

LIBYA

By Neil Scott

Libya is reported to possess close to half of Africa's oil reserves. So, with limited agricultural production and a relatively undeveloped solid minerals sector, it is no surprise that the hydrocarbons industry contributes some 95% to the country's export earnings. Indeed, oil production is booming: in 2000 it was 1.41 Mbbl/d, and is set to reach 2 Mbbl/d in 2003. However, these figures give little comfort to the US oil companies that were major players in the country until the Pan Am air disaster in 1986 and the passing of the Iran-Libya Sanctions Act (ILSA), which prohibited their operating in the country. Now, Congress has renewed the ILSA for a further five years, despite pressure from the Bush Administration for an 'interim' prolongation of two years. Although the US oil interests are held 'in trust' by the Libyan Government, European and Canadian producers, in particular, are reaping the benefit of developing an industry free of US competition. Its potential is formidable - as reflected in the results of Robertson Research International's country survey of interest in new exploration and production ventures. Libya is ranked first for the third successive year.

Historically, almost all of Libya's crude oil production has come from the Sirte Basin in the eastern part of the country, with the state-owned National Oil Co. (NOC) having a majority share in most operations. Now the Murzuq and Bouri fields are assuming increasing importance. Indeed, a consortium led by Repsol (Spain) and including OMV (Austria), Total Fina Elf (France) and Norsk Hydro (Norway) has recently made a fourth discovery in the Muzurq basin with preliminary indications of a >250 Mbbl resource.

Terms for exploration and production sharing agreements (EPSA) have become progressively more favourable since the late

1980s. As reported by the Economist Intelligence Unit, the NOC, rather than the disbanded Energy Ministry, has now been given formal charge of national hydrocarbons policy in an effort to make the contracting procedure more rapid and transparent. This applies equally to gas EPSAs, since it is government policy to develop the country's unused gas resources so as to eventually replace the domestic use of oil by gas wherever possible.

The 'Great Man Made River Project', which supplies the coastal cities with fresh groundwater from the south of the country, has been plagued with technical and financial problems since its inception in 1984. Despite enormous investment in building 3,500 km of pipeline, it operates at only a fraction of its design capacity. In an effort to remedy this, the government has agreed to a rescue package under which leaks in the pipelines will be repaired, and remaining construction work from the second phase completed. The third and fourth phases of the project involve the construction of an additional 1,700 km of pipeline.

Solid mineral production in Libya is largely for the cement industry, for which an estimated 150,000 t/y of gypsum is used in addition to the basic feedstock of limestone and clay. Some 30,000 t/y of salt is produced by evaporation from coastal pans near Benghazi and Tripoli and approximately 13,000 t/y of sulphur is recovered from petroleum and natural gas refining. Potential unexploited mineral deposits include marble, bentonite and silica sand, and there is exploration potential for gold and base metals in metamorphic terrain. The principal undeveloped mineral project in Libya is the Wadi Shatti iron ore deposit with measured resources of 795 Mt at an average grade of 51.7% Fe, but with high phosphorus content.

It comprises magnetite with some siderite contained in three horizons up to 12 m thick, and is amenable to open-pit mining. The project has the potential to produce 10 Mt/y of

sinter fines and is seen by the government as a potential supplier to the Misurata steel complex on the coast. This is presently served with imported ore.