SENEGAL: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of mine facilities	Annual capacity
Attapulgitite	Senegal Mines SA (Sepiol SA, 51%, and Government, 49%)	240 kilometers south of Dakar	100.
Do.	Société Senegalaise de Phosphates de Thies S.A.	Lam Lam, Thies region	NA.
Cement	Les Ciments du Sahel S.A.	Kirene plant	2,400.
Do.	Sococim Industries (Vicat Group, 99.91%)	Rufisque cement plant, east of Dakar	3,500.
Gold kilograms	Sabodala Gold Operations S.A. (Teranga Gold Corp., 90%, and Government, 10%)	650 kilometers east of Dakar	6,500.
Lead metric tons	Gravita Senegal SAU (Gravita India Ltd., 100%)	Recycling lead acid battery plant, Dakar	2,650.
Petroleum products	Petrosen, 45%; Binladin Group, 34%; Total S.A., 20%	Refinery, 23 kilometers from Dakar	1,226.
Phosphate rock, aluminum	Société Senegalaise de Phosphates de Thies SA	Lam Lam, Sebikhotane, and Allou-Kagne	NA.
Phosphate rock, calcium	Industries Chimiques du Sénégal Group (Government of India and Indian Farmers Fertilizer Cooperative Ltd., 85%, and Government of Senegal, 15%)	Taiba Mine, 100 kilometers from Dakar	2,000.
Phosphoric acid	Industries Chimiques du Sénégal Group (Indian Farmers Fertilizer Cooperative Ltd., 85%, and Government, 15%)	Darou I plant and Darou II plant, 100 kilometers from Dakar	660 P ₂ O ₅ .

Do. Ditto. NA Not available.