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2017–2018 Minerals Yearbook

ISRAEL

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The Mineral Industry of Israel

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Note: In this chapter, information for 2017 is followed by information for 2018.

Israel was a major producer of bromine, fertilizers, magnesium metal, phosphate rock, and potash in 2017. As the world's leading producer of bromine, Israel accounted for 46% of the world's bromine production (excluding that of the United States). In addition, Israel was the world's third-ranked producer of magnesium metal in 2017, accounting for 1.8% of the world's estimated magnesium metal production (excluding that of the United States); the sixth-ranked producer of phosphate rock, accounting for 1.4% of the estimated world production of phosphate rock; and the sixth-ranked producer of potash, accounting for 4.9% of the estimated world production of potash. Other mining and mineral-processing operations included those for cement, clays, crude (raw) steel, crushed stone, diamond cutting and polishing, fertilizers, gypsum, refined secondary lead, lime, natural gas, petroleum (both crude and refinery products), salt, and sulfur. Israel and Jordan each held about 7% of the world's potash reserves, measured in potassium oxide (K_2O) equivalent in the Dead Sea. Israel consumed substantial amounts of bromine, phosphate rock, and potash in downstream processing operations; most of the final output from these operations was exported (Jasinski, 2018; 2019a, b; Kimberley Process Certification Scheme, 2018; Bray, 2019; Schnebele, 2019).

Minerals in the National Economy

In 2017, Israel's nominal gross domestic product (GDP) increased by 4.4% to $319 billion;[1] the manufacturing, mining, and quarrying sector's contribution to the GDP was 13.8% compared with a revised 14.0% in 2016. The chemicals, chemical products, and petroleum products sector employed 21,000 workers; the industrial minerals sector, 11,000; the mining and quarrying sector, 4,000; and the basic metals sector, 7,000. Israel's total exports amounted to $53.1 billion in 2017, of which diamond exports accounted for 12.7%. Total imports were valued at about $68.0 billion, of which fuel imports accounted for 11.2%, and diamond imports, 8.5%. According to the European Commission, Israel's top five leading export destinations were the European Union, which received 30% of Israel's exports; the United States, 29%; Hong Kong, 7%; China, 5%; and India, 3%. Israel's top five leading import sources were the European Union, which supplied 41% of Israel's imports; the United States, 12%; China, 9%; Switzerland, 8%; and Turkey, 4% (Central Bureau of Statistics, 2018a–c; European Commission, 2018, p. 8).

Israel's exports to the United States were valued at about $21.9 billion in 2017 compared with about $22.2 billion in 2016. Gem diamond accounted for about 32% of these exports, which were valued at about $7.1 billion. Other significant mineral-related exports to the United States included chemicals (fertilizers) valued at $221.1 million; stone, sand, and cement, $117.4 million; gemstones (other), $101.5 million; iron and steel products (not elsewhere specified), $60.3 million; nonferrous metals (other), $51.1 million; petroleum products (other), $28.7 million; nonmonetary gold, $15.4 million; and bauxite and aluminum, $8.3 million. Imports from the United States were valued at about $12.5 billion in 2017 compared with about $13.2 billion in 2016. Gem diamond accounted for about 40% of these imports and was valued at about $5.0 billion. Other significant mineral-related imports from the United States included $178.6 million worth of petroleum products (other); $53.8 million worth of nonferrous metals (other); and $39.1 million worth of aluminum and alumina (U.S. Census Bureau, 2018a, b).

The mining sector was governed by the Mining Ordinance of 1925 and subsequent regulations enacted in 1973 and 1978. The regulations enacted in 1978 included the establishment of the Quarry Rehabilitation Fund to reduce environmental damage from quarry operations and to ensure the rehabilitation of abandoned mines and quarries. Upstream exploration and production of natural gas and petroleum were governed by the Petroleum Law of 1952 and the Petroleum Regulations of 1953. Downstream production and other activities were governed by the Natural Gas Sector Law of 2002, which established a licensing system for natural gas distribution and transmission and for liquefied natural gas facilities (Ministry of National Infrastructures, 2008; Ministry of Energy, undated a, b).

Production

In 2017, significant increases in mineral production in Israel included production of sand and gravel (listed in table 1 as industrial, unspecified), which increased by 85%; naphtha, 36%; salt, 32%; magnesia, 30%; distillate fuel oil, 24%; asphalt, 20%; phosphoric acid, 18%; and bromine, 11%. Decreased production included that of potassium nitrate, which declined by 69%; monoammonium phosphate fertilizer, by 67%; lime, 33%; crude petroleum, 29%; clay brick, 22%; gypsum, 21%; magnesium chloride and phosphate rock, 16% each; and cement, 11% (table 1).

