



2019 Minerals Yearbook

TUNISIA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF TUNISIA

By Mowafa Taib

In 2019, Tunisia produced aluminum fluoride; cement; crude petroleum and refined petroleum products; gypsum; iron and steel; phosphate rock, phosphate fertilizers, and other phosphate-based products; and salt. The country was the world's 10th-ranked producer of phosphate rock. Tunisia's mineral commodity imports included ammonia, coal, and sulfur for processing of fertilizers and phosphoric acid, crude petroleum for refining, feldspar and kaolin for the ceramic industry, fluorite for aluminum fluoride manufacturing, and aluminum and iron and steel products for the construction and industry sectors (Group Chimique Tunisien, 2020; National Institute of Statistics, 2020a, p. 45–47; Jasinski, 2021).

Minerals in the National Economy

Tunisia's real gross domestic product (GDP) increased by 1.0% in 2019 compared with an increase of 2.7% in 2018. The country's nominal GDP was \$40.5 billion¹ in 2019. The hydrocarbon and mining sector's contribution to the country's GDP was 8.9% in 2019; that of the building materials sector was 2.7%; and that of the chemical industries sector, which included fertilizer manufacturing, was 1.7%. The value-added growth of the mining sector was 21.1% in 2019 compared with 17.1% in 2018. This growth was mostly attributed to a 23% increase in phosphate rock output in 2019. The value-added growth of the natural gas and petroleum sector was –8.1% in 2019 compared with –3.1% in 2018; the decrease was attributed to the depletion of major gasfields and oilfields, stoppage in other fields because of technical issues, and weak exploration in the country in 2019. The energy and mining sector added 5,800 jobs in 2019 compared with a loss of 100 jobs in 2018. Mineral fuels exports, which included crude petroleum, natural gas, and refined petroleum products, accounted for 5.5% of the country's total exports, and phosphate rock and phosphate-related exports accounted for 3.8% of the total exports (table 1; Central Bank of Tunisia, 2020, p. 41, 43, 45, 48, 53, 63–64; National Institute of Statistics, 2021, p. 275, 284).

Foreign direct investment (FDI) flows into Tunisia decreased to \$845 million in 2019 from \$1,036 million in 2018. Similarly, FDI outflows from Tunisia decreased to \$22 million in 2019 from \$34 million in 2018. Most of the FDI inflows went to the industry sector (\$450 million), followed by the energy sector (\$300 million) and the services sector (\$95 million). France, Germany, Italy, and Qatar were the main foreign investors in Tunisia in 2019. The value of FDI inward stock decreased to \$29.5 billion in 2019 from \$31.4 billion in 2018, and the number of the greenfield investments in the country increased to 31 valued at \$2.52 billion from 19 valued at \$557 million in 2018

¹When necessary, values have been converted from Tunisian dinars (TD) to U.S. dollars (US\$) at the annual average exchange rates of TD3.00=US\$1.00 for 2018, and TD2.80=US\$1.00 for 2019.

(Exports Enterprises S.A., 2020; United Nations Conference on Trade and Development, 2020, p. 238, 242).

Government Policies and Programs

Tunisia's mining code (law No. 2003–30 of April 28, 2003) regulates mining activities in the country, including prospecting, exploration, and production. Mines are state-owned properties in Tunisia, and they are regulated by the Office National des Mines (ONM) [National Office of Mines], which also conducts geologic research, prepares geologic and geophysical maps, and promotes the private ownership of mines. The ONM functions under the Ministry of Industry and Small and Medium-sized Enterprises (MISMSE), which became the Ministry of Industry, Mines, and Energy (MIME) in 2020. The mining code sets a corporate tax rate of 25% on profits from mining operations but includes a 5-year tax holiday that starts at the beginning of mine production. The mining code also requires payment of a 1% royalty on the value of the sales of mining products to be paid every 6 months (Ministry of Industry, Mines, and Energy, 2008, p. 34).

Crude petroleum and natural gas production is governed by the hydrocarbon code (law No. 9 of September 14, 1985, and law No. 99–93 of August 17, 1999) and its amendments. Law No. 2002–23 of February 2002 promotes hydrocarbon production and supplements the hydrocarbon code. The hydrocarbon code allows 1 year for prospecting, a maximum of 5 years for exploration, and 30 years for production. The law reduces the corporate income tax rate to 50% from 75% if the state petroleum company of Tunisia—Entreprise Tunisienne d'Activités Pétrolières (ETAP)—holds a minimum of a 40% share in the concession (Entreprise Tunisienne d'Activités Pétrolières, 2003, p. 15, 31, 60–61).

In 2019, the number of valid exploration permits issued by the MISMSE increased to 108 from 81 in 2018 and the number of mining concessions increased to 62 from 57 in 2018. The exploration concessions were for bentonite (2); calcium carbonate (7); phosphate rocks (9); barite, iron ore, lead, and zinc (12); gypsum (17); salt (24); and silica (industrial) sand (37). The concessions under operation in 2019 included bentonite and calcium carbonate (1 each), barite and phosphate rock (4 each), lead and zinc (6), salt (18), and gypsum (23) (Ministry of Industry, Mines, and Energy, 2020a, b).

