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The Mineral Industry of Mauritania

By Mowafa Taib

Mauritania occupies an area of more than 1 million square kilometers (km^2) in northwest Africa and has a population of 3.5 million. The country was a supplier of crude oil, copper, gold, and iron ore in 2013. Mauritania was the 2d-ranked exporter and producer of iron ore in Africa after South Africa, and it was the world's 11th- and 15th-ranked exporter and producer of iron ore, respectively. In addition to copper, gold, and iron ore, Mauritania produced modest quantities of cement, crude oil, gypsum, quartz, salt, and steel (table 1; U.S. Central Intelligence Agency, 2014; World Steel Association, 2014, p. 102–103).

Minerals in the National Economy

In 2013, Mauritania's gross domestic product (GDP) increased in real terms by 6.7% to about $4.2 billion compared with a revised rate of 7.0% in 2012, which was nearly double the revised growth rate of 4.0% in 2011. The growth rate of the mineral sector, which included crude oil and metal production, increased to 16.2% in 2013 from -1.6% in 2012. Crude oil production increased at a rate of 3.2% in 2013 compared with a decrease of 15.9% in 2012. The growth rates of copper, gold, and iron ore were 12.7%, 20.2%, and 16.9%, respectively, in 2013 compared with a decrease of 19.2% and 5.0% and an increase of 2.6%, respectively, in 2012. The contribution of the mining sector to the GDP decreased to 29.3% in 2013 from 31.2% in 2012 and 38.1% in 2011. The value of metal sector activity, which contributed 25.2% of the GDP, increased by 17.2% in real terms in 2013 compared with a decrease of 0.3% in 2012. The increase was the result of increased production of gold and iron ore in 2013 compared with those of 2012. The value of petroleum sector activity, which contributed 2.4% to the GDP, increased slightly (by 1.7%) in 2013. The increase was attributed to the increased production of crude oil to 2.5 million barrels (Mbbl) from 2.4 Mbbl in 2012 (Banque Centrale de Mauritanie, 2014, p. 28–31, 101, 103).

The flow of foreign direct investment (FDI) to Mauritania continued in 2013 but at a reduced rate compared with the historic surge of 2012. The value of FDI influx to Mauritania in 2013 was $1.15 billion, which was about 17% less than that of 2012, which was $1.383 billion. Most of the FDI was used to expand mining projects. The value of greenfield FDI projects in Mauritania, however, decreased to $23 million in 2013 from $361 million in 2012 and $279 million in 2011 (United Nations Conference on Trade and Development, 2014, p. 40, 205, 219).

Government Policies and Programs

The Ministère de l'Industrie et des Mines [Ministry of Industry and Mines] is the Government agency responsible for regulating the country's mining industry activity. The Direction des Mines et de la Géologie [Department of Mines and Geology] implements the Government's policies to enhance foreign investment in the mining sector of Mauritania. The Code Minier [Mining Law] awards exploration permits on a "first come, first served" basis for a 3-year period that can be renewed twice for up to 3 years each time. Mining licenses are awarded for a 30-year period and are renewable for up to 10 additional years. The law exempts mining companies from customs duties for equipment during exploration and the first 5 years of production and permanently on fuel and spare parts. The tax code includes a 25% corporate income tax rate after a tax exemption for the first 3 years of production, a tax withholding rate of 14% on repatriated earnings, and a 16% value-added tax.

The revisions to the Mining Code in 2012 changed the method by which royalties are calculated and the area of land that is assigned for exploration permits. Revisions to the mining law added a 10% tax on all mining transactions and made international commodity prices the basis for the royalty calculation. The area of land allocated for each exploration permit was reduced to 500 km^2 from 1,000 km^2 for all minerals except for the areas allocated for diamond concessions, which remain at 5,000 km^2 (Marouf, 2011). Mining royalties range from 1.5% to 6% of the price of the final processed mineral product. The royalty for Group 1 minerals, which includes chromium, iron ore, manganese, titanium, and vanadium, is assessed at 2.5% of the price. The royalty increases to 3% for iron ore sold at a price of between $100 and $150 per metric ton and to 3.5% for iron ore sold at a price of between $150 and $200 per metric ton. The royalty for Group 2 minerals, which includes precious and nonferrous metals, is 3% of the price on the London Metal Exchange (LME), with the exception of copper (ranges between 3% and 5%, depending on the LME price), gold (ranges between 4% and 6.5%, depending on the LME price), and platinum-group elements (4%). The royalty for Group 3 minerals, which includes coal and fuel minerals, is 1.5% of the sale price; Group 4, which includes uranium and other radioactive materials, is 3.5%; Group 5, industrial minerals and construction materials, 2.5%; and Group 6 minerals (gemstones) and Group 7 minerals (diamond), 5% and 6%, respectively (Ministère du Pétrole et de l'Energie et des Mines, 2012).