Structure of the Mineral Industry

Most of Israel's mining and mineral-processing operations were privately owned, including the producers of aggregates, cement, clays, dolomite, lime, and salt. Israel Chemicals Ltd. (ICL), which was owned by Israel Corp. (45.86%) and institutional and private investors (54.14%), was the country's

[1]Where necessary, values have been converted from New Israeli sheqel (ILS) to U.S. dollars (US$) at an annual average exchange rate of ILS3.5986=US$1.00 for 2017 and ILS3.8395=US$1.00 for 2016.

sole producer of bromine, magnesia, refined magnesium metal, phosphates, potash, and sulfuric acid. ICL had an agreement with the Government to extract the country's mineral resources (mainly bromine, magnesium, and potash) from the Dead Sea until March 31, 2030 (Israel Chemicals Ltd., 2018, p. 18; 2020). Other commodities produced by only one company included refined secondary lead (Hakurnas Lead Works Ltd.), refined secondary zinc (Numinor Chemical Industries Ltd.), and silica sand (Negev Industrial Minerals Ltd.). Cement was produced by two companies (Hartuv Cement Ltd. and Nesher Israel Cement Enterprises Ltd.). The diamond cutting and polishing industry was composed of many small producers. Table 2 is a list of major mineral industry facilities.

Commodity Review

Metals

Magnesium.—In 2017, Israel produced 23,000 metric tons (t) of magnesium metal compared with 22,548 t in 2016. Dead Sea Magnesium Ltd. (DSM) [a subsidiary of ICL] was the only producer of magnesium in the country. DSM operated a plant in Sodom, which is located in southeastern Israel near the southern end of the Dead Sea and had a production capacity of 33,000 metric tons per year (t/yr). During the year, the company continued to evaluate a plan to close the magnesium plant temporarily because the plant was considered to be not economically viable as a result of a new natural resource income tax. More specifically, the company noted that the Law for Taxation of Profits from Natural Resources was a new law that targeted the production of bromine, magnesium, phosphate, and potash; however, by the end of 2017, no regulations had been issued under the new taxation law, no circulars had been published, and no court decisions had been rendered regarding the law. The company also reported that, in recent years, the profitability of its magnesium operations was also largely affected by low magnesium prices, imposed mainly by China, which was the leading magnesium-metal-producing country in the world (table 1; Israel Chemicals Ltd., 2017, p. 56; 2018, p. 73, 87–88, 123, 158, 164; Bray, 2019).

Industrial Minerals

Bromine.—Dead Sea Bromine Company Ltd. (DSBC), a subsidiary of ICL, extracted brines from the Dead Sea at DSBC's plant at Sodom, which had a capacity of 280,000 t/yr of bromine. Production increased to 180,000 t in 2017 from about 162,000 t in 2016; the increase was attributed to the continued recovery in production following the end of a labor strike in May 2015, which led to a 33% decline in production between 2014 and 2015. The increase was also owing to increased international demand for bromine in 2017. ICL consumed most of the bromine produced for the downstream manufacturing of bromine compounds at its plants in China, Israel, and the Netherlands. Bromine compounds produced by DSBC were used in such applications as flame retardants, natural gas and crude petroleum production, pharmaceuticals, and water treatment (table 1; Israel Chemicals Ltd., 2017, p. 82, 153; 2018, p. 60–61, 64).

Cement.—After reaching a 5-year high of more than 7 million metric tons (Mt) of cement production in 2016, Israel's production of cement decreased by 11% to 6.4 Mt in 2017. The decrease in production was likely owing to an increase in cement imports into Israel from Greece and Turkey. The surge in imports led the Government to initiate an investigation into complaints by domestic cement producers that the imported cement was being sold at below-market prices. The country's biggest cement producer was Nesher Israel Cement Enterprises Ltd. (Nesher), which was a subsidiary of Clal Industries and Investment Ltd. Nesher operated the Ramla plant, which had a production capacity of 5 million metric tons per year (Mt/yr) of cement and 4 Mt/yr of clinker, and the Haifa grinding mill, which had a production capacity of 1.2 Mt/yr of cement (table 1; Global Cement, 2017; Nesher Israel Cement Enterprises Ltd., 2020).

