

## SYRIA

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**W**ith continuing regional tensions following the invasion of Iraq, Syria (officially Al Jumhuriyah al Arabiyah as Suriyah or the Syrian Arab Republic), remains in the news. The country is strategically located, being bounded on the north by Turkey, on the east by Iraq, on the south by Jordan and Israel, and on the west by Lebanon and the Mediterranean Sea. The Bush Administration continues to regard it as a 'rogue nation' harbouring terrorists and members of ousted Iraqi President Saddam Hussein's regime. US military engineers have shut down the IPC pipeline linking the Kirkuk oil fields in northern Iraq with Syria's port of Baniyas on the Mediterranean. Reportedly, the 900 km, 1.1-1.4 Mbb/d (nameplate capacity) pipeline was used to handle about US\$1.2 billion worth of oil annually for illegal shipments from Iraq to Syria.

The country's economy has been somewhat stagnant, with growth in real gross domestic product (GDP) around 3%, which is only slightly higher than the rate of population growth. Officially, the country's unemployment rate is less than 10%, although according to foreign diplomats the rate is more likely over 20%. All strategic sectors, including oil, electricity, banking, and chemicals, are run by the government. For his part, President Bashar al-Assad, the relatively young British-educated President, has tried to promote economic reform and replace a state-run economy with a more market-based, modernised one, and to diversify the country's economic base in preparation for the day when oil reserves are depleted (see below). There are hopes for growth in sectors such as banking/insurance/finance, textiles, food processing, cement and steel production, refineries, fertiliser production, water treatment and wastewater treatment, and of course oil and gas. The economy and society should benefit from considerably more openness, and the political as well as economic fall-out from the war in Iraq is yet to be seen. However, Syria has moved extremely slowly and cautiously in this direction and moves to privatise these large state-owned enterprises have been replaced by an effort to increase their efficiency.

Oil was first discovered in Syria in the 1950s, and significant output began after the 1968 completion of a pipeline linking the oil fields in the northeast to refineries in the west. However, after peaking at 590,000 bbl/d in 1996, production has fallen steadily as a result of technological problems and depletion of reserves. Output in 2002 was estimated to be 525,682 bbl/d as older fields reached maturity. This decline is expected to continue despite government efforts to encourage exploration by foreign oil companies, and a switch from oil-fired to natural gas-fired electric power plants. Syria also has opened up new blocks for oil and natural gas exploration, with the Oil and Mineral Resources Ministry issuing exploration rights in January 2003 to Shell in the Damascus-Palmyra area and to India's ONGC Videsh for another onshore block. Independents, Ocean Energy and Stratic Energy, also

received awards. Since the first round of bids closed, bids for additional rounds have been issued for additional blocks.

Syria's oil refineries at Baniyas and Homs have production rates of 132,725 bbl/d and 107,140 bbl/d, respectively, and plans have been discussed to build a third refinery at Deir ez-Zour (initial projected capacity of 60,000 bbl/d increasing to 120,000 bbl/d) to supply products to the eastern part of the country. In addition, there are plans to upgrade the two existing refineries, both of which are in urgent need of overhauling, to replace output of fuel oil with lighter products.

Syria's gas reserves, largely concentrated in the northeast, have significant potential, particularly in the Palmyra area where a large new natural gas field was discovered in 1997. In September 2001, a new integrated natural gas project called Desgas was finished in the Dir ez-Zour region and uses some 175 million ft<sup>3</sup>/d of previously flared associated natural gas in the Dir ez-Zour fields; TotalFinaElf and Conoco each holds a 50% interest, with Conoco as lead operator. Syria plans to build several natural gas combined-cycle power plants and to convert the major oil-fired plants to natural gas in order to save oil for hard currency exports. Proven natural gas reserves are estimated at 8.5 trillion ft<sup>3</sup>. In 2001, about 206 billion ft<sup>3</sup> of natural gas were produced and there are plans to increase this production perhaps even doubling it by 2005. In January 2001, in order to gain access to natural gas imports, Syria signed agreements with Egypt, Jordan, and Lebanon for an onshore pipeline network (the 'Arab Gas Pipeline') linking the four countries and allowing imports of natural gas from Egypt. The section of the pipeline running from Egypt to Jordan is in the final stages of construction, but it remains to be seen whether the extension to Syria will be built. Another possible link into this network would be Cyprus, which has held talks about a possible sub-sea extension of the pipeline network from Lebanon or Syria.

On the industrial mineral front, Syria has two nitrogenous fertiliser plants and one phosphate-based unit at Homs. There are plans for further expansion, including a 450,000 t/y nitrogenous complex near Haseko in the northeast that would use gas from the Omar field. Bechtel and Makad International are building a 500,000 t/y triple super phosphate plant near Palmyra. More than 1 Mt/y of phosphate rock have traditionally been produced and have mainly been destined for Europe. Syria produces phosphate rock through the state-owned company Gecopham. Total phosphate rock production is estimated at 2.4 Mt/y from open-pit mines in the Palmyra area.

Syria is also a producer of salt, marble, basalt, and limestone as well as possessing reserves of natural zeolites, silica sand and gypsum, plus some chrome and manganese ores. Zeolite deposits were identified several years ago 170 km east of Damascus and reserves are estimated at about 605 Mt. A feasibility study has been carried out on a silica sand resource of about 150 Mt, 160 km north of the capital.

Rafiq Burghli and Co established Jordan Minerals Est (JME) in 1980 to produce ground calcium carbonate (GCC). Production capacity has grown

and several quarries supply material to the company's plant in Amman which underwent a US\$4 million modernisation project in 1999-2000; production capacity was increased from 125,000 t to 150,000 t/y of natural and stearic acid coated GCC; new equipment allows for the production of 42,000 t/y of treated GCC. Syrian Carbonate Co Ltd, a JV with Jordan Carbonate Co, also produces GCC, and Fawaz Istwani and Co (Syrian Chemical) established its first GCC plant in 1975 and a second in 1998.