

## SULTANATE OF OMAN

*By a Special Contributor*

The Sultanate of Oman, covering an area of some 212,000 km<sup>2</sup> and with a population of just 2.8 million (including more than half a million non-nationals), is strategically situated at the eastern extremity of the Arabian Peninsula. It shares its western border with Yemen, Saudi Arabia and the United Arab Emirates, and is bounded to the north by the Gulf of Oman and to the east by the Arabian Sea. There is a central desert plain flanked to the north and south by rugged, mountainous terrain.

Since 1970, the country has been ruled by Sultan Qaboos bin Said Al Said, chief of state and head of government. There is a bicameral legislature and the monarch appoints the 48 members of the upper house and has the final say in the selection of the elected 83-member lower house. There is no written constitution. Nevertheless, the Sultan has been keen to modernise and open Oman to the outside world, and the country is regarded as one of the more moderate Arab states.

Natural resources include oil and natural gas, copper, chromium and industrial minerals such as gypsum and limestone, but oil is of greatest importance and the economy is closely tied to the price of oil. In 2002, GDP grew by some 2.2% to an estimated US\$22.4 billion (purchasing power parity). Industry (chiefly oil production and refining, and natural gas production) contributed about 55% of GDP, services 42% and agriculture 3%. Exports, mainly oil, were worth about US\$10.5 billion, approximately twice the value of imports.

According to the BP Statistical Review of World Energy, Oman produced 44.6 Mt of oil in 2002, equivalent to 1.3% of the world total, and its proven reserves amounted to 700 Mt (0.5% of the world total). Natural gas production has risen sharply over the past two years, with a 6% increase in 2002 to 14.8 billion m<sup>3</sup>. At this production rate, proven reserves are sufficient for 56 years.

Oman is pursuing a plan to diversify the economy, focusing on non-oil resources, such as agriculture, fisheries, tourism, and metals and minerals. The most ambitious project in the metals sector is the proposed aluminium smelter at Sohar on the Gulf of Oman. A 500,000 t/y capacity smelter is envisaged plus an adjacent 1,000 MW gas-fired power plant. Total project costs are estimated at some US\$2.0 billion. Alcan has agreed to be a partner in the project and the Abu Dhabi Water Authority is expected to contribute equity to the power plant. An investment bank is now being sought by the sponsors to advise on project financing.

The exploration and the development of mineral resources in Oman is actively promoted by the Ministry of Commerce and Industry, which has long pursued a systematic programme of developing and exploiting the mineral wealth of the Sultanate.

There is a substantial mineral resource base. Some resources are being exploited on a commercial scale, while the rest are waiting either detailed exploration or development. The Sultanate possesses extensive ophiolites, which have the potential to host copper, nickel, chromite, iron ore, gold and silver.

The entire country has been geologically mapped, and there are laboratory facilities equipped to handle all types of investigations related to mineral exploration, as well as geophysical surveying and aerial photography. The Directorate General of Minerals, within the Ministry of Commerce and Industry, is responsible for exploration and has been able to attract the private sector through the provision of mineral inventories of potential areas, based on the exploratory work carried out so far in Oman.

The most publicised exploration project in 2002 was the announcement by National Mining Co., a subsidiary of Muscat-based MB Petroleum, of the discovery of a group of massive sulphide zones carrying copper and gold in volcanogenic rocks in northern Oman. The main zones are at the Shina and Hatta prospects, part of the Block 1 concession north of the former copper mine at Sohar. Block 1 covers an area of 364 km<sup>2</sup> within the northern portion of the major copper/gold-bearing Samail ophiolite belt which extends north from the Batinah coastal region to the UAE border near Shinas.

Regional geochemical and airborne geophysical surveys had commenced in 2000 and drilling began in 2001, targeting coincident geophysical anomalies down-dip from outcropping gossans. Better intersections included around 40 m averaging 1.0 g/t Au and 1.51% Cu from a depth of 34 m, and 15 m at 0.8 g/t Au and 2.71% Cu from 45 m at Shinas, and 7 m at 0.3 g/t Au and 5.0% Cu from a depth of 36 m at Hatta. Zinc and silver were also present in the core. A feasibility study has been proposed together with further drilling, sufficient for an indicated resource estimate.

Copper deposits in the vicinity of Sohar were mined by state-owned Oman Mining Co. during the 1980s and early 1990s, and a smelter was constructed adjacent to the mine site. The deposits were depleted in 1994 and the mine subsequently closed. In 2001, a feasibility study of mine pollution control in the abandoned Sohar mine area was completed with the technical and financial assistance of the Japanese Government. Remedial measures assessed and agreed with the concerned ministry are being implemented. Japan has also provided assistance in the form of a techno-economic study of all the discovered copper and gold deposits in the Yanqul, Khabborah and Ghazain areas.

OMC has continued to operate the smelter, treating imported concentrates on a toll basis. Imports have amounted to around 80,000 t/y of concentrate for the production of some 24,000 t/y of copper. The company's gold processing plant has also continued to produce gold doré from gold-bearing gossans at Rakah near Yanqul. The gossans at Rakah have been depleted and it was reported that production from a new gossan at Bishara would commence during the year.

Oman Chromite Co., a public limited company mines modest quantities of chromite in small, open-pit operations. The ore is beneficiated to produce chips and fines, and both refractory and metallurgical grades are exploited and marketed.

In the industrial minerals sector, Oman produces gypsum in sufficient quantity to meet its domestic needs and also exports gypsum to the UAE. It also produces clay for a developing indigenous ceramics industry.

### **Production ('000 t)**

	<b>2000</b>	<b>2001</b>
Marble	147.68	155.93
Limestone	3,809	3,294
Gypsum	131.90	30.60
Salt	11.70	13.98
Chromite	15.11	30.15
Gold (kg)	604	603
Silver (kg)	306	289
Building Materials	22,448	21,181