



2014 Minerals Yearbook

SYRIA

THE MINERAL INDUSTRY OF SYRIA

By Mowafa Taib

The mineral industry of Syria was adversely affected by the armed conflict in the country, which began in 2011 and continued throughout 2014. The country's mineral industry was restricted to the production of fuel and industrial minerals, as no metals were mined in recent years. The mineral commodities that were produced in Syria in 2014 included cement, crude oil, fertilizer, gypsum, iron and steel, marble, natural crude asphalt, natural gas, phosphate rock, salt, silica sand, and volcanic tuff (table 1).

The armed conflict between the Government and several rebel groups caused widespread destruction to commercial, industrial, and residential structures in many parts of the country and forced more than one-half of the country's population of 22 million people to flee their homes to settle in safe areas within the country and in the neighboring countries of Iraq, Jordan, Lebanon, and Turkey. Production of fuel and industrial minerals continued at reduced levels in 2014, especially natural gas, crude oil, and phosphate rock. The country's capacity to generate electricity, which amounted to 8.9 gigawatts in 2012, was reduced significantly because the power stations depended mainly (94%) on fuel oil and natural gas for power generation (United Nations High Commission for Refugees, 2015; U.S. Energy Information Administration, 2015).

The Government and some Syrian individuals remained subject to economic and financial sanctions by the United States and the European Union in 2014. The Syria Accountability Act of 2004 prohibits the export of most U.S.-manufactured goods to Syria. The USA PATRIOT Act placed specific sanctions against the Commercial Bank of Syria in 2006, and sanctions were contained in several Executive orders concerning Syria issued between 2004 and 2012 by the President of the United States. These sanctions prohibited the importation of petroleum and petroleum products from Syria into the United States and banned individuals from investing and operating in Syria. Consequently, U.S. exports to Syria decreased to about \$7 million in 2014 from \$503 million in 2010, and U.S. imports from Syria decreased to \$12 million in 2014 from \$429 million in 2010 (Council of the European Union, 2013; U.S. Office of Foreign Assets Control, 2014; U.S. Census Bureau, 2015; U.S. Department of State, 2015).

Government Policies and Programs

Law No. 26 of 2009 grants the state ownership of all surface and subsurface mineral resources within the country's borders and territorial waters. Law No. 91 of January 24, 2010, designates the General Establishment of Geology and Mineral Resources (GEGMR) as the Government agency in charge of all mining and quarrying activities in the country. Under law No. 91, the General Company for Marble and Asphalt as well as the Directorates of Salt Mines and Silica Sands at the General Company for Phosphate and Mines (GECOPHAM) were

dissolved and their functions were assigned to the GEGMR (General Establishment of Geology and Mineral Resources, 2011).

Except for phosphate rock production, which is carried out by the GECOPHAM, the GEGMR carries out virtually all mining activities in Syria, either directly or through private contractors, including development, exploration, production activities, field and laboratory analyses, and geologic and geophysical studies. In 2012 (the latest year for which comprehensive data were available), the GEGMR issued 420 mining permits and 92 explosives permits, and fulfilled 13 contracts with private and state-owned cement and construction companies to supply them with such industrial minerals as gypsum, silica sand, and volcanic tuff. The GEGMR promoted investment opportunities in developing such industrial mineral commodities as bentonite, silica sand, volcanic tuff, and zeolites. The GEGMR did not carry out any exploration studies in 2014 because of deterioration in the security situation in the country, especially in Al Hasakah, Halab, Ar Raqqa, Dar'a, and Dayr az Zawr Provinces, where all mining and quarrying activities were halted. The GEGMR employed 3,679 people in 2014 (General Establishment of Geology and Mineral Resources, 2013, p. 169; 2015, p. 12, 13, 30).