Phosphate Rock.—Rotem Amfert Negev Ltd. (a subsidiary of ICL) continued to produce phosphate rock at the Oron, the Rotem, and the Zin Mines in the Negev Desert in southern Israel. The mines had a combined production capacity of 4.5 Mt/yr. As of yearend 2017, the estimated remaining lives of these mines were as follows: Oron Mine, 6 years; Rotem Mine, 6 years; and Zin Mine, 10 years. The production of beneficiated phosphate rock in Israel decreased to 3.33 Mt in 2017 from 3.95 Mt in 2016. ICL reported that the decrease in production was owing to a temporary shutdown of the Zin Mine during part of the third and fourth quarters owing to lower prices and a discontinuation of sales to a major customer (tables 1, 2; Israel Chemicals Ltd., 2018, p. 130, 144–145, 170; PRNewswire, 2018).

Potash.—The production of potash in Israel decreased slightly to 3.70 Mt in 2017 from 3.74 Mt in 2016. Dead Sea Works (DSW) (a subsidiary of ICL) extracted carnallite, a compound of potassium chloride and magnesium chloride, from the Dead Sea to supply raw material for its potash plants in Sodom; the carnallite plant operated at nearly full capacity in 2017. The production of potassium nitrate in Israel decreased sharply to 124,400 t in 2017 from 369,000 t in 2016. The decrease in production was owing to a disruption in the imports of ammonia—an important raw material needed in the production process. The Government cited environmental concerns for the disruption in ammonia imports. More specifically, the Government noted that an old tank that held ammonia imports could no longer be used owing to concerns that a potential leak in the tank could endanger the lives of the people living in Haifa (table 1; Solomon, 2017; Israel Chemicals Ltd., 2018, p. 79, 99, 123).

Mineral Fuels

Natural Gas.—Natural gas production increased to about 9.6 billion cubic meters in 2017 from nearly 9.4 billion cubic meters in 2016. Israel's largest producing natural gas field continued to be the Tamar offshore gasfield. The Tamar gasfield was owned by a consortium made up of Isramco Negev 2 LLP (28.75%), Noble Energy Inc. of the United States (25%), the Delek Group (22%), Tamar Petroleum Ltd. (16.75%), Dor Gas Exploration Ltd. (4%), and Everest Infrastructure LLP (3.5%). Tamar was discovered offshore near Haifa Bay in 2009 and started production in 2013. Another significant natural gas field was the Leviathan field, which included Leviathan North and

Leviathan South. This field, which was discovered in 2010 and was still under development, was expected to become Israel's most significant natural gas offshore discovery; the field is located 130 to 140 kilometers west of Haifa and covers a total area of 500 square kilometers. The field was jointly owned by Noble Energy (39.7%), Delek Group (45.43%), and Ratio Oil Exploration Ltd. (15%) (tables 1, 2; U.S. Energy Information Administration, 2016; Delek Group, 2018, p. A-28).

In 2017, the Leviathan natural gas offshore project continued to be developed after having received approval by the Government in 2016. The Delek Group reported that the development plan would be implemented in two stages. The first stage would include four production wells and installation of treatment facilities with an annual capacity of up to 12 billion cubic meters per year; an investment of $3.75 billion would be required for this stage. The second stage would include four additional wells and expansion of the treatment facilities with an additional capacity of up to 9 billion cubic meters per year; an investment of $1.5 billion to $2.0 billion would be required for the second stage. The first stage was expected to start operating in 2019. At yearend 2017, reserves and contingent resources for the Leviathan gasfield were estimated to be 606 billion cubic meters of natural gas (U.S. Energy Information Administration, 2016; Delek Group, 2018, p. A-72, A-78, A-179).

MINERAL INDUSTRY HIGHLIGHTS IN 2018

In 2018, Israel's GDP increased by 4.7% to $334 billion;[2] the manufacturing, mining, and quarrying sector's contribution to the GDP was 13.2%. The chemicals, chemical products, and petroleum products sector employed 20,200 workers; the industrial minerals sector, 11,300; the mining and quarrying sector, 4,200; and the basic metals sector, 7,300. Israel's total exports were valued at $54.1 billion in 2018, of which diamond exports accounted for 12.6%. Total imports were valued at about $75.6 billion, of which fuel imports accounted for 13.0%, and diamond imports, 7.5%. According to the European Commission, Israel's top five leading export destinations in 2018 were the European Union (received 28% of Israel's exports); the United States, 28%; China, 8%; Hong Kong, 7%; and India, 4%. Israel's top five leading import sources in 2018 were the European Union (supplied 41% of Israel's imports); the United States, 13%; Switzerland, 10%; China, 9%; and Turkey, 4% (Central Bureau of Statistics, 2019a–c; European Commission, 2019, p. 8).

