

THE MIDDLE EAST

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The 15 nations of the Middle East that are covered in this volume encompass an area of more than 6 million square kilometers, which is about two-thirds the size of the United States. In 2002, the total population of the Middle East region was estimated to be about 245 million compared with 281 million for the United States and 6.23 billion for the world. The Middle East has significant reserves of boron minerals, crude oil, natural gas, and phosphate rock.

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General Economic Conditions

The economies of most of the region revolved around trade and the exportation of raw and processed mineral commodities, especially the production and processing of crude petroleum and natural gas. Foreign energy-intensive mineral-processing companies, such as aluminum, were attracted to the region by the abundant availability of natural gas and petroleum and lower cost electrical energy, which was generated with locally produced petroleum and natural gas.

In 2002, the annual change in the gross domestic product (GDP) of the Middle Eastern nations covered in this section increased by an estimated 2.5% compared with a revised 2.6% increase in 2001 (International Monetary Fund, 2003^{§1}). The high crude oil prices of 2002 did not produce a significant regional economic boost because crude oil production ceilings imposed on member states by the Organization of Petroleum Exporting Countries (OPEC) limited the officially allowable oil and associated natural gas output. Affected OPEC members in the region included Iran, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). Iraq also was a member of OPEC, but was not subject to the production ceiling in 2002.

¹References that include a section mark (§) are found in the Internet References Cited section.

The growth of Turkish production was attributed to a rebound from the 2001 recession (World Bank, 2003§).

Investment Data and Political Risk

State-owned companies dominated the region's mineral industry, although foreign direct investment was finding its way into the region's mineral industry. Processing facilities, which included liquefied natural gas plants, natural gas pipelines, natural-gas-processing plants, natural-gas-to-liquids facilities, expansions of existing crude oil refinery capacities, and new crude oil refineries were the primary beneficiaries of proposed mineral-industry-related investment in the region. New ammonia, methanol, and urea plants or plant expansions were proposed or under construction in Iran, Oman, and Saudi Arabia. New aluminum smelter capacity or expansion of existing smelter capacity was proposed for plants in Bahrain, Qatar, Turkey, and the UAE. An expansion of boric acid production capacity was proposed for Turkey. In Iran and Yemen, expansion of cement production capacity was proposed. New chlorine facilities were proposed in Jordan. Expansion of copper mining and refining capacity was proposed or underway in Iran. New iron-and-steel-processing facilities were proposed for Bahrain, Iran, Kuwait, Oman, Qatar, and the UAE. A new magnesium plant was planned for Saudi Arabia, and expansion of soda ash production capacity was proposed in Iran and Turkey. Additional sulfur recovery units were under construction in Kuwait, Saudi Arabia, and the UAE.

In Qatar, the Government proposed to privatize its interest in Qatar National Cement and Qatar Steel Co. In Turkey, a number of mining companies had been transferred to the Privatization Administration; the Government's divestment of its equity interest in chrome, copper, fertilizer, and silver operations was scheduled for 2003.

The possibility of military action by the United States against Iraq tempered some short-term investor interest in the region.

Legislation

In 2002, the Foreign Investment Promotion and Protection Act was enacted and foreign exchange rates were unified in Iran. The new law would allow foreign capital to be used in the development of Iranian mineral resources. In Oman, new foreign investment and mining laws were under consideration.

Exploration

Government agencies engaged in mineral prospecting and general exploration included the Department of Geological Survey of the Directorate General of Minerals in Oman, the

General Directorate of Mineral Research and Exploration in Turkey, the Geological Survey and Mineral Resources Board of Yemen, the Geological Survey of Iran, and the Saudi Geological Survey. Local and international exploration companies also were allowed to explore for minerals in most countries of the region. Crude oil and natural gas exploration was undertaken by Government and international oil companies.