Production

The data sources for mineral commodity production in 2014 were Al Badia Cement J.S.C., the BP Statistical Review of World Energy (2015), and the General Establishment of Geology and Mineral Resources. Notable changes in reported mineral commodity output in 2014 included an increase in phosphate rock production by 23% compared with that of 2013 and a decrease in crude oil production by 44%; natural gas, by 6%; and cement, by 5% (table 1; Al Badia Cement J.S.C., 2015, p. 30; BP p.l.c., 2015, p. 8, 22; General Establishment of Geology and Mineral Resources, 2015).

Structure of the Mineral Industry

The Government was the major shareholder in the hydrocarbon sector through its ownership of Syrian Gas Co. (SGC) and Syrian Petroleum Co. (SPC) under the umbrella of the General Petroleum Corp. of the Ministry of Petroleum and Mineral Resources (MOPMR). The Government lost control of many oilfields in northeastern Syria to rebel groups, however, and these groups started producing small amounts of crude oil from some oilfields using primitive methods. Most international oil companies, which were partners with SGC and SPC in crude oil and natural gas production, had withdrawn from the country by 2012 because of the armed conflict and the sanctions that were imposed on SGC and SPC and their subsidiaries (table 2; General Petroleum Corp., 2015; Ministry of Petroleum and Mineral Resources, 2015a).

The Ministry of Industry is responsible for the cement, fertilizer, and steel industries in the country through several state-owned enterprises that include the General Organization for Cement and Building Materials (GOCBM), the General Fertilizers Co., and the General Company for Iron and Steel Products. Since 2010, privately operated local companies have been quarrying for industrial minerals that are used as building materials, such as basalt, clays, dolomite, iron oxides, limestone, marble, sandstone, silica sand, and volcanic tuff. Privately operated cement and iron and steel plants were established based on investment law No. 10 of 1991. The law and its amendment are intended to enhance the flow of foreign direct investment into the country and to allow the private sector to take a bigger stake in the economic development of the country (table 2; Syrian Economic Forum, 2015, p. 9).

Commodity Review

Industrial Minerals

Cement.—The Al Badia cement plant, which is located at Abu ash-Shamat in southeastern Syria, was owned and operated by Al Badia Cement J.S.C. The plant produced 484,000 metric tons (t) of cement in 2014 compared with 550,000 t in 2013. The plant had the capacity to produce 1.6 million metric tons per year (Mt/yr) of cement. Decreased cement production for the third consecutive year was attributed to weak demand because of the deterioration of security in the country and risks related to the transport of cement. Production at the plant was stopped in June and November because of the deterioration of security in and around the plant; however, production appeared to have resumed in late November (Al Badia Cement J.S.C., 2015, p. 14, 26).

In 2014, the GOCBM, which managed nine state-owned cement plants throughout the country, reported continued production stoppages at three of its subsidiaries' cement plants, which are located at Adra, Aleppo, and Rastan. Production at the other six plants was below capacity. The organization's cement output during 2014 was 2 million metric tons (Mt), which was much less than the more than 5 Mt/yr produced before the armed conflict. The decrease in production was attributed to the deterioration of security, which forced the closure of some cement plants (Aliqtisadi.com, 2016).

In September, Lafarge Cement Syria, which was a subsidiary of Lafarge S.A. of France, shut down operations at its 3-Mt/yr-capacity cement plant, which is located 160 kilometers northeast of Aleppo, and evacuated the workers because of the deterioration of security in the region. The plant was guarded by the Government's army until August 2013, then by the Syrian Kurdish Democratic Union Party before the plant was seized and set on fire by the Islamic State of Iraq and Levant (ISIL) fighters in late September (Daily Star, The, 2014; International Cement Review, 2015, p. 336).

The Pharaon Investment Group Ltd. Holding S.A.L., which rehabilitated the kilns and increased capacity at the Tartus cement plant for the Tartous Cement and Building Materials Co. in 2011, planned to build a new 2-Mt/yr-capacity cement plant at Adra next to the existing cement plant, which was operated by Adra Cement and Building Materials Co. (ACBMC).

