

New Exploration Opportunities Arise In New Zealand

A number of changes to the New Zealand exploration and production climate are occurring which, combined with strong geological prospectivity, are presenting a range of opportunities to companies considering New Zealand as an exploration destination.

Firstly, reserves in the large Maui gas field, which has dominated the New Zealand energy scene for 30 years, are expected to be written down. The likely depletion date has been advanced from 2009 to 2007. This is expected to result in higher gas prices for producers in the future, offering a clear incentive for exploration.

The gas market is being driven by increasing investment in thermal power stations, with gas the preferred fuel. However, some planned plants have been deferred because of uncertainty of supply. Production from New Zealand's world-scale methanol plants is also at risk. The energy markets are thus absorbing significantly more gas than is being discovered.

Increasing geological knowledge is also improving understanding of the range of plays that New Zealand offers. In the Taranaki Basin, oil and gas have been discovered at every level from Paleocene to Pliocene, but deep Cretaceous reservoirs have never been drilled. Government-funded research is pointing to more oil-prone source rocks than have been previously suspected at these older levels, with reservoir rocks in close stratigraphic proximity. These plays are known from seismic data to occur in several New Zealand sedimentary basins.

New exploration permit bidding rounds are offering explorers opportunities in the producing Taranaki Basin as well as in little-explored basins or sub-basins in which there is strong evidence for viable petroleum systems and a wealth of targets. These areas include the deep water Taranaki Basin, where interpretation of new seismic data indicates the presence of a new play for New Zealand – extensive accumulations of thick Cretaceous deltaic sediments with abundant inferred source rocks.

Other areas on offer during 2003 are a large, little-explored, offshore part of the Taranaki Basin and most of the Canterbury Basin. Both areas have proven oil potential with sub-economic discoveries from a very few offshore wells.

As the only producing basin, Taranaki has attracted the most exploration investment. Recent onshore drilling outside of Taranaki has been concentrated on the East Coast, with promising results, but only a few modern onshore wells have been drilled in other basins.

Offshore potential is virtually unlimited. New Zealand has a small land area but a very large marine Exclusive Economic Zone of over 4 MM km² that is barely explored. Of the eight major basins or basin complexes within the limits of the continental shelf, one is producing and another five have been demonstrated by sub-economic discoveries to have viable petroleum systems. This needs to be assessed against the level of wildcat drilling outside of the Taranaki Basin, with only 21 offshore wells drilled in six basins within a total continental shelf area of 255,000 km².

The broad spectrum of exploration opportunities is being recognised by a growing number of companies. This interest is reflected in high levels of exploration

activity in the Taranaki Basin and commitments to several offshore wells in 2003. Companies from North America, Australia, Europe and New Zealand have made substantial exploration commitments involving average expenditure of about NZ\$180 MM a year over the last three years. This does not include field development costs which are expected to be several hundred million dollars over the next few years.

New Zealand is actively seeking to attract a higher level of exploration to enlarge its reserves inventory. Explorers are offered an attractive fiscal regime and a stable political situation. New Zealand has a strong knowledge base, a low-cost skilled work force, and established exploration and production support services.