

# 2005 Minerals Yearbook

# IRAQ

### By Philip M. Mobbs

Hydrocarbon production and processing dominated the national economy of Iraq. In 2005, oil production declined, and the economy of Iraq continued to be adversely affected by the post-conflict insurgency that has engulfed the country since 2003. Incoming oil revenue was not significantly affected because the resultant decline in the volume of Iraqi oil exports was offset by the increase in international crude oil prices in 2005. Iraq's gross domestic product (GDP) based on purchasing power parity was estimated to be about \$94.1 billion in 2005, and the GDP per capita based on purchasing power parity was estimated to be \$3,400. With the exception of cement, production of other mineral and mineral-based commodities was negligible (Knickmeyer, 2006; U.S. Central Intelligence Agency, 2006§<sup>1</sup>).

Problems with electrical power availability, security, and transportation impacted the rehabilitation of the country's industrial sector, especially mineral fuel production and processing. The lack of electrical power resulted in an increased demand for petroleum products to fuel small electrical-power generators, and attacks by insurgents on oil facilities resulted in decreased flow of crude oil to domestic refineries and export terminals.

As part of the Iraqi Government's agreement with the International Monetary Fund to reduce foreign debt, the Government had been expected to increase domestic prices of refined petroleum products in 2004; the Government, however, was restrained by political pressures. Domestic demand for diesel, gasoline, and kerosene increased in 2005 because of the need to refuel about 1 million more cars that had been imported into Iraq after the 2003 conflict and to supply gasoline- and kerosene-fueled electrical-power generators. In mid-2005, imported premium gasoline still sold for about 12.5 cents per gallon, locally-refined regular gasoline sold for about 4.9 cents per gallon, diesel fuel sold for about 2.6 cents per gallon, and kerosene sold for about 1.1 cents per gallon. Fuel prices in Iraq were considerably lower than those of other countries in the region, which resulted in the smuggling of significant volumes of petroleum products out of Iraq. In mid-December 2005, the Government announced that it would reduce the fuel subsidies; the price of premium gasoline was raised to about 65 cents per gallon and that of regular gasoline was increased to about 45 cents per gallon. The fuel price hikes resulted in armed attacks on fuel tankers and gasoline stations, widespread demonstrations, and labor strikes at the oil refineries (Finer and Nouri, 2005; International Monetary Fund, 2005, p. 10-11; Hernandez, 2006).

#### **Commodity Review**

#### Industrial Minerals

Cement.—In 2005, the Government issued licenses for the construction of 20 new cement plants. In northern Iraq, a consortium that was lead by Orascom Construction Industries of Egypt, and which included the Faruk Rasool Group (FRG) of Iraq and a company of the Polysius Group, continued the rehabilitation of the 2.3-million-metric-ton-per-year (Mt/yr)capacity Tasluja cement plant. In 2004, prior to the start of the renovation, the effective capacity of the two-line plant was about 300,000 metric tons per year. Orascom, FRG, and Blair Sayed Magid of Iraq formed the United Cement Corp. of the British Virgin Islands, which proceeded to plan to build the 2.9-Mt/yr-capacity Bazian Cement Plant near Hayasi. The Tasluja plant was scheduled to resume full production in 2006. Initial production from the Bazian plant was expected to begin in late 2007 (Middle East Economic Digest, 2005a; Orascom Construction Industries, 2006).

#### **Mineral Fuels**

**Petroleum.**—In 2005, several oil companies undertook field or reservoir studies; evaluators included the joint venture of Anadarko Petroleum Corp. of the United States, the Dome Group of the United Arab Emirates, and the Vitol Group of the Netherlands and Switzerland for the Suba and the Luhais Fields; Crescent Petroleum Co. of the United Arab Emirates for the Amara, the Nur, and the Ratawi Fields; Exploration Consultants Ltd. of the United Kingdom and the Royal Dutch/Shell Group for the Kirkuk Field; BP p.l.c. of the United Kingdom for the Rumaila Field; Oil Exploration Co. of Iraq and Petrel Resources Plc of Ireland for the Merjan Field; and the K Petroleum Co. (a subsidiary of Heritage Erbil Oil Ltd., which was a subsidiary of the Eagle Group of Iraq and Heritage Oil Corp. of Canada) for the Taq Taq Field. Norsk Hydro ASA of Norway also agreed to assist the Ministry of Oil with field studies.

The Oil & Gas International Group of Canada secured the contract to develop the 80,000-barrel-per-day (bbl/d)-capacity Hamrin oilfield. Petrel was awarded the contract to redevelop the Suba and the Luhais Fields. Production from the Suba and the Luhais Fields was expected to be increased to more than 200,000 bbl/d from about 50,000 bbl/d. In late November, DNO ASA of Norway spudded the Tawke No. 1 exploration well in northern Iraq (Middle East Economic Digest, 2005b; Rigzone.com, 2005§).

The Government requested bids on the rehabilitation of various process units at the Baiji, the Kirkuk, and the Nasiriyah refineries, on the construction of a 70,000-bbl/d-capacity refinery in the Koya area, and on the construction of a 140,000-bbl/d-capacity refinery near Karbala that originally had been proposed to be built near Nahrain (Middle East Economic Digest, 2005c).

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<sup>&</sup>lt;sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

#### Outlook

According to the oil ministry, an estimated \$6.25 billion was lost (oil revenue not earned and costs to repair damage) in 2005 because of 186 attacks on oil industry infrastructure that were attributed to insurgents. In response to the attacks, available funding was directed towards rehabilitation of existing infrastructure and associated security costs instead of new mineral sector development. In the near- and medium-term, the Iraq economy would benefit from improved security, increased oil production and exports, and continued strong world oil prices (Guardian, The, 2006§).

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## TABLE 1 IRAQ: ESTIMATED PRODUCTION OF MINERAL COMMODITIES<sup>1, 2</sup>

#### (Thousand metric tons unless otherwise specified)

Commodity	2001	2002	2003	2004	2005
METALS					
Steel, crude	50				
INDUSTRIAL MINERALS					
Cement, hydraulic:					
Portland	6,000	6,834 4	1,901 4	2,500	3,000
White	158	175	54 4	15	15
Nitrogen, N content of ammonia	280	532 4	4	30	30
Phosphate rock, beneficiated, phosphorus pentoxide content	100	100	10	1 <sup>r</sup>	1
Salt	300	203 4	50 <sup>4</sup>	50	25
Sulfur, elemental:					
Native, Frasch	300	300	50		
Byproduct <sup>5</sup>	50	50	1	20	30
Total	350	350	51	20	30
MINERAL FUELS AND RELATED MATERIALS					
Gas, natural:					
Gross million cubic meters	7,000	7,000	4,000	5,000 <sup>r</sup>	4,000
Dry do.	2,920	2,900	1,500	1,800 <sup>r</sup>	1,500
Natural gas plant liquids thousand 42-gallon barrels	4,000	4,000	2,000	12,000 <sup>r</sup>	11,000
Petroleum:					
Crude, including lease condensate do.	860,000	740,000	490,000	737,940 4	660,000
Refinery products do.	170,000	170,000	50,000	50,000	100,000

Revised. -- Zero.

<sup>1</sup>Estimated data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Table includes data available through September 22, 2006.

<sup>3</sup>In addition to the commodities listed, secondary aluminum, clay, fertilizers, gypsum, secondary lead, lime, limestone, industrial (glass or silica) sand, sand and gravel, and stone also may have been produced but available information is inadequate to estimate output.

<sup>4</sup>Reported figure.

<sup>5</sup>From petroleum and natural gas processing.