The Ministère du Pétrole et de l'Energie [Ministry of Petroleum and Energy] is responsible for overseeing activity in the fuel minerals industry. The Government approved several amendments to its Hydrocarbon Code and Mining Code in 2011.

In 2012, Mauritania was declared an Extractive Industries Transparency Initiative (EITI)-compliant country after having implemented EITI processes, which are designed to promote transparency and improve living conditions in and around mining sites. The country had an established EITI national committee and a "publish what you pay" coalition chapter, which calls on mining companies to publish what they pay to Governments (Coulibaly, 2013).

Production

In 2013, gold production increased by 24% compared with that of 2012, iron ore output increased by 16%, and crude oil production increased by 4%. Production of other mineral commodities such as copper, gypsum, and steel remained at about the same level as in 2012 (table 1).

Structure of the Mineral Industry

In 2013, some 80 local and international companies were involved in mineral exploration and production in Mauritania. Société Nationale Industrielle et Minière (SNIM) was a majority state-owned mining company (78.35% interest). SNIM operated iron ore mines at Guelb el Aouj, Guelb el Rhein, M'Haoudat, and Zouerate in northern Mauritania. SNIM also owned and operated a 700-kilometer (km) heavy-haul railway and a shipping terminal at Nouadhibou Port on the Atlantic coast. Other companies involved in mineral production in Mauritania were privately and (or) publicly owned. Sphere Minerals Ltd., which was a subsidiary of Glencore plc (formerly Glencore Xstrata plc) of Switzerland, was a partner with SNIM in the Guelb El Aouj iron ore mining project, as well as the majority shareholder in the Askaf iron ore project. Tasiast Mauritanie Ltd. S.A. (a wholly owned subsidiary of Kinross Gold Corp. of Canada) and Mauritanian Copper Mines S.A. (MCM) (a wholly owned subsidiary of First Quantum Minerals Ltd. of Australia) were responsible for the country's gold production in 2013. Mauritanian Copper Mines was the sole producer of copper and PETRONAS International Corporation Ltd. (a subsidiary of Petroliam Nasional Berhad of Malaysia) was the sole producer of crude oil. Two companies produced cement—Ciment de Mauritanie S.A. and Mauritano-Française des Ciments S.A. Salt was produced by Société Mauritanienne des Industries du Sel (SOMISEL) (table 2).

Mineral Trade

In 2013, iron ore exports, which accounted for 51.2% of the country's total exports by value in 2013, increased by 20% to $1.36 billion from $1.13 billion in 2012, and gold exports increased by 6% to $472 million from $445 million in 2012. Crude oil exports, which accounted for 8.2% of the total exports, decreased by about 20% to $217 million from $271 million in 2012, and copper exports, which accounted for 8.1% of total exports, decreased by about 9% to $216 million from $238 million in 2012. Seventy-five percent of Mauritania's iron ore exports went to China, followed by Italy (11%), France (5%), and other European countries (9%) (Banque Centrale de Mauritanie, 2014, p. 37–38, 6).

Commodity Review

Metals

Copper.—The Guelb Moghrein Mine, which is an open pit mine located near the town of Akjoujt in the Inchiri District in western Mauritania, was the country's only operating copper mine. The mine was 100% owned and operated by MCM. MCM mined about 2.9 million metric tons (Mt) of ore, processed 2.8 Mt of sulfide ore grading 1.4% copper, and produced about 37,970 metric tons (t) of copper in concentrate. As of yearend 2013, MCM estimated the total mineral reserves at the Guelb Moghrein Mine, which included proven, probable, and proven possible reserves at a cutoff grade of 0.46% copper, to be 31.3 Mt of ore grading 0.92% copper and 0.69 gram per metric ton (g/t) gold. At the end of 2013, the total measured, indicated, and high-stockpile mineral resources at the Guelb Moghrein Mine were estimated to be as follows (using a cutoff grade of 0.5% copper): 30.5 Mt of sulfide "ore" containing 1.08% copper and 0.69 g/t gold and 4.2 Mt of oxide "ore" containing 1.16% copper and 1.09 g/t gold (First Quantum Minerals Ltd., 2014b).