Israel's exports to the United States were valued at about $21.8 billion in 2018. Gem diamond accounted for about 35% of these exports, which were valued at about $7.6 billion. Other significant mineral-related exports to the United States included chemicals (fertilizers) valued at $236.6 million; gemstones (other), $129.3 million; stone, sand, and cement, $96.1 million; iron and steel products (not elsewhere classified), $69.1 million; nonferrous metals (other), $48.7 million; petroleum products (other), $32.0 million; and bauxite and aluminum $8.9 million (U.S. Census Bureau, 2019).

In 2018, production of lime increased by 60%; potassium nitrate, by 55%; magnesium chloride, 26%; monoammonium phosphate, 22%; kerosene, 20%; distillate fuel oil, 19%; potash (K_2O content), 16%; crude petroleum, 15%; other petroleum products, 15%; lead (secondary refinery) and liquefied petroleum gas, 14% each; and natural gas (gross), 10%. Decreased production included that of gypsum, by 35%; magnesia, 31%; naphtha, 21%; phosphoric acid, 20%; and common clay, 12% (table 1).

Israel's production of cement decreased by nearly 8% to 5.86 Mt in 2018, which was the lowest level in 5 years. The decrease in production was owing to competition from lower-priced cement imports from Greece and Turkey. In November, an advisory committee recommended to Israel's Ministry of Economy that an antidumping duty should not be imposed on the lower-priced cement imports. In response, cement producers in Israel noted that they would be forced to continue to reduce output, reduce staff, and possibly close if the antidumping duty is not imposed (Global Cement, 2018; Times of Israel, 2018a).

Natural gas production in Israel increased by nearly 10% to 10.48 billion cubic meters in 2018 owing to increased output by the Tamar field to meet increased domestic consumption. In September, a consortium made up of the Delek Group, Egyptian East Gas Co., and Noble Energy announced a $500 million deal that would allow natural gas exports from Israel to Egypt; this involved the purchase from the Egyptian East Mediterranean Gas Co. of a 39% interest in an old unused pipeline connecting the Israeli coastal city of Ashkelon with North Sinai in Egypt. The purchase of the interest in the pipeline was necessary to allow two natural gas export deals of 10 years (worth a total of $15 billion) to move forward; the agreement was signed in February with Egypt's Dolphinus Holdings Ltd. Dolphinus Holdings agreed to purchase 64 billion cubic meters of natural gas from Israel over 10 years, with one-half of the gas coming from the Leviathan offshore gasfield and one-half coming from the Tamar offshore gasfield. Israel's Energy Minister noted that the agreement with Dolphinus Holdings was the most significant trade deal between Israel and Egypt since their historic peace treaty in 1979 (Cowen and Rabinovich, 2018; Times of Israel, 2018b).

Outlook

The International Monetary Fund forecasted that Israel's real GDP would increase by 3.3% in both 2019 and 2020. The manufacturing, mining, and quarrying sector will continue to be a significant contributor to the economy; and the sector will increase in importance as the country continues to develop its offshore energy resources. Natural gas production is expected to increase with the opening of the Leviathan gasfield and the expansion of the Tamar gasfield, which may transform Israel into a major natural-gas-producing country in the Eastern Mediterranean region. The production outlooks for bromine, fertilizer, and phosphate rock will likely depend on Israel's tax policy, the resolution of domestic labor disputes, and market conditions in the world economy (International Monetary Fund, 2019, p. 157).

[2]Where necessary, values have been converted from New Israeli sheqel (ILS) to U.S. dollars (US$) at an annual average exchange rate of ILS 3.5934=US $1.00 for 2018.