Production

Notable increases in Tunisia's production of mineral commodities in 2019 compared with that in 2018 included white spirits (refined petroleum products), which increased, by 820%; hyperphosphate, by 225%; diammonium phosphate and phosphate rock (gross weight), by 23% each; lime, by 21%; phosphate rock (P₂O₅ content), by 20%; iron ore, by 13%; triple superphosphate, by 12%; and white cement, by 10%.

Notable decreases included residual fuel oil, which decreased by 83%; distillate fuel oil, by 52%; hot-rolled steel products, by 42%; dicalcium phosphate, by 41%; naphtha, by 31%; ammonium nitrate, by 24%; gasoline and liquefied petroleum gas, by 22% each; and compound (nitrogen-phosphorus-potassium) fertilizers and sodium triphosphate, by 16% each. Data on mineral production are in table 1.

Structure of the Mineral Industry

Government-owned Compagnie des Phosphates de Gafsa (CPG) carried out all phosphate mining activities in Tunisia. Government-owned Group Chimique Tunisien (GCT) produced fertilizers and phosphoric acid. Tunisian Indian Fertilizers S.A. (TIFERT) was a joint venture of CPG and GCT (35% interest each) and Coromandel International Ltd. and Gujarat State Fertilisers and Chemicals Ltd. (both of India, 15% interest each). Except for the Government-owned Société des Ciment d'Oum el Kébil [Oum el Kébil Cement Co.], all Tunisia's cement production was carried out by private companies. The companies included domestic as well as Italian, Portuguese, Saudi Arabian, and Spanish companies. Government-owned Société Tunisienne de Sidérurgie [Tunisian Steel Manufacturing Co.] (El-Fouladh) was the main steel billet producer in the country. Société de Djebel Djerissa, which produced iron ore at its Djerissa and Tamera Mines, was also Government owned and operated under the Mining Directorate of the MISMSE. Privately owned steel mills produced reinforcing-steel bar. Table 2 is a list of major mineral production facilities (table 2).

Mineral Trade

In 2019, the value of Tunisia's exports increased to \$15.7 billion from \$13.7 billion in 2018 and its imports increased to \$22.6 billion from \$20.0 billion in 2018. The value of petroleum exports, which included crude and refined petroleum products, increased to \$864 million in 2019 from \$768 million in 2018 owing to the increase in value of crude petroleum exports, which also compensated for the decrease in the value of refined petroleum products exports. The value of phosphate rock and phosphate-based products exports decreased to \$595 million in 2019 from \$667 million in 2018 owing to lower prices in world markets. In 2019, Tunisia exported 2.2 million metric tons (Mt) of cement, 1.7 Mt of salt, 525,000 metric tons (t) of phosphoric acid, 360,000 t of triple superphosphate, 341,000 t of diammonium phosphate, and 14,000 t of other phosphate products. Phosphate rock exports amounted to only 1,400 t in 2019 compared with 800 t in 2018. The decrease in phosphate rock exports in recent years was because phosphate rock production was not sufficient to meet domestic demand by the GCT and TIFERT, which were the main manufacturers of phosphate-based products. Tunisia imported about 24,000 t of phosphate rock from Algeria for the first time in 2019 to meet domestic demand from phosphate fertilizer manufacturing plants. Tunisia exported 136,000 t of finished and semifinished steel products in 2019 compared with 85,000 t in 2018 and imported 1.0 Mt of steel products compared with 1.3 Mt in 2018 (Central Bank of Tunisia, 2020, p. 72, 82;

National Institute of Statistics, 2020b, p. 5, 235–237, 24; World Steel Association, 2020, p. 10, 13).

The total volume of crude petroleum and refined petroleum products exports was about 9.0 million barrels (Mbbbl) and 2.8 Mbbbl, respectively. The main destinations of Tunisia's exports were (in descending order of the total value of exports), France, Italy, Germany, Spain, Algeria, Libya, the United Kingdom, and the United States (Central Bank of Tunisia, 2020, p. 72, 82; National Institute of Statistics, 2020b, p. 5, 235–237, 243).

The value of Tunisia's exports to the United States decreased to \$470 million in 2019 from \$649 million in 2018. The sharp decrease was mainly attributed to the decrease in crude petroleum and distillate fuel oil (and olive oil) exports from Tunisia to the United States in 2019. The values of Tunisia's crude petroleum and fuel exports to the United States were both zero in 2019 compared with \$88 million and \$20 million, respectively, in 2018. Other mineral commodity exports from Tunisia to the United States included iron and steel products (valued at \$10.6 million); cement, sand, and stone (\$5.1 million); inorganic chemicals (\$1.4 million); and finished steel shapes (\$1.3 million) (U.S. Census Bureau, 2020b).

Tunisia's mineral commodity imports included aluminum, ammonia, coke, crude petroleum and refined petroleum products, feldspar, fluorite, kaolin, steel products, and sulfur. The origins of Tunisia's imports were mainly (in descending order of the total value of imports) Italy, France, China, Germany, Turkey, Spain, Algeria, the United States, and Russia. In terms of tonnage, Tunisia exported 136,000 t of finished and semifinished steel products in 2019 compared with 85,000 t in 2018 and imported 1.0 Mt compared with 1.3 Mt (National Institute of Statistics, 2020b, p. 1, 4–5; World Steel Association, 2020, p. 10, 13).