Gold.—Two mines produced gold in Mauritania in 2013—the Guelb Moghrein copper-gold mine and the Tasiast gold mine. The Guelb Moghrein Mine produced 1,810 kilograms (kg) of gold in 2013, which was 3.8% less than the 1,882 kg of gold produced in 2012. The Tasiast gold mine, which was owned and operated by Kinross and located in northwestern Mauritania, produced 7,707 kg of gold, which was 33.7% more than the 5,770 kg of gold produced in 2012 (First Quantum Minerals Ltd., 2014a; Kinross Gold Corp., 2014).

As of yearend 2013, estimates of proven and probable mineral reserves at the Tasiast deposit were 176.6 Mt at a grade of 1.71 g/t gold for a total of 302,000 kg of gold. The measured and indicated resources were estimated to be 174.6 Mt at a grade of 0.84 g/t gold for a total of 147,000 kg of gold, and the inferred resources were about 31.2 Mt at a grade of 0.79 g/t gold for a total of 246,000 kg of gold. In 2013, Kinross took a writedown of about $3.1 billion on the Tasiast Mine following changes in its future expansion plan as a result of increasing operating costs and decreasing gold prices on the world market (Kinross Gold Corp., 2014).

Gryphon Minerals Ltd. of Australia was exploring for copper and gold in three locations in Mauritania—the Akjoujt, the Saboussiri, and the Tijirit projects in 2012. In 2013, however, Gryphon discontinued exploration at the Akjoujt and the Saboussiri properties to focus on the Tijirit gold project, which is located in northwestern Mauritania in a gold district that includes the Tasiast gold deposit. The project, which was wholly owned by Gryphon, encompassed continuous exploration licenses covering an area of about 1,400 km^2. Gryphon's activity in 2013 included mapping, sampling, and identifying future drilling programs in the event that the company should decide to expand exploration activity once gold market conditions improve (Gryphon Minerals Ltd., 2014).

Iron Ore.—SNIM produced a record 13.0 Mt of iron ore in 2013 and was expected to ramp up production in 2014. SNIM was implementing a capacity-building and -expansion plan; it called the plan Nouhoudh (rising up) and aimed for it to increase the project's iron ore production to 40 million metric tons per year (Mt/yr) and make SNIM one of the world's top exporters of seaborne iron ore. The identified resources in Tiris Province, which include the Guelb el Rhein deposit, were more than 5 billion metric tons of magnetite iron and several hundred million metric tons of hematite iron ore.

The Guelb el Rhein deposit has magnetite ore grading 37% iron, which was enriched at the Guelb el Rhein plant by dry magnetic separation to bring the iron content up to 66%. The plant had the capacity to concentrate 5 Mt/yr of iron ore. Hematite iron ore deposits were located at the Kedia d'Idjill and M'Haoudat areas, which accounted for 60% of SNIM's iron ore production. SNIM reported an increase of its iron ore resources by 830 Mt, which was discovered in the Zouerate area. The Government expected that five more mines would become operational in the next 3 years. SNIM has been developing its facilities to achieve its production target of 18 Mt/yr of iron ore by 2016. The work included increasing the production capacities of the existing mines and constructing a new beneficiation plant at the Guelb el Rhein Mine that would have the capacity to produce 4 Mt/yr of concentrated iron ore. The $710 million expansion project was financed by multiple donor institutions. SNIM was also building a new ore-carrier port next to the existing port at Nouadhibou to enable handling of 170,000-t-capacity ships in the first phase and 250,000-t-capacity ships in the second phase, as well as upgrading the 700-km iron ore railway between the iron ore mines and the port. In 2013, Mauritania's capacity to process, transport, and export iron ore reached 16 Mt/yr, following completion of construction of a second loading wharf at the Port of Nouadhibou on the Atlantic coast (Thomson Reuters, 2013; Société Nationale Industrielle et Minière, 2014b).

Glencore, which acquired 87% of Sphere Minerals Ltd. of Australia in 2011, completed a feasibility study for the Askaf iron ore project and a prefeasibility study for the Guelb el Aouj phase 1 iron ore project, which was a joint venture with SNIM to develop a 15-Mt/yr-capacity iron ore mine at Guelb el Aouj. Guelb el Aouj is considered a large-scale iron ore production project, which is located in an area that hosts about 4 billion metric tons (Gt) of iron ore (Glencore plc, 2014, p. 61).