The ownership of the plant would follow the build-operate-transfer model by which Pharaon Group would build and operate the plant for 15 years and then transfer its equity in the plant to the ACBMC (Syrian Industries Guide, 2015).

Phosphate Rock.—Phosphate rock production increased to 1.2 Mt in 2014 from an estimated 1.0 Mt in 2013. Eighty percent of phosphate rock output was exported, and the remainder was used by the domestic market. The main importer of phosphate rock from Syria was Selaata Chemicals Co. Sal (SCC) of Lebanon; it imported 348,000 t of phosphate rock by trucks from Syria in 2014, which apparently was not enough to meet its demand. SCC imported an additional 261,000 t of phosphate rock by ship from Morocco (General Establishment of Geology and Mineral Resources, 2015, p. 42; Lebanese Customs Administration, 2015).

Mineral Fuels

Natural Gas and Petroleum.—According to the BP Statistical Review of World Energy (2015), Syria's crude oil and condensate production decreased by 44% to 33,000 barrels per day (bbl/d) in 2014 from 59,000 bbl/d in 2013, which in turn was a decrease of about 83% from the 355,000 bbl/d produced in 2011. Natural gas output decreased by 6% to 4.4 billion cubic meters in 2014 from 4.7 billion cubic meters in 2013. The decrease in crude oil and natural gas production was attributed to military attacks on natural gas treatment plants and the Government's loss of control of most of the oilfields in northeastern Syria to ISIL and the Kurdish People's Defense Units militia of the Syrian Democratic Union Party (van Wilgenburg, 2013; BP p.l.c., 2015, p. 8, 22).

Syria's proven crude oil reserves were estimated to be 2.5 billion barrels (Gbbbl) and those of natural gas were estimated to be 285 billion cubic meters by yearend 2014. The U.S. Geological Survey, however, estimated that the Levant basin, where the largest oilfield discoveries—the Tamar and the Leviathan fields—are found, contains an additional 3.5 trillion cubic meters of recoverable natural gas and about 1.7 Gbbbl of technically recoverable oil. In 2013, MOPMR and Russia's Soyuzneftegaz signed an agreement for Syria's first offshore oil exploration, development, and production in Block 2 of Syria's territorial waters in the Mediterranean Sea. The exploration area covers about 2,190 square kilometers. Soyuzneftegaz expected that the exploration phase would take more than 5 years to complete (ITAR TASS, 2014; U.S. Energy Information Administration, 2015).

Syria's two oil refineries at Baniyas and Homs remained in operation throughout the armed conflict despite some damage at the Homs refinery as a result of a military attack in 2014. The combined capacity of the refineries was more than 90 million barrels per year (Mbbbl/yr), and the actual total production since 2013 has been between 30 Mbbbl/yr and 36 Mbbbl/yr because of reduced crude oil production in Government-controlled areas. The Government was considering proposals to refine up to 60 Mbbbl/yr of crude oil for others, which would increase capacity utilization and, therefore, generate revenue (Ministry of Petroleum and Natural Resources, 2015b).

Outlook

Syria's economy was expected to shrink further with the continuation of the 4-year armed conflict between the pro-Government forces and the rebel groups around the country. Thus, more damage to the country's infrastructure and displacement of people inside and outside the country is expected. International investors, who pulled out of the country following the deterioration of safety and security throughout the country, expected to stay out of the country until the armed conflict is resolved. The armed conflict and sanctions on Government agencies, private companies, and individuals had an adverse effect on the country's hydrocarbon sector, including exploration, development, production, transportation, distribution, and export. The Government's phosphate rock production capacity was expected to decrease further in 2015 following ISIL's control of the Khunayfis phosphate mine in southern Palmyra, which has the capacity to produce 1 Mt/yr of phosphate rock. Some investors are expected to reinvest in cement and hydrocarbon projects when the armed conflict ends and reconstruction efforts begin (table 2; Vovcuk, 2015).