Tunisia's imports from the United States decreased to \$461 million in 2019 from \$597 million in 2018. Mineral commodity imports from the United States included petroleum products other than fuel oil (valued at \$40.0 million), chemicals (all kinds; \$20.0 million), natural gas liquids (\$3.4 million), iron and steel products other than iron and steel mill products (\$4.8 million), and nonferrous metals (\$1.8 million) (U.S. Census Bureau, 2020a).

Commodity Review

Metals

Lead and Zinc.—Lead and zinc may have been produced in Tunisia but there was no comprehensive information on their production in 2019. The Government trade statistics showed that exports of lead ore and their concentrates increased to 1,687 t in 2019 from 230 t in 2018 and 709 t in 2017. Similarly, exports of zinc ore and their concentrates amounted to 1,670 t in 2019 compared with zero in 2018 and 1,081 t in 2017. However, it was unclear if the source of lead and zinc exports was from local production or from reexports. In 2019, six feasibility studies for lead and zinc mining projects were completed. The MISMSE expected that these projects would be in operation by 2020. They included the Boukhil deposit in Siliana Governorate and the Kbouch deposit in Le Kef Governorate, which were

owned by Société d'exploration de Minière and had been under development since 2017. The development of the Fej Lehdoum deposit in the Beja and Siliana Governorates, which was owned by a joint venture of North African Mining and Minerals Co. Ltd. (90% interest) and ONM (10% interest), started in 2018. Tunisian Mining Services Co. began the development of the Oued Djebs deposit in the Beja Governorate and Sidi Idris deposit in Bizerte Governorates, respectively, in 2018. European Industrial and Base Metals Co. Ltd. (90% interest) and ONM (10%) started the development of the Bou Jaber barite-fluorite-lead-zinc mining project in 2019. Mineral resources at the Bou Jaber deposit were estimated to be about 2.4 Mt grading 1.26% lead and 5.77% zinc. The Bou Jaber Mine had the capacity to produce 3,000 metric tons per year (t/yr) of lead and 23,000 t/yr of zinc. The Fej Lehdoum lead-zinc project had the capacity to produce 12,500 t/yr of lead and 23,000 t/yr of zinc. Mineral resources at the Fej Lehdoum deposit were estimated to be 4.6 Mt grading 3.84% lead and 4.06% zinc. Mineral resources at the Boukhil deposit were estimated to be 1.55 Mt grading 1.4% lead and 5.28% zinc; those at the Kbouch deposit were 3.4 Mt grading 6.2% lead and zinc combined. Lead and zinc production capacity at each of the Sidi Idris and the Oued Djebs Mines was estimated to be 1,600 t/yr of lead and 7,000 t/yr of zinc (Sharif, 2016, p. 458; Ministry of Industry, Mines, and Energy, 2020c; National Statistics Office, 2020a, p. 45; 2020b, p. 14, 235).

Industrial Minerals

Gypsum.—Tunisia held large reserves of gypsum in the Tataouine Governorate, which were estimated to be 65 billion metric tons by the MISMSSE. In 2019, Tunisia's gypsum production decreased to 947,000 t from 984,000 t in 2018. Société Knauf les Plâtres (a subsidiary of Knauf Gips KG of Germany), which operated an 800,000-t/yr gypsum plant in the Sidi Bouzid Governorate, was constructing a new 110,000-t/yr-capacity gypsum plant in the Tataouine Governorate in 2019; the plant was expected to start production in early 2020. Ali Ben Hassine Bou Allagui operated a 100,000-t/yr-capacity gypsum mine at Jebel Rkaiz El Beidha in the Gafsa Governorate, and La Chimique de Tunisie Co. operated a 60,000-t/yr-capacity gypsum plant in the Tataouine Governorate. Tunisia's output of gypsum was expected to increase to 1.3 million metric tons per year (Mt/yr) in 2020 (table 1; Global Gypsum, 2018, p. 12; Sharif, 2018, p. 14).

Phosphate Rock.—In 2019, Tunisia's phosphate rock output increased by 24% to 4.1 Mt from 3.3 Mt in 2018. The Government was focused on increasing phosphate rock output fourfold to 16 Mt/yr by 2030 through expansion projects at existing mines and the development of new mines. The MISMSSE was implementing a strategic program for the phosphate sector by accelerating the development of phosphate rock production at the Meknassi, the Oum Lakhecheb, the Tozeur-Nefta, and the Sra Ouertane deposits (table 1; Ministry of Industry, Mines, and Energy, 2020c).

The Meknassi phosphate rock mine in the Sidi Bouzid Governorate began commercial production in May; it produced 130,000 t of phosphate rock in 2019. The project had the capacity to produce 1 Mt/yr of phosphate rock ore, and it held 20 Mt of probable and proven reserves. GPC had a permit to

extract 600,000 t/yr of phosphate rock from the Meknassi Mine. The Oum Lakhecheb Mine expansion project in the Metlaoui district in the Gafsa Governorate had the capacity to produce 2.4 Mt/yr of phosphate rock ore. The open pit mine has been in operation since 2014 but the construction of the 2.4-Mt/yr-capacity washing unit was delayed owing to disputes with the construction company and to land acquisition-related issues. The project to develop the Tozeur-Nefta deposit in the Tozeur Governorate was expected to be completed by yearend 2022. The project was expected to have the capacity to produce 2.5 Mt/yr of washed phosphate rock (Ministry of Industry, Mines, and Energy, 2020c).