In the Middle East in 2002, hydrocarbon exploration continued in Bahrain, Iran, Iraq, Israel, Jordan, Oman, Qatar, Saudi Arabia, Syria, Turkey, the UAE, and Yemen and was restarted offshore Lebanon. Industrial mineral and metal exploration activity was concentrated in Iran and Turkey. Exploration and prospecting for base and precious metals, predominantly by the private sector, also took place in Cyprus, Oman, Saudi Arabia, and Yemen.

Commodity Overview

The outlook segments of the mineral commodity tables are based on projected trends that could affect current (2002) producing facilities and on planned new facilities that operating companies, consortia, or Governments have projected to come online within indicated time frames. Forward-looking information, which includes estimates of future production, exploration and mine development, cost of capital projects, and timing of operations onset are subject to a variety of risks and uncertainties that could cause actual events or results to differ significantly from expected outcomes. Projects listed in the following section are presented as an indication of current (2002) industry plans and are not a USGS prediction of what will happen. The USGS provides no warranty, expressed or implied, as to the accuracy, completeness, or reliability of furnished data and is under no obligation to correct or update any forward-looking statements, whether as a result of new information or as future events take place.

Metals

Increased bauxite production was expected in Iran when the Jajarm alumina plant begins commercial operations. Regional aluminum output was envisioned to increase augmented in Bahrain with the completion of Aluminium Bahrain's fifth potline, in Iran with the completion of the Bandar Abbas smelter, in Turkey with the expansion of the Seydehisir plant, and in the UAE with the expansion of Dubai Aluminium Company's Jebel Ali's smelter. Mined copper ore in the region was projected to increase with additional production from the Meiduk and the Songon Mines in Iran and as block I is developed in Oman. Increased copper metal production was expected from the region with National Iranian Copper

Industries Company's ongoing expansion of the Sarcheshmeh copper refinery in Iran. Increased gold production in the region is anticipated with the proposed development of new mines in Iran, Saudi Arabia, and Turkey and the expansion of older mines in Iran and Oman.

Continued expansion of steel plant capacity in Iran was expected to result in a significant growth of crude steel output. The development of the Al-Jabail zinc mine in Yemen and an associated zinc refinery in Saudi Arabia was expected to augment Middle Eastern lead and zinc production.

Mineral Fuels

Turkish coal production was projected to decline, but in Iran, new foreign direct investment in the coal industry was expected to result in increased Iranian coal output. With the increased international interest in the development of natural gas resources and markets, the successful offshore natural gas exploration efforts in the Mediterranean Sea and the Persian Gulf and the proposed development of onshore gas resources in Saudi Arabia, natural gas production in the Middle East was expected to increase by about 50% by 2007.

Trade Review

The region was a major supplier of crude oil and natural gas to Asia and crude oil to the United States. The Middle East region supplied about 24% of the 3.3 billion barrels of crude oil that the United States imported in 2002. Saudi Arabia, which was the leading supplier of crude oil to the United States, provided 554 million barrels (Mbbbl), or 16% of the United States' crude oil imports. Iraq, with exports of about 168 Mbbbl to the United States, was in sixth place on the list of the leading crude oil suppliers to the United States. Kuwait, which was the source of nearly 79 Mbbbl of crude oil, remained 11th on the list (U.S. Energy Information Administration, 2004).

Reference Cited

U.S. Energy Information Administration, 2004, Table 3.3—Petroleum imports from...: *Monthly Energy Review*, February, p. 48-55.

Internet References Cited

International Monetary Fund, 2003, Middle East and Turkey—Gross domestic product, constant prices, annual percent change, *World Economic Outlook Database*, accessed September 24, 2003, via URL <http://www.imf.org/external/pubs/ft/weo/2003/02/data/dbcdafm.cfm>.

World Bank, 2003, *Global development finance 2003*, accessed March 5, 2004, at URL http://www.worldbank.org/prospects/gdf2003/GDF_vol_1_web.pdf.