In addition to its joint venture with Glencore, SNIM formed a joint venture with China Minmetals Corp. to develop the Tazadit underground mine (TUM). SNIM's share of TUM was 65% and that of China Minmetals was 35%. Mauritania Saudi Mining and Steel Co. was a 50–50 joint venture created between SNIM and Saudi Basic Industries Corp. (SABIC) to develop iron ore deposits at Guelb Atomai (Société Nationale Industrielle et Minière, 2014a, d).

PT Bumi Resources Minerals Tbk (BRM) of Indonesia owned a 60% interest in Bumi Mauritania S.A. and an 89.6% interest in Tamagot Bumi S.A. Bumi Mauritania and Tamagot were exploring for iron ore in Mauritania and held four iron ore concessions in the Tamagot region, which is located 250 km northeast of Nouakchott. In December, BRM transferred its asset in the iron ore project in Mauritania to Rubis International Ltd., which was a local partner in the project. The reason for the divestment decision was that BRM intended to focus on developing its projects in Indonesia (PT Bumi Resources Minerals Tbk, 2014, p. 9).

Societe Miniere d'Afrique du Sud et de l'Ouest S.A. (SOMASO S.A.), which was a joint venture of TransAfrika Resources Ltd. (70% interest) and Agrineq S.A. (30% interest), continued exploration work at the Kaouat iron ore project (prospecting permit 273B1), which is located 255 km northeast of Nouakchott and covers an area of 1,474 km^2. SOMASO identified an exploration target of 1 Gt of ore grading 30% iron, which could potentially be concentrated to 67% iron (TransAfrika Resources Ltd., 2014).

Charter Pacific Corp. (CPC) of Australia held an exploration permit for iron ore at the Kaoua El Khadra region, which is located near Akjoujt and the Guelb Moghrein copper-gold mine. The company owned a 51% interest in the permit, and SNIM owned the remaining 49% interest. Charter Pacific set up an exploration target of between 2.6 Gt and 4.4 Gt of magnetite banded iron formations containing between 18% and 39% iron and planned to install a magnetic separation beneficiation plant to produce higher content iron ore. Legleitat Iron Mauritanie (a 70%-owned subsidiary of CPC) was awarded a mining permit for an advanced hematite deposit that hosts direct-shipping-grade iron ore. The Legleitat iron ore deposit was an established investment site, which had an estimated inferred resource of 12.2 Mt of iron ore containing 59% iron that had the potential to support production of 1 Mt/yr of direct-shipping-grade iron ore for 10 years. CRC planned to begin production at the Legleitat site in late 2015 (Charter Pacific Corp., 2014).

Industrial Minerals

Gypsum.—Mauritania is home to one of the world's largest gypsum deposits. Sebkha N'dramcha, which is located about 50 km northeast of Nouakchott, contains at least 140 Mt of proven reserves of gypsum. Only a small fraction of the gypsum resources had been explored and mined. The country's main producer of gypsum was Société Arabe des Industries Métallurgiques (SAMIA) (50–50 joint venture of SNIM and the Industrial Bank of Kuwait); SAMIA produced 60,000 metric tons per year (t/yr) of gypsum, two-thirds of which was used as a cement additive and one-third of which was used in plaster production (table 2; Taylor and others, 2012, p. 15; Ould Eleya, 2014).

Phosphate Rock.—Mauritania's probable reserves of phosphate rock were estimated to be at least 100 Mt, including 70 Mt grading 21% phosphorus pentoxide (P_2O_5) at the Bofal deposit and 29 Mt grading 19% P_2O_5 at the Loubboira deposit. Both deposits occur in the ridges of phosphatic sedimentary rocks of Eocene age uncovered along the northern bank of the Senegal River and located 300 km east of the Atlantic coast. Bofal Indo Mining Co. S.A., which was established in 2010, was a joint venture of Archean Group of India and the Government to develop the country's first phosphate rock mine, which would be located in the Bofal-Loubboira area in southwestern Mauritania. Bofal was expected to produce 1 Mt/yr of phosphate rock by the end of 2013 but by yearend, the project was still at the reserve development stage. The company also planned to build a phosphoric acid plant by 2015 (Marouf, 2010; Taylor and others, 2012, p. 15).

Quartz.—Mauritania Minerals Co. S.A. (MMC) held a license for the establishment of the first quartz operation in Mauritania at the Oum Agueneina deposit, which contained 70 Mt of quartz. The Oum Agueneina Mine was expected to be operational in 2013 but no information on quartz production was available. The quartz mine was owned by MMC (90%) and the Government (10%) and had the capacity to produce 300,000 t/yr of quartz (Mauritania Minerals Co. S.A., 2014).