The Sra Ouertane phosphate rock development project was located in Le Kef Governorate. The project aimed to produce 4 Mt/yr of phosphate rock ore that would be used domestically to manufacture fertilizers and phosphoric acid. The \$3 billion project was listed as a public-private partnership, and in 2019, the Government was still looking for international investors to develop the project. The MISMSSE was also involved in building the M'dhilla 2 fertilizer plant, which was aimed at increasing the country's capacity to produce triple superphosphate fertilizer by 400,000 t/yr, and the capacity to produce phosphoric acid (54% P₂O₅), by 180,000 t/yr. The project was expected to begin production by yearend 2019 after a 5-year delay owing to social unrest and other issues related to land acquisition, but the delay continued throughout 2019 owing to disputes with workers unions (Ministry of Industry, Mines, and Energy, 2020c).

Salt.—In 2019, Tunisia's salt production decreased slightly to 2.0 Mt from 2.1 Mt in 2018. The MISMSSE expected the country's production of sodium chloride and sodium sulfate to increase steadily to 2.5 Mt by 2025. The increase was expected to come from the commencement of production at the saltworks projects at Nour in the Sfax Governorate and Sebkheth Mcheguig in the Sidi Bouzid Governorate (table 1; Sharif, 2018; Ministry of Industry, Mines, and Energy, 2020c).

Mineral Fuels

Crude Petroleum and Natural Gas.—Tunisia's production of crude petroleum and natural gas had been gradually decreasing since 2010 owing to the depletion of reserves and to technical breakdowns at certain wells. Natural gas production decreased at ETAP concessions and at concessions held by other domestic and foreign companies. ETAP's share of the country's natural gas output was 64% in 2019 compared with 69% in 2018. In 2019, a total of 25 new valid hydrocarbon permits were issued by the Government compared with 21 new permits in 2018. The permits covered 86,451 square kilometers (km²). Fifteen onshore permits covered 50,696 km² and 10 offshore permits covered 35,755 km². Seventeen of the permits were for exploration and 8 were for prospecting. Exploration investments in 2019 increased to \$77.4 million from \$56.6 million in 2018. In 2019, three hydrocarbon discoveries were made in Tunisia compared with zero discoveries made in 2017 and 2018. They were the Shalbia-1 well on the Jenein Sud permit, the Sidi Marzoug-1 well on the Zaafrane permit, and the TRF-6 well on the Baguel and Tarfa concession (Entreprise Tunisienne d'Activités Pétrolières, 2020, p. 21, 23, 26, 61–64, 76).

ETAP was a partner with local and foreign companies that engaged in the development of Tunisia's onshore and offshore hydrocarbon resources. These companies included China National Petroleum Corporation International, Circle Oil PLC of Ireland, Eni Tunisia B.V. of Italy, Perenco Ltd. of France and the United Kingdom, HBS Oil Co. of Egypt, Medco Tunisia Petroleum Co. Ltd. of Indonesia, Medex Petroleum Ltd. of Cyprus, OMV A.G. of Austria, Petrofac Ltd. of the United Kingdom, Shell Tunisia Upstream Ltd., Société MARETAP S.A., Thyne Petroleum Services S.A., and Tuniso-Kuwaitian Petroleum Co. of Kuwait. Other foreign companies that held hydrocarbon concessions in Tunisia included British Gas Tunisia Ltd., which was a subsidiary of British Gas p.l.c. and Serinus Energy p.l.c., both of the United Kingdom (table 2).

Outlook

Tunisia's economic growth is expected to decrease by 4.3% in 2020 owing mainly to the adverse effects of the coronavirus disease 2019 (COVID-19) pandemic. The Government is likely to continue its focus on reviving phosphate rock mining and phosphate-based fertilizers and chemical manufacturing in the country by implementing several development projects, such as the Mknassi, the Oum Lakhecheb, the Tozeur-Nefta, and the Sra Ouertane projects. The MISMSSE planned to increase phosphate rock production to 16 Mt/yr by 2030. Salt production is expected to increase to 2.5 Mt/yr in the next 5 years, and production of gypsum is expected to increase to 1.3 Mt/yr in 2020 (Central Bank of Tunisia, 2020, p. 28, 47).

