## Oil And Gas Exploration Key To NZ Low-Cost Energy Strategy

The New Zealand Government is committed to a sustainable and efficient energy future, with the overall objective of ensuring the delivery of reliable and sustainable energy services. An abundant energy supply at reasonable cost is one of New Zealand's key competitive advantages.

The promotion of oil and gas exploration is central to achieving the outcomes the Government is seeking from its energy policy. That is why a fiscal environment has been created that facilitates and encourages oil and gas exploration.

New Zealand is able to provide a significant proportion of its energy requirements from indigenous resources, and it is important that this situation is sustained. Natural gas provides over 30% of the country's total primary energy supply.

New Zealand's major gas resource has for 30 years been the Maui field, which originally contained two thirds of the country's estimated recoverable gas reserves. This field is likely to be depleted by about 2007, although there have been additions to the reserve inventory from recent discoveries, particularly from the Pohokura offshore gas-condensate discovery and from smaller onshore fields.

At the present time about 45% of natural gas produced is used for electricity generation. Gross natural gas production has averaged over 240 PJ per annum over the past few years.

Natural gas generates 25% of New Zealand's electricity supply of 38,000 GWh. Demand for electricity continues to grow at a steady pace, by an average of 1.9% per year over the past 25 years. Over 150 MW of new capacity will be required each year from 2005 to meet the long term trend for growth in power demand of around 2% per annum, and to avoid the risks of dry years when hydro storage lakes are low.

Most new investment in power generation has been in gas-fired plants. Gas is likely to be the preferred fuel for the majority of new generation plants in the near future. Gas has relatively low emissions compared with other fossil fuels.

The gas market is undergoing a significant transition phase. An earlier than expected depletion of the Maui gas field has accelerated the need to discover and develop more gas fields and has produced strong incentives to find alternative sources of gas for the medium to long term.

This is also important for New Zealand's sustainable economic and regional

development which requires a reliable, stable and economical supply of electricity and gas for priority uses such as dairy processing, forestry, wood, meat products, and pulp and paper manufacturing facilities. New Zealand has competitive advantages from its efficiency at producing these energy-intensive commodities.

Oil production is also currently dominated by the Maui field, which supplied 77% of total production (including naphtha) in 2001. New Zealand is approximately 30% self-sufficient in oil, and improvement on that figure is desirable. New Zealand's crude oil and condensate production was 12.4 MMbbl in the year ended March 31st 2001, of which 9.4 MMbbl was exported. The remaining amount was used for refinery feedstocks at the Marsden Point refinery. Total crude petroleum imports were 36 MMbbl.

The energy sector faces major challenges over the next few years, and continued exploration for oil and gas is fundamental. New Zealand needs new discoveries.