References Cited

- Al Badia Cement J.S.C., 2015, Annual report 2014: Al Badia Cement J.S.C., 33 p. (Accessed July 20, 2015, at <http://www.albadiacement.com/file.aspx?itemid=86662>.)
- Aliqtisadi.com, 2016, The value of General Organization for Cement and Building Materials production exceeds 13 billion Syrian pounds in 4 months: Aliqtisadi.com, June 1. (Accessed May 11, 2017, at <https://sy.aliqtisadi.com/786839>.)
- BP p.l.c., 2015, BP statistical review of world energy—June 2015: London, United Kingdom, BP p.l.c., 45 p. (Accessed August 15, 2015, at <http://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2015/bp-statistical-review-of-world-energy-2015-full-report.pdf>.)
- Council of the European Union, 2013, Syria—EU economic sanctions to apply until 1 June 2014: Council of the European Union Factsheet, May 31. (Accessed September 10, 2014, at http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/137355.pdf.)
- Daily Star, The, 2014, Jihadists in Syria attack French cement plant: The Daily Star [Beirut, Lebanon], September 15. (Accessed July 27, 2015, at <http://www.dailystar.com.lb/ArticlePrint.aspx?id=271949&mode=print>.)
- General Establishment of Geology and Mineral Resources, 2011, Law No. 26 of 2009: Damascus, Syria, General Establishment of Geology and Mineral Resources. (Accessed September 26, 2013, at <http://www.geology-sy.org/index.php?m=93>.)
- General Establishment of Geology and Mineral Resources, 2013, Annual report 2012: Damascus, Syria, General Establishment of Geology and Mineral Resources. (Accessed September 26, 2014, at <http://www.geology-sy.org/index.php?m=93>.)
- General Establishment of Geology and Mineral Resources, 2015, Annual report 2014: Damascus, Syria, General Establishment of Geology and Mineral Resources. 34 p. (Accessed July 26, 2015, at <http://www.geology-sy.org/index.php?d=3&id=54>.)
- General Petroleum Corp., 2015, Partners: General Petroleum Corp. (Accessed July 18, 2015, at <http://www.spc.com.sy/en/main/company.php>.)
- International Cement Review, 2015, Syria, in *The global cement review* (11th ed.): Dorking, United Kingdom, International Cement Review, 386 p.
- ITAR TASS, 2014, Russia's Soyuzneftegaz oil offshore exploration in Syria to take no less than 5 years: ITAR TASS, March 13. (Accessed September 16, 2014, at <http://en.itar-tass.com/economy/723441>.)
- Lebanese Customs Administration, 2015, Trade statistics: Lebanese Customs Administration. (Accessed June 26, 2015, at http://www.customs.gov.lb/customs/trade_statistics/yearly/search.asp.)
- Ministry of Petroleum and Natural Resources, 2015a, Decree No. 15 of 2009: Ministry of Petroleum and Natural Resources. (Accessed March 23, 2017, at <http://www.mopmr.gov.sy/index.php/ar/ministry-ar/aboutus-ar/regulations-legislation-ar>.)
- Ministry of Petroleum and Natural Resources, 2015b, The Ministry is considering proposals to refine crude oil for others: Ministry of Petroleum and Natural Resources, March 15. (Accessed July 28, 2015, at <http://www.mopmr.gov.sy/index.php/localnews/469-rentalrefineries15-3-2015.html>.)
- Syrian Economic Forum, 2015, Investment in Syria: Syrian Economic Forum, 12 p. (Accessed July 25, 2015, at <http://www.syrianef.org/En/wp-content/uploads/2015/06/Investment-in-Syria.pdf>.)
- Syrian Industries Guide, 2015, Pharaon Group to build a new 300 million euros cement plant: Syrian Industries Guide. (Accessed at July 24, 2015, <http://www.industrysy.com/index.php?page=2&id=1611&lang=en>.)
- United Nations High Commission for Refugees, 2015, UNHCR country operations profile—Syrian Arab Republic: United Nations High Commission for Refugees. (Accessed July 24, 2015, at <http://www.unhcr.org/pages/49e486a76.html>.)
- U.S. Census Bureau, 2015: Trade in goods with Syria: U.S. Census Bureau. (Accessed September, 8, 2014, at <http://www.census.gov/foreign-trade/balance/c5020.html>.)
- U.S. Department of State, 2015, Syria sanctions: U.S. Department of State. (Accessed July 20, 2015, at <http://www.state.gov/e/eb/tfs/spi/syria>.)
- U.S. Energy Information Administration, 2015, Syria—International energy data and analysis: U.S. Energy Information Administration, June 24, 7 p. (Accessed July 24, 2015, at <http://www.eia.gov/beta/international/analysis.cfm?iso=SYR>.)
- U.S. Office of Foreign Assets Control, 2014, Syrian sanctions regulations—Final rule: Federal Register, v. 79, no. 85, part IV, May 2, p. 25414–25433.
- van Wilgenburg, Wladimir, 2013, Syrian Kurdish militia takes over oil fields: Al-Monitor [Washington, DC], March. (Accessed July 27, 2015, at <http://www.al-monitor.com/pulse/originals/2013/03/power-vacuum-oil-fields-syria-kurdish-militia-pyd.html>.)
- Vovcuk, Valdi, 2015, ISIS touts giant mines as new million-dollar funding source: Vocativ [New York, New York], May 26. (Accessed July 28, 2015, at <http://www.vocativ.com/news/195776/isis-shows-off-a-new-potential-source-of-funding>.)