TABLE 1
MIDDLE EAST: 2002 AREAL EXTENT AND ESTIMATED POPULATION

Country	Area (square kilometers)	Estimated population (millions)
Bahrain	665	0.7
Cyprus	9,250	0.8
Iran	1,648,000	65.5
Iraq	437,072	24.3
Israel	26,990	9.7
Jordan	92,300	5.2
Kuwait	17,820	2.1
Lebanon	10,400	4.4
Oman	212,460	2.5
Qatar	11,437	0.6
Saudi Arabia	1,960,582	22.1
Syria	185,180	17.0
Turkey	780,580	69.6
United Arab Emirates	82,880	3.0
Yemen	527,970	18.6
Total	6,003,586	246.0
United States	9,269,091	288.4
World	NA	6,200.0

NA Not applicable.

Source of area data: U.S. Central Intelligence Agency, World Factbook 2003.

Source of population data: World Bank Group, World Development Indicators Database, August 2003.

TABLE 2
MIDDLE EAST: GROSS DOMESTIC PRODUCT IN 2002

Country	Estimated GDP (PPP) ^{1, 2, 3} (billions)	Estimated GDP (PPP) per capita ¹	Real GDP annual percentage change ²
Bahrain	\$13.9	\$19,800	4.1
Cyprus	12.5	15,700	2.2
Iran	497.4	7,600	6.7
Iraq	58.0 ⁴	2,400	-3.0 ³
Israel	118.9	12,300	-1.0
Jordan	20.9	4,000	4.9
Kuwait	34.5	16,400	-0.9
Lebanon	29.3	6,700	2.0
Oman	31.3	12,500	2.3
Qatar	22.6	37,600	3.0
Saudi Arabia	247.7	11,200	1.0
Syria	60.6	3,600	2.7
Turkey	440.5	6,300	7.8
United Arab Emirates	67.2	22,400	1.5
Yemen	18.5	1,000	3.9
Total	1,673.8	NA	NA
United States	10,225.1	35,500	2.4
World	48,443.0	7,800	3.0

NA Not applicable.

¹Gross domestic product (GDP) based on purchasing power parity (PPP) valuation of country GDP.

²Source: International Monetary Fund, World Economic Outlook Database, September 2003.

³Table data compiled January 27, 2004; may be different than what is presented in individual country chapters.

⁴Source: U.S. Central Intelligence Agency, World Factbook 2003.

TABLE 3
SELECTED MIDDLE EAST EXPLORATION ACTIVITY IN 2002¹

Country	Prospect	Commodity	Companies	Resource notes ²	Exploration notes
Turkey	Kisladag	Au	Tuprag Metal Madencilik San. Ve Tic. Ltd. Sti.	126 Mt at a grade of 1.2 g/t Au	Completed about 10,600 meters of reverse circulation and core drilling; feasibility study underway.
Yemen	Al Jabali	Zn, Pb, Ag	Anglo American plc, Ansan Wikfs Hadramaut Ltd., and ZincOx Resources plc	12.6 Mt oxide ore at a grade of 8.9% Zn, 1.2% Pb, and 68 g/t Ag	Feasibility study underway.

¹Abbreviations used for commodities in this table include the following: Ag--silver, Au--gold, Pb--lead, and Zn--zinc. Abbreviations used for units of measurement include the following: g/t--grams per metric ton and Mt--million metric tons.

²Resources reported where available based on data from various public sources. Values may have been updated and may differ from previously published data. Resources may include measured, indicated, and inferred resources.