Mineral Fuels and Related Materials

Natural Gas and Petroleum.—Crude oil production in Mauritania came from the offshore Chinguetti oilfield. PC Mauritania I Pty. Ltd. and PC Mauritania II B.V. (subsidiaries of PETRONAS International Corporation Ltd. of Malaysia) were the operators of the Chinguetti oilfield, which produced 2.5 Mbbl of crude oil in 2013 compared with 2.4 Mbbl in 2012 (table 1). Tullow Oil plc of the United Kingdom was exploring for crude oil in eight offshore blocks. The company planned to build the first natural gas pipeline in the country to carry natural gas from the Banda gasfield to Nouakchott; production at the gasfield was expected to begin in 2015 (table 1; Marouf, 2012).

In August, Tullow began exploration operations following a technical oil discovery at Fregate-1. The company increased its exploration acreage after signing a production-sharing contract with the Government for the shallow water Block C–3 license area in April (Tullow Oil plc, 2014, p. 60).

In 2013, Repsol S.A. of Spain and RWE Dea A.G. of Germany started drilling the Ouguiya-1 well in Block 10 in the Taoudenni Basin in central Mauritania. The well was expected to be completed in 2014. Repsol was the operator and held a 70% interest in the project; RWE Dea held the remaining 30% interest. Other companies that were exploring for oil and gas in Mauritania included Total E&P Mauritania (a subsidiary of Total S.A. of France), which was exploring Block C–9 in the deep offshore area and Block A–29 in the Taoudenni Basin; Charoit Oil & Gas Ltd. of the United Kingdom; and Kosmos Energy Ltd. of the United States (Oil and Gas Journal, 2013).

Uranium.—In 2013, several companies were exploring for uranium in Mauritania. These companies included Agrineq S.A., Aura Energy Ltd., and Forte Energy N.L. (all of Australia); Alba Mineral Resources Plc. (United Kingdom); and PT Earthstone Resources Ltd. (Indonesia). Additionally, three domestic companies were engaged in uranium exploration—Lusitania Uranium Mauritania, Mauritania Resources Ltd., and Orecorp Mauritania S.A.R.L. The Government awarded an exploration license for titanium and zirconium in the northern El Abiod area to Mineralis S.A.R.L. (WISE Uranium Project, 2014).

Forte Energy, which held 10 Group 4 uranium exploration permits that covered 9,925 km^2 in the Zedens region in northern Mauritania, conducted vehicle-based radiometric surveys and very-low-frequency electromagnetic surveys at the A238, the Bir En Nar, and the Firawa prospects and at several anomalies identified near Bir Moghrein. The company renewed a 5,400-meter (m) diamond-drilling program at the Bir En Nar prospect after completing a 4,115-m reverse-circulation drilling program. The company reported the indicated and inferred mineral resource estimates for the A238, the Bir En Nar, and the Firawa prospects to be 76.8 Mt containing 266 parts per million (ppm) uranium oxide (U_3O_8) for 20,400 t of contained U_3O_8 (reported as 44.9 million pounds) at a cutoff grade of 100 ppm U_3O_8 (Forte Energy N.L., 2013).

In 2013, Aura Energy Ltd. of Australia focused its exploration activity on its eight wholly owned permits at the Reguibat craton in northern Mauritania, which covers an area of about 8,400 km^2. Aura reported the presence of carnotite-type calcrete uranium mineralization in gravel and sands. The company conducted beneficiation tests that increased the concentration of uranium by sevenfold and leaching experiments that resulted in a 94% recovery rate of uranium (Aura Energy Ltd., 2014).

Outlook

The Government has been focusing on developing the country's mineral resources in general and iron ore in particular. SNIM is planning to increase its iron ore production to 40 Mt/yr in the next decade from the current 13 Mt/yr. This goal could be achieved after the completion of the iron ore projects that are currently being implemented as partnerships between SNIM and such international mining companies as ArcelorMittal, CPC, China Minmetals, Glencore, PT Bumi Resources, and SOMASO (Société Nationale Industrielle et Minière, 2014b, c).

In March 2014, Kinross cut the cost of its Tasiast gold mine expansion project by about 41% to $1.6 billion from $2.7 billion. The National Instrument 43–101 technical report, which was released in March 2014, also indicated that Kinross would not decide the scope of the expansion project until 2015 or later. The report also projected a more than threefold increase in gold production during the 17-year mine life (Els, 2014).