TABLE 1
SYRIA: PRODUCTION OF MINERAL COMMODITIES¹

(Thousand metric tons unless otherwise specified)

Commodity	2010	2011	2012	2013 ^c	2014 ^c
METALS					
Steel: ^c					
Crude	70	70	10	10	10
Manufactured ²	700	890	130	130	130
INDUSTRIAL MINERALS					
Asphalt	157	81	13	10	10
Cement, hydraulic	6,000	5,000	6,000	4,000	3,800 ³
Gypsum	540	559	328	300	181 ³
Nitrogen:					
N content of ammonia	169	85	50 ^e	50	50
N content of urea	116	70	61	61	50
Phosphate:					
Phosphate rock, mine output:					
Gross weight	3,167	3,541	1,534	1,000	1,234 ³
P ₂ O ₅ content (30%)	950	1,062	460	300	370 ³
Phosphatic fertilizers, P ₂ O ₅ equivalent	176	170 ^r	85	70 ^r	70
Phosphoric acid, P ₂ O ₅ equivalent ^c	61	50	50	50	50
Salt	81	71	34	30	30
Sand and gravel	1,445	4,956	1,103	1,100	729
Stone:					
Dolomite, refractory grade ⁴	53,300 ^r	35,700	21,200 ^r	20,000	4,880 ³
Gravel and crushed rock ⁴	394 ^r	820	300 ^e	300	202 ³
Marble materials	300	173	80	80	93 ³
Marble blocks thousand square meters	218	124	123	100	92 ³
Volcanic tuff	910	809	485	324	251 ³
Sulfur:					
Byproduct of petroleum and natural gas	26	26 ^e	26	20	20
Sulfuric acid: ^c					
Gross weight	166 ³	83	40	40	40
S content	54	27	13	13	13
MINERAL FUELS AND RELATED MATERIALS					
Gas, natural:					
Gross ^c million cubic meters	8,000	9,000	6,000	5,000	5,000
Dry do.	8,000	7,100	5,200 ^r	4,700 ^{r,3}	4,400 ³
Natural gas plant liquids ^c thousand 42-gallon barrels	3,650	3,650	1,900 ^r	330 ^{r,3}	330
Petroleum:					
Crude do.	140,525	119,355	62,415	21,535 ^{r,3}	12,045 ³
Refinery products:					
Liquefied petroleum gas do.	1,715	1,679	NA	NA	NA
Gasoline do.	12,884	12,921	NA	NA	NA
Naphtha do.	7,080	5,000	NA	NA	NA
Kerosene and jet fuel do.	3,212	3,248	NA	NA	NA
Distillate fuel oil do.	29,346	29,602	NA	NA	NA
Residual fuel oil do.	33,653	32,886	NA	NA	NA
Asphalt do.	3,000	3,000	NA	NA	NA
Other do.	810	2,914	NA	NA	NA
Total do.	91,700	91,250	36,000 ^r	36,000 ^r	36,000

^cEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. do. Ditto. NA Not available.