TABLE 4
MIDDLE EAST: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2002¹
(Thousand metric tons unless otherwise specified)

Country	Metals			Industrial minerals					Mineral fuels and related products, petroleum			
	Aluminum, metal, primary	Chromite, mine output, gross weight	Steel, crude	Ammonia, N content	Cement, hydraulic	Gypsum	Phosphate rock, gross weight	Potash, K ₂ O equivalent	Crude, including condensate (thousand 42-gallon barrels)	Refinery products (thousand 42-gallon barrels)		
Bahrain	519	--	--	377	67	--	--	--	13,800 ^e	87,000 ^e		
Cyprus	--	--	--	--	1,600 ^e	260 ^e	--	--	--	7,824		
Iran ^e	130	80	7,293 ²	1,119 ²	28,600	10,380	--	--	1,230,000	500,000		
Iraq ^e	--	--	25	200	2,000	--	300	--	740,000	170,000		
Israel ^f	--	--	150	--	5,150	144	3,476 ²	1,918 ²	28	67,300		
Jordan	--	--	30 ^e	--	3,455	176 ^e	7,179	1,174	15	21,700 ^e		
Kuwait ^e	--	--	--	414	1,600	--	--	--	680,000	240,000		
Lebanon	--	--	--	--	2,852	2 ^e	--	--	--	--		
Oman	--	27	--	--	1,400 ^e	56	--	--	328,000 ^e	30,629		
Qatar ^e	--	--	1,000	1,166 ²	1,100	--	--	--	230,000	17,700		
Saudi Arabia	--	--	3,800 ^e	1,737	22,000 ^e	450 ^e	--	--	2,589,000	582,860		
Syria ^e	--	--	70	143 ²	5,200	345	2,483 ²	--	185,530	85,700		
Turkey	63 ^e	314	16,046	301 ^e	32,576	264	--	--	17,579	190,000		
United Arab Emirates ^e	536	10	70	364	6,500	90	--	--	750,000	82,500		
Yemen ^e	--	--	--	--	1,400	100	--	--	173,000	34,000		
Total	1,250	431	28,500	5,800	116,000	12,300	13,400	3,092	6,940,000	2,120,000		
Share of world total	4.8%	3.2%	3.3%	5.4%	6.5%	11.6%	10.0%	11.6%	25.6%	7.4%		
United States	2,710	--	91,600	10,800 ³	91,300	15,700	36,100	1,200	2,100,000	6,300,000		
World total	26,200	13,500	865,000	109,000	1,770,000	106,000	134,000	26,600	27,100,000	28,400,000		

^eEstimated; estimated data, U.S. data, and world totals are rounded to no more than three significant digits. -- Zero or zero percent.

¹Totals may not add due to independent rounding. Percentages are calculated on unrounded data. Table includes data available as of October 2004.

²Reported figure.

³Synthetic anhydrous ammonia; excludes coke oven byproduct ammonia.

TABLE 5
MIDDLE EAST: HISTORIC AND PROJECTED BAUXITE MINE PRODUCTION, 1990-2007¹

(Metric tons)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Iran	100,000 ^e	148,000	400,000 ^e	405,000 ^r	420,000 ^{r, e}	450,000 ^r	500,000	550,000
Turkey	773,000	232,278	458,537	242,040 ^r	287,403 ^r	300,000 ^r	300,000 ^r	300,000
Total	873,000	380,000	860,000	647,000 ^r	707,000 ^r	750,000 ^r	800,000 ^r	850,000

^eEstimated. ^rRevised.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 6
MIDDLE EAST: HISTORIC AND PROJECTED ALUMINUM PRODUCTION, 1990-2007^{1,2}

(Metric tons)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Bahrain ²	213,000	450,709	509,308	522,749 ^r	518,924 ^r	527,000	527,000	750,000
Iran	60,000	119,400	140,000 ^e	140,000 ^e	130,000 ^e	150,000	150,000 ^r	200,000 ^r
Turkey	61,000	61,514	61,000	61,730 ^r	63,000 ^r	63,000	75,000	110,000
United Arab Emirates	174,000	247,400	470,000	500,000	536,000 ^e	640,000	600,000	700,000
Total	508,000	879,000	1,180,000	1,220,000 ^r	1,250,000 ^r	1,380,000	1,350,000 ^r	1,760,000 ^r

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²May include some secondary aluminum produced from used beverage cans.