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TABLE 1
ISRAEL: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons, gross weight, unless otherwise specified)

Commodity[2]		2014	2015	2016	2017	2018
METALS						
Lead, refinery, secondary		26,426	26,000 e	24,128 r	25,261	28,700
Magnesium metal, primary		25,993	19,307	22,548	23,000	21,000
INDUSTRIAL MINERALS						
Bromine, elemental		173,796	115,583	161,986	180,000	175,000
Cement, hydraulic	thousand metric tons	6,603	6,904	7,150	6,361	5,858
Clay:						
Brick		50,000	45,000	44,000	34,288	32,700
Common		996,640	1,041,509	1,152,694	1,158,600	1,019,000
Flint[e]		320,000	330,000	330,000	330,000	300,000
Fertilizers, phosphate fertilizer:						
Monoammonium phosphate		78,327	86,381	87,061	29,150	35,500 e
Triple superphosphate		560,940	431,630	625,329	655,900	662,300
Other		316,460	242,379	288,901	299,550	300,000 e
Gypsum		82,000	159,299	147,000	116,000	75,800
Lime		250,000 e	554,000 e	573,000	384,900	614,000
Magnesium compounds:						
Magnesia		45,000	29,708	34,648 r	45,000	30,870
Magnesium chloride, Mg content		135,966	95,397	107,274	90,000	113,000
Phosphate, compounds, phosphoric acid		483,655	606,955	614,560	726,900	583,600
Phosphate rock, beneficiated:						
Gross weight	thousand metric tons	3,357	3,848 r	3,946	3,332	3,550
P_2O_5 content[e]	do.	1,040	1,190	1,220 r	1,030	1,100
Potash:						
Gross weight	do.	3,503	2,438	3,739	3,700	3,800
K_2O content	do.	2,213	1,540	2,068 r	1,900	2,200 e
Compounds, potassium nitrate		397,600	358,500	396,600	124,400	192,700
Salt, marketable	thousand metric tons	460	333	389	514	520 e
Sand and gravel, industrial, unspecified		200,000 e	218,000	302,000	559,800	560,000 e
Stone, sand, and gravel, construction:						
Sand and gravel, other	thousand metric tons	5,500	5,500	4,904	5,113	4,900
Stone:						
Crushed, unspecified	do.	46,000	51,650	55,254	57,442	55,300 e
Dimension, marble		74,000	77,000	76,000 e	76,000 e	70,000 e
Sulfur:						
Byproduct, petroleum, S content	thousand metric tons	61	72	71	71 e	71 e
Compounds, sulfuric acid:						
Gross weight	do.	1,818	2,148	2,185	2,118	2,057
S content	do.	594	702	720	700 e	680 e
MINERAL FUELS AND RELATED MATERIALS						
Natural gas:						
Gross	million cubic meters	7,672	8,370	9,390	9,570	10,480
Marketable	do.	6,870	7,500	8,500 r, e	8,600 e	9,400 e
Petroleum:						
Crude	thousand 42-gallon barrels	440	473	681	480	552
Refinery:						
Asphalt	do.	1,203	1,684	1,566	1,876	1,892
Distillate fuel oil	do.	24,175	24,168	24,326	30,054	35,895
Gasoline	do.	20,439 r	22,250	21,980	23,470	25,567
Kerosene	do.	9,297	8,673	9,550	8,842	10,635
Liquefied petroleum gas	do.	4,991	5,505	5,015	5,164	5,874
Lubricants	do.	41	45	114	115 e	115 e
Naphtha	do.	6,772	6,817	5,544	7,545	5,993
Oil shale	do.	220	210 e	NA	NA	NA
Residual fuel oil	do.	15,087	15,709	14,656	13,533	13,103
Other[e]	do.	20,000	21,000	20,000	20,000	23,000
Total	do.	102,000 r	106,000	103,000	111,000	122,000

See footnotes at end of table.

TABLE 1—Continued
ISRAEL: PRODUCTION OF MINERAL COMMODITIES[1]

[e]Estimated. [r]Revised. do. Ditto. NA Not available.
[1]Table includes data available through September 24, 2019. 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.
[2]In addition to the commodities listed, caustic soda, polished gem diamonds, raw steel, secondary refined zinc, and semimanufactured steel may have been produced, but available information was inadequate to make reliable estimates of output.