¹Table includes data available through September 18, 2015.

²Mostly from imported crude and semimanufactured steel.

³Reported figure.

⁴Converted to thousand metric tons from thousand cubic meters by multiplying by a factor of 2.85.

TABLE 2
SYRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2014

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity	
Asphalt	General Establishment of Geology and Mineral Resources (GEGMR) (Government, 100%)	Al Bishri, Dayr az Zawr, and Kafriyah, Latakia	100	
Cement	Adra Cement and Building Materials Co. (ACBMC) ¹	Adra	1,500 ²	
Do.	Al Badia Cement J.S.C. (Al Muhaidib Holding Co., 29.5%; Syrinvest Holding B.V., 26%; public stockholders, 15%; Menaf S.A.S., 12%; Ziad Al Zaim, 7.5%; Al Fozan Holding Co., 5%)	Abu ash-Shamat	1,600	
Do.	Al-Hasakeh Cement L.L.C. (Guris Holdings, 100%)	Clinker mill at Al-Hasakah	700	
Do.	Al-Chahba Cement and Building Materials Co. ¹	Sheikh Said, Aleppo	740 ²	
Do.	do.	Maslamieh, Aleppo	220	
Do.	Arabian Cement Co. ¹	do.	876	
Do.	Guris Raqqa Cement Co. (Guris Holdings, 100%)	Clinker mill at Ar Raqqa	1,500	
Do.	Lafarge Cement Syria (Lafarge S.A., 98.67%, and Mas Economic Group S.A., 1.33%)	Ayn Al-Arab, Halab Province	3,000 ²	
Do.	Military Housing Cement Group (Government, 100%)	Musselemieh	336	
Do.	Rastan Cement and Building Materials Co. ¹	Rastan	130 ²	
Do.	The Syrian Company for Cement and Building Materials ¹	Hama cement plant 1	1,330	
Do.	do.	Hama cement plant 2	328	
Do.	do.	Hama cement plant 3	1,200	
Do.	Tartous Cement and Building Materials Co. ¹	Tartus	1,825	
Gypsum	General Establishment of Geology and Mineral Resources (GEGMR) (Government, 100%)	Ar Raqqa, Jayrud, and Latakia	573	
Marble	do.	Zobar, Latakia, and Sabboura	600	
Natural gas	million cubic meters	Al Furat Petroleum Co. [Syrian Petroleum Co, 50%, and a consortium of Syria Shell Petroleum Development B.V., Himalaya Energy Services B.V., and China National Petroleum Corp. (CNPC), 50%]	Processing plant at Omar field	2,400
Do.	do.	Ebla Petroleum Co. [Suncor Energy Inc., 50%, and General Petroleum Corp. (GPC), 50%]	Ash Shaer and Cherrife	2,500
Do.	do.	Syrian Gas Co. (Government, 100%)	Arak	13,770
Do.	do.	do.	Dubayat	14,872
Do.	do.	do.	Processing plant at Dayr az Zawr	4,750
Do.	do.	do.	Processing plant at Palmyra	2,200
Do.	do.	do.	Processing plant at Jebissa	1,060
Do.	do.	do.	Processing plant at Suwaydiyah	240
Do.	do.	do.	Abu Rabah, Al -Fayed north, Qumqum, Bilas, Al-Rasm, and Abu Al Dhuh	1,825
Nitrogen:				
Ammonia ³	General Fertilizers Co. (Government, 100%)	Homs	300	
Fertilizers	do.	do.	200	
Urea	do.	do.	330	
Petroleum:⁴				
Crude	Al Bou Kamal Petroleum Co. [General Petroleum Corp. (GPC), 50%, and Tatneft Oil Co., 50%]	Al Kishima oilfield	NA	
Do.	Al-Furat Petroleum Co. [General Petroleum Corp. (GPC), 50%; Syria Shell Petroleum Development B.V., 31.25%; Himalaya Energy Syria B.V., 18.75%]	Al Izba, Al Ward, Galban, Jamof/Saban, Maleh/Azraq, Omar/Omar North, Sijan, Tanak, and Thayyam fields	NA	
Do.	Deir Ezzor Petroleum Co. [General Petroleum Corp. (GPC), 50%, and Total S.A., 50%]	Al-Mazraa, Attala North Jafra, Qahar, Tabiyeh fields	NA	
Do.	Dijla Petroleum Co. [General Petroleum Corp. (GPC), 50%, and Gulfsands Petroleum, p.l.c., 50%]	Khurbet East field	NA	
Do.	Oudeh Petroleum Co. [General Petroleum Corp. (GPC), 50%, and China Petrochemical Corp. (Sinopec), 50%]	do.	NA	