TABLE 7
MIDDLE EAST: HISTORIC AND PROJECTED COPPER MINE PRODUCTION, 1990-2007^{1,2}

(Thousand metric tons, metal content of ore)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Cyprus	0	0	11	8	8 ^e	8	8	8
Iran	79	120 ^e	138 ^e	144 ^e	161 ^r	162 ^r	200 ^r	260 ^r
Oman	14	--	--	--	--	--	2	10
Saudi Arabia	1	1	1 ^e	1 ^e	1 ^e	1	1	--
Turkey	40	40	76	57 ^r	48 ^r	50 ^r	60	55
Total	134	160	226	210 ^r	218	221 ^r	270 ^r	330 ^r

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²Copper content of mined ore (gross weight).

TABLE 8
MIDDLE EAST: HISTORIC AND PROJECTED REFINED COPPER METAL PRODUCTION, 1990-2007 ^{1,2}

(Metric tons)

Country	1990	1995	2000	2001	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Cyprus ³	--	--	5,197	5,176	3,641 ⁴	5,200	5,200	5,100
Iran	47,800	90,400	132,000 ^e	132,000 ^e	143,000	140,000 ^r	200,000	240,000
Oman	12,000	33,900	24,281	24,000 ^e	24,000	25,000	25,000	30,000
Turkey	84,200	100,300	64,100 ^r	58,400 ^r	41,000	80,000	80,000	80,000
Total	144,000	225,000	226,000 ^r	220,000 ^r	212,000	250,000 ^r	310,000	355,000

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²May include secondary.

³Electrowon.

⁴Reported.

TABLE 9
MIDDLE EAST: HISTORIC AND PROJECTED GOLD MINE PRODUCTION, 1990-2007 ¹

(Kilograms, metal content of ore)

Country	1990	1995	2000	2001	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Iran	500	630	765 ^e	770 ^e	650	800	900	900
Oman	54	591	551 ^r	603 ^r	118	100	100	100
Saudi Arabia	3,540	8,080	3,800 ^e	5,000 ^e	5,000 ^{r,2}	5,700	8,000	9,000
Turkey	1,010	1,200	500 ^e	2,000 ^{e,r}	5,000 ^r	4,000	2,000	3,000
Total	5,100	10,500	5,620 ^r	8,370 ^r	10,800 ^r	10,600	11,000	13,000

^eEstimated. ^rRevised.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²Reported.

TABLE 10
MIDDLE EAST: ESTIMATED HISTORIC AND PROJECTED IRON ORE MINE PRODUCTION, 1990-2007 ¹

(Thousand metric tons, metal content of ore)

Country	Average grade	1990	1995	2000	2001	2002	2003	2005	2007
Iran	49%	1,800	4,500	6,100 ^r	5,100 ^r	5,600 ^r	6,000	6,200	6,200
Turkey	53%	2,690 ²	2,750	2,200 ^r	2,100 ^r	2,400 ^r	2,500	2,500	2,500
Total		4,490	7,250	8,300 ^r	7,200 ^r	8,000 ^r	8,500	8,700	8,700

^rRevised.

¹Estimated data are rounded to no more than three significant digits.

²Reported.

TABLE 11
MIDDLE EAST: HISTORIC AND PROJECTED IRON PRODUCTION, 1990-2007 ¹

(Metric tons)

Country	1990	1995	2000	2001	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Iran								
Direct-reduced iron (DRI)	264,000	3,301,000	4,740,000 ^e	5,000,000 ^e	5,280,000	5,300,000	5,300,000	5,300,000
Pig iron	1,270,000	1,532,000	2,200,000 ^e	2,300,000 ^e	2,400,000	2,400,000	2,500,000	2,500,000
Sub total	1,534,000	4,833,000	6,940,000	7,300,000	7,680,000	7,700,000	7,800,000	7,800,000
Iraq, DRI	170,000	--	--	--	--	--	--	--
Qatar, DRI	580,000	622,000	620,962	733,549	750,000	750,000	750,000	750,000
Saudi Arabia, DRI	1,090,000	2,129,000	3,090,000	2,880,000	3,290,000	3,000,000	3,300,000	3,300,000
Turkey, pig iron	4,830,000	330,070	300,000 ^e	247,598	157,622 ²	150,000	150,000	150,000
Total	8,200,000	7,910,000	11,000,000	11,200,000	11,900,000	11,600,000	12,000,000	12,000,000

^eEstimated. -- Zero.