References Cited

- Central Bank of Tunisia, 2020, Annual report 2019: Tunis, Tunisia, Central Bank of Tunisia, June, 205 p. (Accessed October 25, 2020, at https://www.bct.gov.tn/bct/siteprod/documents/RA_2019_en.pdf.)
- Entreprise Tunisienne d'Activités Pétrolières, 2003, Legal publication—Hydrocarbons code under law: Tunis, Tunisia, Entreprise Tunisienne d'Activités Pétrolières, July, 85 p. (Accessed August 15, 2016, at http://www.etap.com.tn/uploads/telechargement/code_hydrocarbures.pdf.)
- Entreprise Tunisienne d'Activités Pétrolières, 2020, Annual report 2019: Tunis, Tunisia, Entreprise Tunisienne d'Activités Pétrolières, 144 p. (Accessed October 23, 2020, at http://www.etap.com.tn/rapports/AR_ETAP_2019.pdf.)
- Exports Enterprises S.A., 2020, Foreign direct investment (FDI) in Tunisia: Exports Enterprises S.A. (Accessed October 27, 2020, at <https://www.nordeatrade.com/en/explore-new-market/tunisia/investment>.)
- Global Gypsum, 2018, Round-up—Gypsum projects in 2017 and 2018: Surrey, United Kingdom, Pro Global Media Ltd., September, 44 p. (Accessed October 20, 2020, at <https://www.eiif.org/sites/default/files/inline-files/eGGSept2018ns.pdf>.)
- Group Chimique Tunisien, 2020, Products and services: Group Chimique Tunisien. (Accessed January 23, 2020, at <http://www.gct.com.tn/produits-services/produits>.) [In French.]
- Jasinski, S.M., 2021, Phosphate rock: U.S. Geological Survey, Mineral Commodity Summaries 2021, p. 122–123.
- Ministry of Industry, Mines, and Energy, 2008, Code minier [Mining code]: Tunis, Tunisia, Ministry of Industry, Mines, and Energy, 76 p. (Accessed October 29, 2020, at https://www.energiemines.gov.tn/fileadmin/user_upload/cadre_reglementaire/code-minier-fr.pdf.) [In French.]
- Ministry of Industry, Mines, and Energy, 2020a, Aperçu sur le secteur des mines [Mining sector overview]: Tunis, Tunisia, Ministry of Industry, Mines, and Energy. (Accessed October 22, 2020, at <https://www.energiemines.gov.tn/fr/themes/mines/>.) [In French.]
- Ministry of Industry, Mines, and Energy, 2020b, List of concessions: Tunis, Tunisia, Ministry of Industry, Mines, and Energy, 4 p. (Accessed October 22, 2020, at https://www.energiemines.gov.tn/fileadmin/docs-u1/Liste_des_concessions_d_exploitation_mini%C3%A8res.pdf.) [In French.]
- Ministry of Industry, Mines, and Energy, 2020c, Phosphate sector projects sheet: Tunis, Tunisia, Ministry of Industry, Mines, and Energy. (Accessed October 22, 2020, at <https://www.energiemines.gov.tn/fr/themes/mines/developpement-des-ressources-minieres/phosphate>.)
- National Institute of Statistics, 2020a, Bulletin mensuel de statistique [Monthly statistical bulletin]: Tunis, Tunisia, National Institute of Statistics, 53 p. (Accessed October 31, 2020, at <http://www.ins.tn/sites/default/files/publication/pdf/bms%20aou%CC%82%202020.pdf>.) [In French.]
- National Institute of Statistics, 2020b, Statistiques du commerce extérieur année 2019 [External commerce statistics year 2019]: Tunis, Tunisia, National Institute of Statistics, 475 p. (Accessed March 30, 2021, at <http://ins.tn/sites/default/files/publication/pdf/comex%202019.pdf>.) [In French.]
- National Institute of Statistics, 2021, Statistical yearbook of Tunisia 2015-2019: Tunis, Tunisia, National Institute of Statistics, 329 p. (Accessed November 28, 2022, at http://www.ins.tn/sites/default/files/publication/pdf/annuaire-2019%20avec%20lien_1.pdf.) [In Arabic and French.]
- Sharif, Najah, 2016, Nonphosphate mining sector in Tunisia—Status and outlook, in Abstracts of the 15th Arab International Mineral Resources Conference, Jeddah, Saudi Arabia, November 22–24: Arab Industrial Development and Mining Organization, 622 p.
- Sharif, Najah, 2018, Mining of industrial minerals and salts in Tunisia—Status and outlook, in Abstracts of the 15th Arab International Mineral Resources Conference, Jeddah, Saudi Arabia, November 26–28: Arab Industrial Development and Mining Organization, 27 p.
- United Nations Conference on Trade and Development, 2020, World investment report 2020: Geneva, Switzerland, United Nations Conference on Trade and Development, 247 p. (Accessed October 19, 2020, at http://unctad.org/en/PublicationsLibrary/wir2020_en.pdf.)
- U.S. Census Bureau, 2020a, U.S. exports to Tunisia by 5-digit end-use code 2010-2019: U.S. Census Bureau. (Accessed October 30, 2020, at <https://www.census.gov/foreign-trade/statistics/product/enduse/exports/c7230.html>.)
- U.S. Census Bureau, 2020b, U.S. imports from Tunisia by 5-digit end-use code 2010-2019: U.S. Census Bureau. (Accessed October 30, 2020, at <https://www.census.gov/foreign-trade/statistics/product/enduse/imports/c7230.html>.)
- World Steel Association, 2020, Steel statistics yearbook 2019: Brussels, Belgium, World Steel Association, 42 p. (Accessed March 30, 2021, at <https://www.worldsteel.org/en/dam/jcr:5001dac8-0083-46f3-aadd-35aa357acbce/Steel%2520Statistical%2520Yearbook%25202020%2520%2528concise%2520version%2529.pdf>.)

