



2013 Minerals Yearbook

LEBANON

THE MINERAL INDUSTRY OF LEBANON

By Mowafa Taib

Lebanon is one of the smallest countries in the Middle East region with an area of only 10,400 square kilometers (km²). In 2013, the country was not an important producer of minerals but was active in trading of mineral commodities, such as diamond, gold, ferrous and nonferrous scrap metals, fertilizers, and hydrocarbon products. In terms of tonnage, limestone for cement was the country's leading mineral commodity. Other industrial minerals produced in Lebanon included fertilizer, gypsum, lime, limestone, and salt. Most of the country's output of minerals was used locally in the agriculture and construction sectors, and the remainder was exported (Ministry of Finance, 2014; U.S. Central Intelligence Agency, 2014).

Government Policies and Programs

In 2013, the Government took additional steps to develop its share of offshore crude oil and natural gas resources following the discovery of an estimated 1.69 billion barrels of crude oil, 3.47 trillion cubic meters of recoverable natural gas, and 87 billion cubic meters of natural gas liquids in the Levant Basin, which is located along the coasts of Cyprus, Israel, Lebanon, and Syria in the Mediterranean Sea. The Government estimated the country to have resources of 850 million barrels of crude oil and 2.7 trillion cubic meters of natural gas (MEED, 2014). The country's first hydrocarbon law, the Offshore Petroleum Law, was approved by the Cabinet on August 17, 2011. In 2012, the Government had created the Petroleum Administration Authority under the Ministry of Energy and Water to manage the offshore exploration for hydrocarbons in a 22,730-km² area located in the eastern Mediterranean Sea along the Lebanese coast. In February, the Government started prequalifying interested companies for its first offshore crude oil and natural gas bidding round and was expected to make the final selections by 2014 and to begin exploration in 2017. More than 50 companies submitted prequalification documents for the bidding round (U.S. Geological Survey, 2010; Mirza, 2013; U.S. Energy Information Administration, 2014).

Minerals in the National Economy

The Lebanese economy was dominated by services sector activity, which contributed 75.4% of the gross domestic product (GDP), or \$64.3 billion, in 2013. The industrial and agricultural sectors contributed 20.0% and 4.6%, respectively. The Lebanese economy grew at a rate of 1.5% in 2013 compared with a growth rate of 2.5% in 2012 following 4 years of an average annual growth rate of 7.8%. The slow economic growth in recent years was attributed to the collapse of the Government in early 2011 because of its support of the Special Tribunal for Lebanon and the conflict in neighboring Syria. The conflict in Syria had four main effects on the country's economy: (1) it was a cause of sectarian tensions in many Lebanese towns and cities; (2) it forced more than 1 million people to seek refuge in Lebanon, thus increasing the country's population by

about 20%; (3) it increased investment risk, thereby making it difficult for regional and international investors to invest in large projects in Lebanon because of political instability and the interdependence of the Lebanese and Syrian economies; and (4) it disrupted the transport of merchandise through Lebanon's ports to and from other countries in the Middle East by way of Syria (Bank Audi S.A.L., 2014, p. 4, 12; International Monetary Fund, 2014, p. 96).

Mineral Trade

In 2013, the value of Lebanon's total exports decreased by 12% to \$3.94 billion from \$4.48 billion in 2012. Exports of pearls and precious and semiprecious metals accounted for 20% of the total value of exports compared with 38% in 2012; exports of metallic products accounted for 13% of the total value of exports compared with 10% in 2011; and exports of chemical products, which included fertilizers, accounted for 8% of the total value of exports in 2012 and 2013. The volume of phosphate fertilizer exports was estimated by the Arab Fertilizer Association to be 310,000 metric tons (t) in 2012 and 2013. Lebanon's major export markets were, in terms of the value of exports, Syria (13%), Saudi Arabia (9%), the United Arab Emirates (8%), Iraq (7%), Turkey (5%), and Switzerland (4%) (Arab Fertilizer Association, 2014, p. 49; Ministry of Finance, 2014, p. 6–7, 12–13).

The total value of Lebanon's imports decreased slightly to \$21.23 billion in 2013 from \$21.28 billion in 2012. The value of imports of mineral products (mainly mineral fuels) accounted for 24% of imports compared with 28% in 2012; chemical products, 9% of total imports compared with 8% in 2012; and metals and metal products, 8% of total imports compared with 7% in 2012. China was Lebanon's leading source of imports, accounting for 11% of total imports, followed by Italy (8%), France and the United States (7% each), Germany (6%), Russia (4%), and the United Kingdom (3%) (Ministry of Finance, 2014, p. 4–5, 12–13).