¹Estimated data and totals are rounded to no more than three significant digits.

²Reported.

TABLE 12
MIDDLE EAST: HISTORIC AND PROJECTED STEEL PRODUCTION, 1990-2007 ¹

(Thousand metric tons)

Country	1990	1995	2000	2001	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Iran	1,425	4,696	6,600 ^e	6,890 ^e	7,293 ²	7,500	10,000	14,500
Iraq ^e	150	300	50	50	25	50	200	200
Israel ^e	144	200	270	220	150	150	150	150
Jordan ^e	179 ²	30	30	30	30	30	30	30
Qatar	580	614 ^e	744	908	1,000	1,100	1,100	1,100
Saudi Arabia	1,833	2,451	2,973	3,413	3,800	3,500	3,500	3,500
Syria ^e	76 ²	70	70	70	70	70	70	70
Turkey	9,322	12,744	14,325	14,382 ^r	16,046 ²	16,046 ^r	16,500	16,500
United Arab Emirates	--	--	70	70	70	70	70	400
Total	13,700	21,100	25,100	26,000 ^r	28,700	28,400 ^r	31,600	36,500

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²Reported.

TABLE 13
MIDDLE EAST: HISTORIC AND PROJECTED LEAD MINE PRODUCTION, 1990-2007 ¹

(Metric tons, metal content of ore)

Country	1990	1995	2000	2001	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Iran	11,000	15,900	15,000 ^e	15,000 ^e	15,000	15,000	15,000	15,000
Saudi Arabia	250	50	50 ^e	60 ^e	60	60	50	50
Turkey	18,000	10,376	17,270	17,293 ^r	17,352 ^r	17,500 ^r	18,000	18,000
Yemen	--	--	--	--	--	--	--	5,000
Total	29,300	26,300	32,300	33,000 ^r	33,000 ^r	33,000 ^r	33,000	38,000

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 14
MIDDLE EAST: HISTORIC AND PROJECTED PRIMARY REFINED LEAD PRODUCTION, 1990-2007 ¹

(Metric tons)

Country	1990	1995	2000	2001	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Iran ^e	--	4,000	15,000	12,000	12,000	12,000	12,000	12,000
Turkey ^e	5,400	2,000	--	--	--	--	--	--
Total	5,400	6,000	15,000	12,000	12,000	12,000	12,000	12,000

^eEstimated. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 15
MIDDLE EAST: HISTORIC AND PROJECTED SECONDARY REFINED LEAD PRODUCTION, 1990-2007 ¹

(Metric tons)

Country ²	1990	1995	2000 ^e	2001 ^e	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Iran ^e	10,000	41,200	38,000	38,000	38,000	38,000	38,000	38,000
Israel	--	8,200	13,000 ³	20,000 ³	22,000 ³	25,000	25,000	25,000
Turkey ^e	3,600	2,000	4,000	4,000	4,000	4,000	4,000	4,000
Total	13,600	51,400	55,000	62,000	64,000	67,000	67,000	67,000

^eEstimated. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²In addition to the countries listed, Saudi Arabia also produces secondary lead, but information is inadequate to estimate production.

³Reported.

TABLE 16
MIDDLE EAST: HISTORIC AND PROJECTED NICKEL PRODUCTION, 1990-2007 ¹

(Metric tons, metal content of ore)

Country	1990	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Turkey	--	--	--	--	500	3,000	18,000
Total	--	--	--	--	500	3,000	18,000

^eEstimated; estimated data and totals are rounded to no more than three significant digits; may not add to totals shown. -- Negligible or no production.