SNIM signed an agreement with Glencore to develop the Askaf iron ore mine in return for access to SNIM's port, railway, and storage facilities for 18 years. Glencore was finalizing the evaluation of its two iron ore projects in Mauritania—the Askaf and the El Aouj—which were expected to produce more than 22.5 Mt/yr of iron ore when completed. Sphere Minerals signed an engineering, procurement, and construction contract worth $600 million with Essar Projects Ltd. of India to build a 7.5-Mt/yr iron ore beneficiation plant. The plant was expected to start production in 2017, but Sphere Minerals decided to move slowly with the construction of the project because of the decline in iron ore prices in the world market (Mining-technology.com, 2014).

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TABLE 1
MAURITANIA: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity[2]		2009	2010	2011	2012	2013
METALS						
Copper, in concentrate		36,608 r	36,969 r	35,281 r	37,670	37,970
Gold	kilograms	7,837	8,305	8,172	7,652	9,517
Iron and steel:						
Iron ore:						
Gross weight	thousand metric tons	10,524	11,534	11,160	11,200	13,000
Iron content e	do.	6,840	7,500	7,250	7,280	8,450
Steel e		5,000	5,000	5,000	5,000	5,000
INDUSTRIAL MINERALS						
Cement		324,415	552,382	565,029	644,000 e	650,000 e
Gypsum		36,928	65,245	72,153	75,000 e	75,000 e
Salt		455	391	690	700	700
MINERAL FUELS AND RELATED MATERIALS						
Petroleum, crude	thousand 42-gallon barrels	4,105	3,025	2,824	2,400	2,500

eEstimated; estimated data are rounded to no more than three significant digits. rRevised. do. Ditto.

[1]Table includes data available through December 31, 2014.

[2]In addition to the commodities listed, modest quantities of crude construction materials (clays, sand and gravel, and stone), phosphate rock, and quartz presumably were produced, but output was not reported quantitatively, and available information is inadequate to make reliable estimates of output.

TABLE 2
MAURITANIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement		Ciment de Mauritanie S.A.	Nouakchott	900
Do.		Mauritano-Française des Ciments S.A.	do.	450
Copper		Mauritanian Copper Mines (MCM) (First Quantum Minerals Ltd., 100%)	Guelb Moghrein Mine, Akjoujt, Inchiri District	40
Gold	kilograms	Tasiast Mauritanie Ltd. S.A. (Kinross Gold Corp., 100%)	Tasiast Gold Mine, 300 kilometers north of Nouakchott	7,300
Do.	do.	Mauritanian Copper Mines S.A. (MCM) (First Quantum Minerals Ltd., 100%)	Guelb Moghrein Mine, Akjoujt, Inchiri District	2,900
Gypsum		Société Arabe des Industries Métallurgiques (SAMIA) [Industrial Bank of Kuwait, 50%, and Société Nationale Industrielle et Minière (SNIM), 50%]	Sebkha N'dramcha, 50 kilometers northeast of Nouakchott	100
Iron and steel:				
Iron ore		Société Nationale Industrielle et Minière (SNIM) (Government, 78.35%; Industrial Bank of Kuwait K.S.C, 7.17%; Arab Mining Co., 5.66%; Iraq Foreign Development Fund, 4.59%; Office National des Hydrocarbures et des Mines, 2.30%; Islamic Development Bank, 1.79%; private investors, 0.14%)	Guelb el Rhein, Kedia d'Idjill, and M'Haoudat Mines, Tiris Zemmour region	13,000
Do.		El Aouj Mining Co. S.A. [Société Nationale Industrielle et Minière (SNIM), 50%, and Glencore plc, 50%]	Guelb el Aouj Mine,[1] Tiris Zemmour region	7,000
Steel	metric tons	Société Arabe du Fer et de l'Acier (SAFA) [Société Nationale Industrielle et Minière (SNIM) 100%]	Nouadhibou	7,500
Petroleum, crude	thousand 42-gallon barrels	PETRONAS International Corporation Ltd. (Petroliam Nasional Berhad, 100%)	Chinguetti oilfield, 80 kilometers offshore	3,000
Quartz		Joint venture of Mauritania Minerals Co. S.A. (MMC), 90%, and Government, 10%	Oum Agueneina Mine	300
Salt	metric tons	Société Mauritanienne des Industries du Sel (SOMISEL)	Sebkha de N'Terert and Sebkhet ej Jill brine pits, in the southwestern part of the country	1,000

Do., do. Ditto
[1]Under development.