See footnotes at end of table.

TABLE 2—Continued
 SYRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2014

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum—Continued				
Crude		Syria-Sino Al Kawkab Oil Co. [General Petroleum Corp. (GPC), 50%, and China Petrochemical Corp. (Sinopec), 50%]	Oudeh field	NA
Do.		Syrian Petroleum Co. (Government, 100%)	Jebissa, Karatchok, Rumailan, and Suwaydiyah fields	NA
Refined	thousand 42-gallon barrels	Banias Refinery Co. (Government, 100%)	Banias	48,545
Do.	do.	Homs Refinery Co. (Government, 100%)	Homs	43,800
Phosphate rock		General Company for Phosphate and Mines (GECOPHAM) (Government, 100%)	Alsharqiya (A and B Mines)	2,575
Do.		do.	Khunayfis	1,000
Phosphatic fertilizers		General Fertilizers Co. (Government, 100%)	Homs	450
Phosphoric acid		do.	do.	100
Salt		General Establishment of Geology and Mineral Resources (GEGMR) (Government, 100%)	Dayr az Zawr	72
Steel:				
Billet		General Company for Iron and Steel Products (Hadeed Hama) (Government, 100%)	Hamah	70
Rolled		Al Wahib Group	Tartus	100
Do.		Arabian Steel Co. (ASCO)	Jableh	300
Do.		General Company for Iron and Steel Products (Hadeed Hama) (Government, 100%)	Hamah	78
Do.		Hmisho Steel S.A.	Latakia	500
Do.		International Company for Steel Rolling	Hessya	300
Do.		Joudco Steel Ltd.	do.	150
Do.		Middle East Steel Industries	Yabroud	140
Do.		Orient Co.	Aleppo	330
Do.		Syria Steel and Iron Co. (SALB)	Adra	250
Sulfur	metric tons	Homs Refinery Co.	Homs	40,000
Do.	do.	do.	Processing plant at Suwaydiyah	NA
Do.	do.	Syrian Petroleum Co. (Government, 100%)	Processing plant at Jebissa	NA
Sulfuric acid		General Fertilizers Co. (Government, 100%)	Homs	406
Volcanic tuff		General Establishment of Geology and Mineral Resources (GEGMR) (Government, 100%)	Quarries at Dar'a, Assowaida, Al Hasakah, and Ar Raqqah	1,000

Do., do. Ditto. NA Not available.

¹Subsidiary of the General Organization of Cement and Building Materials (GOCBM), which was 100% Government owned.

²Operation shut down in 2014.

³Expressed in nitrogen equivalent.

⁴Major operating companies and major equity owners as of yearend 2012. The majority of international companies withdrew from the country by 2012.