Production

Lebanon's cement output is typically well documented by financial institutions and the industrial sector because it is used as an indicator of the country's construction sector activity. In 2013, cement output was reported to have increased by 10% to 5.8 million metric tons (Mt) from 5.3 Mt in 2012. Production of other industrial mineral commodities, such as fertilizer, gypsum, and sulfuric acid, was estimated from known production capacities because of a lack of reliable reported production data (table 1).

Structure of the Mineral Industry

All mineral production activities in Lebanon were carried out by private companies. Cement producers in Lebanon included Ciment de Sibline S.A.L. (majority owned by Secil-Companhia Geral de Cale e Cimento S.A. of Portugal), Cimenterie du Moyen-

Orient S.A.L., Cimenterie Nationale S.A.L. (Alsabeh Cement), Holcim (Liban) S.A.L. (a subsidiary of Holcim Ltd. of Switzerland), and Société Libanaise des Ciments Blancs S.A.L. (a subsidiary of Holcim Ltd.). Lebanon Chemicals Company S.A.L. (LCC), which was the sole producer of fertilizer and other chemicals in the country, changed its name to Selaata Chemicals Co. S.A.L. (SCC) in 2012. The company produced aluminum sulfate, monocalcium phosphate, phosphoric acid, sulfuric acid, and triple superphosphate fertilizer. Attar Steel Co., Demco Steel Industries S.A.L., and Société Industrielle Libanaise S.A.L. carried out production of rolled steel and steel pipes. Diametal S.A.L. was among the first companies in the Middle East to produce shredded and heavy melting scrap. Lebanese Salt Palace Co. S.A.R.L. and Nepton Salt Co. S.A.L. at Enfeh in northern Lebanon produced salt (table 2; Diametal S.A.L., 2014).

Commodity Review

Metals

Iron and Steel.—In 2013, iron and steel production in Lebanon included hot-rolled steel and steel pipes as well as other finished steel products from imported crude steel. Lebanon's consumption of finished steel products exceeded local production, which made the country reliant on imports for all its crude steel and more than one-half of its semifinished and finished steel products. Production of hot-rolled steel products was estimated to be 500,000 t in 2013. Scrap was the main steel product exported by Lebanon. Scrap exports increased to 408,000 t in 2013 from 365,000 t in 2012. The country also exported 24,000 t of semifinished and finished steel products. Steel imports decreased by one-half to 1.5 Mt in 2013 from 3.0 Mt in 2012, and included 149,000 t of ingot and semifinished steel, about 1.1 Mt of reinforcing steel bar, 248,000 t of flat steel, and 23,000 t of tabular steel products. The top exporters of steel products to Lebanon were, in descending order of export value, Ukraine, Turkey, China, Egypt, and Italy (Bank Med S.A.L., 2013; World Steel Association, 2014, p. 57, 66, 72, 107).

Lead.—No lead was mined in Lebanon in 2013; however, at least two lead processing facilities were operating in the country. The estimated volume of secondary lead produced in the country in 2013 was 6,000 t, which was 20% more than in 2012. The two small-scale smelters responsible for secondary lead production were Arabay Trading and Industrial S.A.L. and National Ammunition Co. (tables 1 and 2).

Industrial Minerals

Diamond.—Although diamond has never been mined in Lebanon, the country had an active diamond cutting and polishing industry and also traded in diamond. No reliable information was available on the country's cutting and polishing activities. According to the Kimberley Process Certification Scheme's latest statistics, Lebanon's diamond exports decreased by about 65% in value and 56% in volume in 2013 compared with those of 2012. Exports of rough and polished diamond were 311,628 carats valued at \$44 million in 2013 compared with 704,390 carats valued at more than \$125 million in 2012 and 1,104,935 carats valued at \$296 million in 2011. Similarly,

diamond imports decreased by 54% in volume and 57% in value compared with those of 2012. Lebanon imported 311,513 carats of diamond valued at about \$49 million in 2013 compared with 683,390 carats worth about \$113 million in 2012 and 1,177,960 carats worth about \$205 million in 2011 (Kimberley Process Certification Scheme, 2014).

Mineral Fuels

Natural Gas and Petroleum.—The Ministry of Energy delayed the auction of licenses for offshore oil and gas exploration and exploitation in its territorial waters several times in 2013. These delays were attributed to the Government needing more time to establish the legal and administrative framework for these activities, which would be taking place in the country for the first time. Another reason for the delays was related to the dispute with Israel over the demarcation of the southern boundary of Lebanon's territorial waters. The disputed region, which is located near the center of the Levant Basin, covers more than 477 km² and may hold substantial hydrocarbon resources. The Ministry of Energy and Water expected to complete the prequalification bid for 10 offshore blocks by January 2014, to finalize the selection process by the end of 2014, and begin exploration in 2017. Fifty-two companies submitted documents for prequalification for the bidding round, among which were Chevron Corp. and Exxon Mobil Corp. of the United States, Royal Dutch Shell plc of the United Kingdom, and Total S.A. of France (Baxter, 2013; U.S. Energy Information Administration, 2013, 2014).