TABLE 1
TUNISIA: PRODUCTION OF MINERAL COMMODITIES¹

(Thousand metric tons, gross weight, unless otherwise specified)

Commodity ²	2015	2016	2017	2018	2019
METALS					
Iron ore, mine:					
Gross weight	285	211 ^r	198 ^r	178 ^r	198
Fe content	178	132 ^r	124 ^r	110 ^r	124
Steel:					
Raw steel	50	92	74 ^r	84 ^r	77
Products, hot-rolled	500	673	500	576	332
INDUSTRIAL MINERALS					
Barite ^c	10	10	10	10	10
Cement, hydraulic, Portland:					
Gray	9,089	8,495	7,650	7,516	7,727
White	418	532	403	335	370
Total	9,500	9,000	8,000	7,800	8,100
Fertilizers:					
Compound fertilizers	7	30	12	31	26
Diammonium phosphate	370	570	587	361	444
Dicalcium phosphate	67	64	35	61	36
Hyperphosphate	6	23	20	4	13
Sodium tripolyphosphate	87	68	84	64	54
Triple superphosphate	262	385	301	246	276
Fluorspar, products, aluminum fluoride	37	40	41	43	42
Gypsum, mine	690 ^r	902 ^r	944 ^r	984 ^r	947
Lime	308	206	189	149	180
Nitrogen, products, ammonium nitrate	155	214	200	228	173
Phosphate, compounds, phosphoric acid	476	600	600 ³	436	436
Phosphate rock:					
Gross weight	3,240	3,664	4,422	3,341	4,108
P ₂ O ₅ content	972	1,060 ^e	1,282 ^e	1,000 ^e	1,200 ^e
Salt, sea salt	1,280 ^r	1,346 ^r	1,404 ^r	2,117 ^r	2,040
Sulfur, compounds, sulfuric acid	3,000	3,000 ^e	3,000 ^e	2,500 ^e	2,500 ^e
MINERAL FUELS AND RELATED MATERIALS					
Natural gas:					
Gross weight		million cubic meters			
Dry basis		do.			
	3,000	2,585 ^r	2,529 ^r	2,213 ^r	2,200 ^e
	2,529	2,213	2,089	1,907 ^r	1,795
Petroleum:					
Crude		thousand 42-gallon barrels			
	17,874	17,800	14,438	13,936	13,319
Refinery:					
Distillate fuel oil		do.			
	3,770	3,581	2,811	3,566 ^r	1,700
Gasoline		do.			
	202	245	173	235	184
Liquefied petroleum gas		do.			
	1,123	1,141	852	947	738
Naphtha		do.			
	2,857	2,122	949	2,468	1,701
Paraffin oil		do.			
	423	420	506	224	--
Residual fuel oil		do.			
	2,870	2,693	2,414	2,502	434
White spirits		do.			
	128	428	122	143	1,315
Total		do.			
	11,400	10,600	7,830	10,100 ^r	6,070

^eEstimated. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through September 21, 2020. All data are reported unless otherwise noted. Totals and estimated data are rounded to no more than three significant digits; may not add to totals shown.

²In addition to the commodities listed, clays, sand and gravel, lead, tile, stone, and zinc may have been produced, but available information was inadequate to make reliable estimates of output.

Source: National Institute of Statistics (Tunisia).

TABLE 2
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum fluoride	Industries Chimiques du Fluor (ICF) (Arab Mining Co., 26.67%; Société Hoteliere El Kantaoui Marhaba International Co., 18.90%; Marhaba Beach Hotel, 17.16%; other investors, 35.27%)	Plant at Gabes, Gabes Governorate	42
Barite	North Mining Co.	Mine at Jebel Rmaila, Kasserine Governorate	6
Do.	do.	Mine at Kedyat Alkoucha, Kef Governorate	13
Cement:			
Portland	Carthage Cement S.A. (Société Bina Corp., 50.24%; public stocks, 35.64%; Riha Group, 8.96%; Naifer Group, 5.16%)	Plant at Djebel Ressas, Ben Arous Governorate	2,200
Do.	Les Ciment de Bizerte	Plant at Bizerte, Bizerte Governorate	1,500
Do.	Société des Ciment d'Enfidha (Cementos Portland Valderrivas, S.A., 88%)	Plant at Ain M'Dhakker (Enfidha), Sousse Governorate	2,100
Do.	Société des Ciment de Jbel Oust (Cimentos de Portugal SGPS, S.A., 100%)	Plant at Jbel Oust, Zaghuan Governorate	1,800
Do.	Société des Ciment de Gabès (Secil-Companhia Geral de Cal e Cimento, S.A., 100%)	Plant at Gabes, Gabes Governorate	1,300
Do.	Société des Ciments Artificiels Tunisiens (Colacem S.p.A., 100%)	Plant at Ben Arous, Ben Arous Governorate	1,000
Do.	Société des Ciment d'Oum el Kélil (Government, 100%)	Plant at Kef, Kef Governorate	1,200
White	Société Tuniso-Andalouse de Ciment Blanc S.A. (Sotacib) (Grupo Prasa, 100%)	Plant at Feriana, Kasserine Governorate	1,400
Fertilizers and chemicals:			
Ammonium nitrate	Group Chimique Tunisien (GCT) (Government, 100%)	Plant at Ghannouch, Gabes Governorate	330
Diammonium phosphate	do.	do.	1,300
Triple super phosphate	do.	Plant at M'dhilla, Gafsa Governorate	465
Do.	do.	Plant at Sfax, Sfax Governorate	330
Sodium tripolyphosphate	Société Chimique (ALKIMIA) [Doghri Group, 41.04 %; Group Chimique Tunisien (GCT), 39.10%; Driss Group, 17.06%; other investors, 2.80%]	Plant at Gabes, Gabes Governorate	200
Gypsum	Ali Ben Hassine Bou Allagui	Jebel Rkaiz El Beidha, Gafsa Governorate	100
Do.	Industries Chimiques du Fluor (ICF)	Plant at Gabes Governorate	100
Do.	La Chimique de Tunisie Co.	Mine in Tataouine Governorate	60
Do.	Société Knauf les Plâtres (Knauf Gips KG)	Plant at Maknassy, Sidi Bou Zid Governorate	800
Do.	do.	Plant at Ezzahra, Tataouine Governorate	110
Iron ore, gross weight	Société de Djebel Djerissa (Government, 91%)	Djerissa and Tamera Mines in Kef Governorate	300
Iron and steel:			
Raw steel	Société Tunisienne de Sidérurgie (El-Fouladh) (Government, 91%)	Plant at Menzel Bourguiba Bizerte Governorate.	200
Products, rolled, bar and rod	Intermetal S.A. (private, 100%)	Plant at Ben Arous, Ben Arous Governorate	300
Do.	Tunisacier Steelworks (private, 100%)	Plant at Bizerte, Bizerte Governorate	100