TABLE 2
ISRAEL: STRUCTURE OF THE MINERAL INDUSTRY IN 2018

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Bromine		Dead Sea Bromine Company (DSBC) [Israel Chemicals Ltd. (ICL), 100%]	Sodom	280
Cement		Nesher Israel Cement Enterprises Ltd. (Clal Industries and Investments Ltd., 100%)	Plant at Ramla	5,000
Do.		do.	Clinker plant at Ramla	4,000
Do.		do.	Grinding mill at Haifa	1,200
Do.		Hartuv Cement Ltd.	Plant at Beit Shemesh	850
Clay		Negev Industrial Minerals Ltd.	Ramon Crater	NA
Copper ore		Arava Mines Ltd. (Altos Hornos de México, S.A.B. de C.V., 100%)	Timna Mine, in the Negev Desert[1]	NA
Lead, refined, secondary		Hakurnas Lead Works Ltd.	Ashdod	38
Lime		Negev Industrial Minerals Ltd.	Mishor Rotem	180
Do.		Lime & Stone Production Co. Ltd. [Readymix (Israel) Ltd., 100%]	Shefeya	150
Magnesium:				
Magnesia		Dead Sea Periclase Ltd. [Israel Chemicals Ltd. (ICL), 100%]	do.	75
Magnesium, refined		Dead Sea Magnesium Ltd. (DSM) [Israel Chemicals Ltd. (ICL), 100%]	Sodom	33
Natural gas	million cubic meters	Isramco Negev 2 LLP, 28.75%; Noble Energy Inc., 25%; Delek Group, 22%; Tamar Petroleum Ltd., 16.75%; Dor Gas Gas Exploration Ltd., 4%; Everest Infrastructure LLP, 3.5%	Tamar gasfield (offshore)	11,400
Petroleum:				
Crude	thousand 42-gallon barrels	Lapidoth Israel Oil Prospectors Corp.	Heletz field (onshore)	NA
Refined	do.	Bazan Group Ltd. (Private investors, 51.4%; Israel Corp., 33.06%; Israel Petrochemical Enterprises Ltd., 15.50%)	Haifa Bay	71,900
Do.	do.	Paz Oil Company Ltd.	Ashdod	40,200
Phosphate:				
Phosphate rock		Rotem Amfert Negev Ltd. [Israel Chemicals Ltd. (ICL), 100%]	Oron, Rotem, and Zin Mines in the Negev Desert	4,500
Phosphatic fertilizers		do.	Mishor Rotem	1,900
Phosphoric acid[2]		do.	do.	760
Potash		Dead Sea Works (DSW) [Israel Chemicals Ltd. (ICL), 100%	Sodom	4,000
Salt		do.	do.	700
Do.		Israel Salt Industries Ltd. (subsidiary of Danker Group)	Eilat	150
Do.		do.	Atlit	14
Silica sand		Negev Industrial Minerals Ltd.	Mactesh Hatira	300
Steel:				
Billet		Yehuda Steel Ltd.	Bene Ayish	200
Do.		do.	Ashdod	180
Do.		Hod Metal Products & Manufacturing Co. Ltd.	Acre	250
Rebar		Yehuda Steel Ltd.	Bene Ayish	200
Do.		do.	Ashdod	120
Do.		Hod Metal Products & Manufacturing Co. Ltd.	Kiryat Gat	250
Stone, sand, and gravel:				
Unspecified		Lime & Stone Production Co. Ltd. [Readymix (Israel) Ltd., 100%]	Modiim	6,000 e
Do.		do.	Dragot, Ein Harod, Eilat, Golani Junction, Kadarim, Revivim, Segev, and Shefar'am	5,000 e
Do.		Shapir Civil and Marine Engineering Ltd.	Etziona quarry, Emek Haela	2,500 e
Do.		do.	Vered quarry, Eron	2,500 e
Do.		Hanson Israel (subsidiary of HeidelbergCement AG)	Migdal Zedeka and other quarries	8,000 e

See footnotes at end of table.

TABLE 2—Continued
ISRAEL: STRUCTURE OF THE MINERAL INDUSTRY IN 2018

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Stone, sand, and gravel:—Continued			
Dolomite	Shapir Civil and Marine Engineering Ltd.	Natuf quarry	NA
Do.	do.	Zanuach quarry	NA
Sulfur	Bazan Group Ltd. (Private investors, 51.5%; Israel Corp., 33.5%; Israel Petrochemical Enterprises Ltd., 15.0%)	Haifa Bay	40
Do.	Paz Oil Company Ltd.	Ashdod	33
Sulfuric acid	Rotem Amfert Negev Ltd. [Israel Chemicals Ltd. (ICL), 100%]	Mishor Rotem	2,400
Zinc, refined, secondary	Numinor Chemical Industries Ltd.	Ma'a lot-Tarshisha	NA

[e]Estimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.
[1]Not operational in 2018.
[2]P_2O_5 equivalent.