Outlook

The development of Lebanon's offshore hydrocarbon resources in the Levant Basin and the start of production in 2020 could provide a long-term supply of crude oil and natural gas to the country and subsequently stimulate its mineral industry. The Government, however, is not expected to be able to spend large amounts of funds on infrastructure projects because of the high public debt, which is equivalent to 120% of the country's GDP (U.S. Central Intelligence Agency, 2014).

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TABLE 1
LEBANON: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2009	2010	2011	2012	2013	
METALS						
Iron and steel: ^c						
Hot-rolled	200,000	200,000	300,000	500,000	500,000	
Pipes	200,000	200,000	200,000	300,000	300,000	
Lead, secondary	5,000	6,000	6,000	5,000	6,000	
INDUSTRIAL MINERALS						
Cement, hydraulic	thousand metric tons	4,897	5,227	5,550	5,309	5,831
Gypsum ^e	do.	100	105	105	105	110
Lime ^e	do.	250	250	250	250	270
Limestone, for cement ^e	do.	6,400	7,000	7,000	7,000	7,500
Phosphate, P ₂ O ₅ equivalent:						
Phosphatic fertilizers	73,000	270,000	310,000	310,000	310,000	
Phosphoric acid	51,000	60,000	60,000	60,000	60,000	
Salt ^e	20,000	20,000	20,000	20,000	15,000	
Sulfuric acid: ^e						
Gross weight	500,000	600,000	600,000	600,000	500,000	
S content	164,000	196,000	196,000	196,000	164,000	

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

¹Table includes data available through December 31, 2014.

²In addition to the commodities listed, ammonium sulfate, granite, gravel, marble, sand, and other construction materials were also produced, but quantities are not reported, and available information was inadequate to make reliable estimates of output.

TABLE 2
LEBANON: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum sulfate	Selaata Chemicals Company S.A.L.	Selaata	30
Cement	Holcim (Liban) S.A.L. (Holcim Ltd., 52.00%; Mershed Baaklini, 14.98%; Seament Holding S.A.L., 7.50%; individual investors, 21.39%)	Chekka	2,900
Do.	Cimenterie Nationale S.A.L.	do.	2,800
Do.	Ciment de Sibline S.A.L. (Secil-Companhia Geral de Cale e Cimento S.A., 50.5%; Bank Med, 20%; Walid Jumblatt, 20%)	Sibline	1,277
Do.	Cimenterie du Moyen-Orient S.A.L. (Seament Holding S.A.L.)	Chekka	500
Do.	Société Libanaise des Ciments Blancs S.A.L. (Holcim Ltd., 52%)	do.	100
Granite and marble	Arabian Mining Habre & Co. S.A.L.	Kahaleh, Baabda	NA
Do.	Wadih Tadros & Fils Co.	Kafarchima	NA
Do.	Société Nationale de Marbre	Mar Elias, Btina	NA
Do.	Marble & Cement Products S.A.L.	Bekaa	NA
Do.	Boustani, Mallah & Co. SARL	Kesrouan	NA
Gypsum	Sodap Liban S.A.L.	Hosrayel, Jebeil	30
Iron and steel, steel: ¹			
Rolled	Attar Steel Co.	Beirut	200
Do.	Société Industrielle Libanaise S.A.L.	Southern Metn	NA
Pipes	Demco Steel Industries S.A.L.	do.	200
Do.	Tandem Tubes S.A.L. (Tannous Group)	Hosrayel, Jebeil	NA
Scrap:			
Shredded	Diametal S.A.L.	Mkalles	100
Heavily melted	do.	do.	200
Wire	Steel Wire Lebanon S.A.L. (Tannous Group)	Hosrayel, Jebeil	NA
Lead, secondary	National Ammunition Co.	Daraya, Kesserwan	NA
Do.	Arabay Trading and Industrial S.A.L.	Tannayel, Bekaa	NA
Lime	Société des Chaux et Plâtres du Liban S.A.L.	Chekka	250
Phosphate fertilizer:	Selaata Chemicals Company S.A.L. (SCC)	Selaata	NA
Single superphosphate	do.	do.	120
Triple superphosphate	do.	do.	220
Phosphoric acid	do.	do.	165
Salt	Nepton Salt Co. S.A.L.	Enfeh	10
Do.	Lebanese Salt Palace Co. S.A.R.L.	do.	10
Sulfuric acid	Selaata Chemicals Company S.A.L.	Selaata	600

Do., do. Ditto. NA Not available.

¹Lebanon's only steel mill, which was owned and operated by Consolidate Steel Lebanon S.A.L., was shut down in 2003.