TABLE 17
MIDDLE EAST: HISTORIC AND PROJECTED SILVER MINE PRODUCTION, 1990-2007 ¹

(Kilograms, metal content of ore)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Iran ^e	38,000	60,000	22,000	22,000	22,000 ^e	(²)	(²)	(²)
Oman	3,000	100 ^e	4,894	3,153	38	(²)	(²)	(²)
Saudi Arabia	16,200	16,900 ^e	9,300 ^e	15,000 ^e	14,000 ^e	(²)	(²)	(²)
Turkey ^e	52,500	70,000	110,000	987,656 ^r	662,000	(²)	(²)	(²)
Undistributed	XX	XX	XX	XX	XX	600,000 ^r	600,000 ^r	600,000 ^r
Total	110,000	147,000	146,000	1,030,000 ^r	698,000	600,000 ^r	600,000 ^r	600,000 ^r

^eEstimated. ^rRevised. XX Not applicable.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²Included in "Undistributed."

³Reported.

TABLE 18
MIDDLE EAST: HISTORIC AND PROJECTED ZINC MINE PRODUCTION, 1990-2007 ¹

(Metric tons, metal content of ore)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Iran	29,000 ^e	145,100	90,000 ^{r, e}	120,000 ^{r, e}	120,000 ^{r, e}	120,000 ^r	125,000 ^r	125,000 ^r
Saudi Arabia	2,470	500 ^e	3,000 ^e	3,300 ^e	3,000 ^{r, e}	3,500	--	--
Turkey	39,000	9,118	39	37 ^e	35 ^e	40	50	60
Yemen	--	--	--	--	--	--	--	60,000
Total	70,500	155,000	93,000 ^r	123,000 ^{r, e}	123,000 ^{r, e}	124,000 ^r	125,000 ^r	185,000 ^r

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 19
MIDDLE EAST: HISTORIC AND PROJECTED ZINC METAL PRODUCTION, 1990-2007 ¹

(Metric tons)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Iran	--	--	49,000 ^r	73,000 ^r	100,000 ^{r, e}	100,000 ^r	125,000 ^r	125,000 ^r
Saudi Arabia	--	--	--	--	--	--	--	50,000
Turkey	21,100	17,050	-- ^r	--	--	--	--	--
Total	21,100	17,100	49,000 ^r	73,000 ^r	100,000 ^{r, e}	100,000 ^r	125,000 ^r	175,000 ^r

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 20
MIDDLE EAST: HISTORIC AND PROJECTED PHOSPHATE ROCK PRODUCTION, 1990-2007 ¹

(Thousand metric tons, P₂O₅ content of ore)

Country	1990 ^e	1995	2000	2001	2002 ^e	2003 ^e	2005 ^e	2007 ^e
Iraq ^e	270	300	200	100	100	20 ^r	200	200
Israel	1,104 ²	1,264	1,305	1,115	1,100	1,020 ^r	1,250	1,250
Jordan	2,010	1,655	1,824	1,928	2,340 ^r	2,200 ^r	2,300	2,450
Syria	511	477	646	613	745 ^r	725 ^r	725 ^r	725 ^r
Total	3,900	3,700	3,980	3,760	4,290 ^r	3,970 ^r	4,500 ^r	4,600 ^r

^eEstimated. ^rRevised.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

TABLE 21
MIDDLE EAST: HISTORIC AND PROJECTED SALABLE COAL PRODUCTION, 1990-2007 ^{1,2}

(Thousand metric tons)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Iran	1,440	1,640	1,815	2,002	2,020	2,000	2,500	2,500
Turkey	52,530	59,408	64,645	61,543	52,940	48,000	48,000	45,000
Total	54,000	61,000	66,500	63,500	55,000	50,000	50,500	47,500

^eEstimated.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²Includes anthracite, bituminous, and lignite.

