

## NEW ZEALAND

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**T**he Labour government continues in power though its majority is now threatened by defecting MPs, a problem that dogged previous governments elected under the MMP proportional voting system. No significant policy shifts are likely as a result, but the opposition National Party has seen its support in the polls soar since former Reserve Bank governor Don Brash took on the leadership. The next election is due in 2005. Economic growth has continued at higher levels than forecast, due mainly to continuing high commodity prices, a building boom and a surge in immigration, though this is now slowing.

Mineral exploration activity, which has been at a low level for the past decade, has picked up recently in line with overseas trends. The main gold producers are leading the charge and Canadian and Australian companies have acquired exploration tenements, mainly for gold in the Hauraki (North Island) and West Coast and Otago (South Island) regions. NZ's sole listed gold exploration company, Heritage Gold, has increased its activities in the Hauraki district.

Crown Minerals, the Government agency that manages minerals, has undergone a major reorganisation with the aim of improving the level of service it provides both to the government and the private sector. While driven primarily by the earlier than expected depletion of the Maui gas field (that has been providing 20% of NZ's primary energy supply), the review will affect minerals management too. It has led to major staff changes, with greater emphasis on contributing to government policy making and upgrading the handling of information.

Mineral exploration has been assisted by Crown Minerals producing a prospectivity study for mesothermal gold deposits in 2002, and another on epithermal gold-silver deposits in 2003. These have been prepared in collaboration with the Institute of Geological and Nuclear Sciences.

Gold and Resource Developments Ltd, operator of the country's largest gold mine, the Macraes mine in Otago in the South Island, has floated its gold operations under a new company – OceanaGold - which was listed on the Australian and New Zealand stock exchanges in March 2004. Its Macraes mine increased gold output to a record 175,000 oz during 2003. The company plans to make a decision soon on the construction of a 2.3 km long decline to access extensions to the Frasers pit ore zone underground, where diamond drilling has shown mineralisation to extend more than 1 km to the east of the pit limit at a depth exceeding 500 m.

OceanaGold's Reefton (West Coast, South Island) project is undergoing a further feasibility study and would now consist of open pits at Globe Progress, and an underground mine on the old Blackwater mine located about 20 km to the south. Ore would be concentrated at Reefton, and transported to the Macraes mine by road and rail for treatment by pressure oxidation and cyanidation. A decision by the company is now expected on the 3rd quarter of 2004. OceanaGold is targeting future gold production at about 215,000 oz/y if the underground mine is developed, increasing to up to 350,000 oz/y if the Reefton project proceeds.

At Sams Creek in the north of the South Island, gold mineralisation occurs in quartz sulphide veins in a porphyry dyke. Since the prospect was discovered 30 years ago, drilling has defined an inferred gold resource of 10.7 Mt grading 2.12 g/t, with potential for along strike extensions. Here OceanaGold plans further exploratory drilling within the higher-grade zones.

Gold output from the open pit Martha mine (Newmont) at Waihi in the North Island was 109,828 oz of gold and 954,100 oz of silver in 2003. Newmont had sought to sell the mine in 2003, but has now decided to retain it, and has resumed exploration in the district with an active diamond drilling programme.

The company has spent NZ\$18 million on exploration and feasibility studies of the recently discovered Favona gold-silver deposit located adjacent to the Martha ore-treatment plant. The approval process is close to completion for a new underground mine, and construction is due to commence this year. The aim is to operate the Favona mine as an extension of the existing Martha mine, and to commence production well before the open pit closes in 2007.

Placer gold mining in the west and south of the South Island declined sharply to about 20,000 oz in 2003 from operations in the West Coast, Otago and Southland regions. The demise of L & M Mining Ltd and the Grey River dredge has seen alluvial gold output decline steadily over the past five years.

New Zealand produces a range of specialist industrial minerals of volcanic origin for export and domestic use including: high-quality white halloysite exported for use in pottery and ceramics (Imerys Tableware, formerly NZ China Clays); amorphous silica as a cement additive (Microsilica NZ Ltd, a subsidiary of Golden Bay Cement within the Fletcher Building group); bentonite (Omya NZ Ltd); zeolite which has a wide range of applications (Resource Refineries Ltd); and perlite (Industrial Processors Ltd).

New Zealand Steel has been producing about 2 Mt of titanomagnetite iron sand concentrate each year from North Island coastal deposits, 0.6 Mt for export from Taharoa 150 km south of Auckland, and 1.2 Mt for steel-making at the integrated Glenbrook steel mill 50 km south of Auckland.

Coal output has increased strongly to record levels over the past two years, reaching 5.2 Mt in 2003. Sub-bituminous coal is produced in the Waikato region of the North Island, mainly for steel making at the Glenbrook mill (700,000 t/y), and with increasing quantities being used for thermal power

generation at the Huntly power station. Bituminous coal produced in the West Coast region of South Island is the main source of export coal, while sub-bituminous coal and lignite are produced in Southland and Otago for industrial and domestic use.

The government-owned Solid Energy NZ Ltd, which produces about 80% of the coal mined in New Zealand, has reported a record profit for the past two years on a record volume of 4.09 Mt. The company is planning to increase its combined domestic and export production to 7 Mt/y within five years. The company is developing new mines and is investigating the feasibility of building a new 100 – 150 MW coal-fired power station in the South Island to be operating by 2006. If no new gas fields are discovered and economic growth continues to be driven by the primary sector, the company predicts that total annual coal production could increase to more than 10 Mt by 2010. Coal exploration activity has increased and several companies are investigating the coal seam gas potential of the main coalfields.

Pike River Coal Co (72%-owned by NZ Oil and Gas) has obtained approval in principle from the Minister of Conservation for its Pike River underground export coal mine, located 30 km north of Greymouth. The field has recoverable reserves of 15.5 Mt of high-quality coking coal and the company is planning to produce between 0.6 Mt and 1Mt of coking coal over a 20-year mine life.

### Mineral Production Statistics (t)

	2001	2002	2003
Gold (t)	9.9	9.8	9.5
Silver (t)	26.9	28.7	29.9
Iron sand concentrate (Mt)	1.6	1.7	1.9
Coal (Mt)	3.9	4.5	5.2