See footnotes at end of table

TABLE 2—Continued
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Lead, mine, gross weight	metric tons	European Industrial and Base Metals Co. Ltd., 90%, and National Office of Mines (ONM), 10%	Mine at Bou Jaber in Le Kef Governorate	3,000
Do.	do.	North African Mining and Minerals Co. Ltd., 90%, and National Office of Mines (ONM), 10%	Mine at Fej Lehdoum in Beja and Siliana Governorates	12,500
Do.	do.	North Mining Co.	Mine at Oued Djebs in Beja Governorate	1,600
Do.	do.	do.	Mine at Sidi Idris in Bizerte Governorate	1,600
Do.	do.	Société d'exploration de minière	Mine at Kbouch in Kef Governorate	1,600
Do.	do.	do.	Mine at Boukhil in Siliana Governorate	1,600
Lime, hydraulic		Les Ciment de Bizerte	Plant at Bizerte	70
Natural gas	million cubic meters	British Gas Tunisia Ltd. (British Gas p.l.c., 100%)	Miskar offshore field	526
Do.	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Djebel Grouz Field, onshore	11
Do.	do.	do.	Oued Zar and Hammouda Field, onshore	33
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and British Gas Tunisia Ltd., 50%	Hasdrubal Field, offshore	117
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Eni Tunisia B.V., 49%	Baraka Field, offshore	1
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%; Eni Tunisia B.V., 25%; Pioneer Natural Resources Co., 20%; Talisman Energy Inc., 5%	Adam Field, onshore	281
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Mazarine Energy, 50%	Ghrib Field, onshore	20
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and OMV A.G., 50%	Durra Field, onshore	25
Do.	do.	do.	Anaguid Field, onshore	7
Do.	do.	do.	Chourouq Field, onshore	2
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Petrofac Ltd., 45%	Chergui Field, offshore	194
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Perenco Ltd., 50%	Franig Field, offshore	45
Do.	do.	do.	Baguel and Tarfa Field, onshore	32
Do.	do.	do.	Maamoura Field, offshore	10
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Winstar Resources Ltd., 45%	Sabria Field, onshore	11
Petroleum:				
Crude	do.	Eni Tunisia B.V., 50%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%	Djebel Grouz Field, onshore	116
Do.	do.	do.	Oud Zar and Hammouda Field, onshore	434
Do.	do.	do.	Makhrouga-Laarich-Debbech Field, onshore	744
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%; Eni Tunisia B.V., 25%; OMV A.G., 20%; Medco Tunisia Petroleum Co. Ltd., 5%	Adam Field, onshore	1,121
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Eni Tunisia B.V., 49%	Baraka Field, offshore	32
Do.	do.	do.	Mamoura Field, offshore	167

See footnotes at end of table

TABLE 2—Continued
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum:—Continued				
Crude—Continued	million cubic meters	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Mazarine Energy Tunisia, 45%; Medex Petroleum Ltd., 5%	Ghrib Field, onshore	434
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Perenco Ltd., 49%	Franig	29
Do.	do.	do.	Baguel and Tarfa Field, onshore	366
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and OMV A.G., 50%	Chourouq Field, onshore	823
Do.	do.	do.	Jinane Field, onshore	81
Do.	do.	do.	Sondes Field, onshore	76
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Shell Tunisia Upstream Ltd., 50%	Hasdrubal offshore field	1,296
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Thyna Petroleum Services S.A., 49%	Cercina Field, offshore	551
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%; China National Petroleum Corporation International, 22.5%; Tuniso-Kuwaitian Petroleum Co., 22.5%	Sidi El Kilani Field, onshore	214
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Société MARETAP S.A., 45%	Ezzouia Field, onshore	191
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Thyna Petroleum Services S.A., 49%	El Ain and Gremda Field, onshore	34
Do.	do.	do.	El Hajeb and Guebiba Field, onshore	696
Do.	do.	do.	Rhemoura Field, onshore	31
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 55%, and Serinus Energy, 45%	Sabria Field, onshore	185
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Eni Tunisia B.V., 49%	Maamoura Field, offshore	167
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 51%, and Circle Oil Plc, 49%	Mazrane Field, onshore	50
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 70%, and Société de Recherches et d'Exploitation des Pétroles en Tunisie (SEREPT), 5%	Douleb Field, onshore	99
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 95%, and Société de Recherches et d'Exploitation des Pétroles en Tunisie (SEREPT), 30%	Tamesmida Field, onshore	114
Do.	do.	Entreprise Tunisienne d'Activités Pétrolières (ETAP), 50%, and Société de Recherches et d'Exploitation des Pétroles en Tunisie (SEREPT), 50%	Ashtart offshore field	1,561
Do.	do.	Petrofac Ltd., 55%, and Entreprise Tunisienne d'Activités Pétrolières (ETAP), 45%	Cherqui Field, offshore	87
Do.	do.	Serinus Energy p.l.c.	Chouech Essaida Field, onshore	1,213
Do.	do.	do.	Sanhar Field, onshore	100
Do.	do.	do.	Ech-chouech Field, onshore	39
Do.	do.	Production sharing contract between and Entreprise Tunisienne d'Activités Pétrolières (ETAP) and HBS Oil Co.	Mazarane Field, onshore	50
Do.	do.	Production sharing contract between and Entreprise Tunisienne d'Activités Pétrolières (ETAP) and Medco Tunisia Petroleum Co. Ltd.	Bir Ben Tartar Field, onshore	219
Refined	do.	Société Tunisienne des Industries du Raffinage (Government, 100%)	Refinery at Bizerte, Bizerte Governorate	12,775
Phosphate rock		Compagnie des Phosphates de Gafsa (CPG) (Government, 100%)	Kef Eddour Mine, Gafsa Governorate	1,500
Do.		do.	Kef Eschfaier Mine, Gafsa Governorate	2,300