TABLE 22
MIDDLE EAST: HISTORIC AND PROJECTED NATURAL GAS PRODUCTION, 1990-2007¹

(Million cubic meters, dry gas)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Bahrain	6,000	7,205	8,966 ^r	9,285 ^r	9,429 ^r	9,500 ^r	9,500 ^r	9,500 ^r
Iran	23,800	36,600	57,800	60,000 ^r	63,000 ^r	75,000 ^r	100,000	125,000
Iraq	4,200	3,000	3,000	2,920	2,900 ^r	1,000 ^r	3,000	3,000
Israel	40	21	10	10	8 ^r	10	720 ^r	720 ^r
Jordan	--	30	287	290	269 ^r	540 ^r	540	540
Kuwait	5,200	9,280	9,600	9,500	8,700 ^r	9,500	9,500	9,500
Oman	3,000	3,015	12,020	14,000 ^r	14,800 ^r	14,000	15,000	15,000
Qatar	6,090	13,600	26,141	27,738	29,300 ^r	30,000	35,000	60,000
Saudi Arabia	30,800	38,030	54,623 ^r	58,163 ^r	62,014 ^r	63,000 ^r	70,000	75,000
Syria	1,200	2,900	3,886	4,000 ^r	5,800 ^r	6,900 ^r	6,900 ^r	12,800 ^r
Turkey	212	182	612	600	268 ^r	300 ^r	500	500
United Arab Emirates	23,800	31,320	39,800	41,300	42,000 ^r	40,000	40,000	40,000
Yemen ²	--	--	--	--	--	--	--	--
Total	104,000	145,000	224,000 ^r	232,000 ^r	240,000 ^r	257,000 ^r	290,000 ^r	350,000 ^r

^eEstimated. ^rRevised. -- Negligible or no production.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.

²Most produced natural gas in Yemen was stripped of liquids and reinjected.

TABLE 23
MIDDLE EAST: HISTORIC AND PROJECTED CRUDE PETROLEUM (INCLUDING CONDENSATE) PRODUCTION, 1990-2007¹

(Thousand 42-gallon barrels)

Country	1990	1995	2000	2001	2002	2003 ^e	2005 ^e	2007 ^e
Bahrain	15,900	14,468	13,766	13,656	13,800 ^r	13,400	13,500	13,500
Iran	1,130,000	1,329,700	1,360,000 ^e	1,350,000 ^e	1,230,000 ^e	1,372,000 ^r	1,300,000	1,400,000
Iraq	745,000	205,000	937,000 ^e	860,000 ^e	740,000 ^e	745,000 ^r	800,000	900,000
Israel	94	36	25	24 ^r	28 ^r	25 ^r	25 ^r	25 ^r
Jordan	116	20	15	15	15	15	15	15
Kuwait	428,000	752,265	766,000	745,000	680,000 ^r	793,000 ^r	800,000 ^r	700,000
Oman	250,000	311,300	353,000 ^r	352,000	328,000 ^r	310,000 ^r	350,000	350,000
Qatar	148,044	142,300	231,000	237,000	230,000 ^r	272,000 ^r	235,000	235,000
Saudi Arabia	2,350,000	3,004,300	2,962,000 ^r	2,879,000 ^r	2,589,000 ^r	3,200,000 ^r	3,000,000	3,000,000
Syria	140,000	222,650	199,843	189,180 ^r	185,530 ^r	193,000 ^r	193,000 ^r	210,000 ^r
Turkey	26,600	24,124	19,873	18,370	17,579	17,000	15,000	15,000
United Arab Emirates	773,000	800,500	815,000	790,000	750,000 ^r	818,000 ^r	750,000	750,000
Yemen	73,000	125,925	167,000	165,000	173,000 ^r	160,000 ^r	170,000	170,000
Total	6,080,000	6,930,000	7,820,000 ^r	7,600,000 ^r	6,940,000 ^r	7,890,000 ^r	7,600,000 ^r	7,700,000 ^r

^eEstimated. ^rRevised.

¹Estimated data and totals are rounded to no more than three significant digits; may not add to totals shown.