See footnotes at end of table

TABLE 2—Continued
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity	
Phosphate rock—Continued	Compagnie des Phosphates de Gafsa (CPG) (Government, 100%)	Jallabia mining center, Gafsa Governorate	1,300	
Do.	Compagnie des Phosphates de Gafsa (CPG) (Government, 100%)	Meknassi Mine, Sidi Bouزيد Governorate	1,000	
Do.	do.	Metlaoui, Mzinda, Redeyef, Uom El Araies Mines, Gafsa Province	2,600	
Phosphoric acid	Group Chimique Tunisien (GCT) (Government, 100%)	Plant at Ghannouch, Gabes	470	
Do.	do.	Plant at Skhira, Sfax Governorate	375	
Do.	do.	Plant at M'dhilla, Gafsa Governorate	183	
Do.	Group Chimique Tunisien (GCT) (Government, 100%)	Plant in Sfax Governorate	131	
Do.	Tunisian Indian Fertilizers S.A. (TIFERT) [Compagnie des Phosphates de Gafsa (CPG), 35%; Group Chimique Tunisien (GCT), 35%; Coromandel International Ltd., 15%; Gujarat State Fertilizers and Chemical Ltd., 15%]	Plant at Skhira, Sfax Governorate	360	
Salt:				
Sodium chloride	Compagnie Générale des Salines de Tunisie (COTUSAL)	The Saline of Sfax Sfax Governorate	315	
Do.	do.	The Sousse Saltworks Sousse Governorate	135	
Do.	do.	The Saltworks of Zarzis Medenine Governorate	650	
Do.	Saida S.A.	Sebkhet Sidi El Heni- Mlichette Zeramdine, Monastir Governorate	250	
Do.	Solar Salt Production Co.	Sebkhet Mcheguig, Sidi Bouزيد Governorate	60	
Do.	do.	Sebkhet Al Mahbal, Medenine Governorate	300	
Do.	Tunisel S.A.	Sabkhet Laadhibet, Ben Guerdane, Medenine	1,000	
Do.	Tunisial Salt Co.	Nour, Sfax Governorate	60	
Sodium sulfate	Tataouine Salt Co. [Société Chimique (ALKIMIA), 100%]	Sebkhet Oum el Khialate, Tataouine Governorate	100	
Sulfuric acid	Group Chimique Tunisien (GCT) (Government, 100%)	Plant at Gabes, M'dhilla, Sfax, Skhira	4,800	
Do.	Industries Chimiques du Fluor (ICF) (Arab Mining Co., 26.67%; Société Hoteliere El Kantaoui Marhaba International Co., 18.90%; Marhaba Beach Hotel, 17.16%; other investors, 35.27%)	Plant at Gabes, Gabes Governorate	100	
Do.	Tunisian Indian Fertilizers S.A. (TIFERT) [Compagnie des Phosphates de Gafsa (CPG), 35%; Group Chimique Tunisien (GCT), 35%; Coromandel International Ltd., 15%; Gujarat State Fertilizers and Chemical Ltd., 15%]	Plant at Skhira, Sfax Governorate	3,600	
Zinc, mine, gross weight	metric tons	European Industrial and Base Metals Co. Ltd., 90%, and National Office of Mines (ONM), 10%	Mine at Bou Jaber in Kef Governorate	23,000
Do.	do.	North African Mining and Minerals Co. Ltd., 90%, and National Office of Mines (ONM), 10%	Mine at Fej Lehdoum in Beja and Siliana Governorates	23,000
Do.	do.	Tunisian Mining Services Co.	Mine at Oued Djebes in Beja Governorate	7,000
Do.	do.	do.	Mine at Sisi Idris in Bizerte Governorate	7,000

See footnotes at end of table

TABLE 2—Continued
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners		Location of main facilities	Annual capacity
Zinc, mine, gross weight:—Continued	metric tons	Société d'exploration de minière.	Mine at Kbouch in Kef Governorate	7,000
Do.	do.	do.	Mine at Boukhil in Siliana Governorate	7,000
Do., do. Ditto.				