

NEW ZEALAND

*By Richard Barker
Consulting Geologist, New Zealand*

The Labour-Alliance coalition government faces its first election before the end of 2002, with the Labour Party expected to do well. The Alliance Party has announced it will split after the election, so the coalition will not survive. While some of the government's policies have been unpopular with industry, economic growth has been maintained, due mainly to a continuing low exchange rate, good growing conditions for agriculture and relatively high commodity prices boosting exports. For the year ended December 2001, the economy grew 2.4%, down on the 3.8% growth recorded in the previous calendar year. The long-term economic growth rate remains below the average for OECD countries and the major political parties recognise that the rate must rise if living standards are to improve.

Exploration activity has been at a low level for the past decade, being confined mainly to the expansion of existing operations and the development of known resources. The industry, through the NZ Minerals Industry Association which represents the main companies in all sectors of the mining industry, is pressing on with its plan to re-invigorate the minerals sector through a strategy that encompasses an improved relationship with the government and the public, increased investment in research and development by both the public and private sectors, and legislative reform. Geological and economic research shows that the industry has the potential to more than double its contribution to GDP within ten years.

The Macraes mine (Gold and Resource Developments Ltd) in Otago in the South Island maintained its gold output at 169,000 oz for 2001. An upgrade of the milling capacity at Macraes from 3.9 Mt/y to 4.5 Mt/y is due for completion in mid-2002, allowing the plant to handle concentrate from its

Reefton hard-rock gold project on the west coast of the South Island.

The development of the Reefton project has hinged on obtaining the consent of the Minister of Conservation for access to 270 ha of Crown land in the Victoria Range Forest Park. In August 2001, the Minister declined consent, leading to fears that the project would be blocked. However, further negotiations based on a consent given by a previous Minister in 1993 led to a reduced-scale project affecting 170 ha being approved by the Minister, and in December 2001 the company gave the go-ahead for development to proceed. The treatment of Reefton ore at the Macraes plant will lead to an increase in output from its present level of about 170,000 oz/y to 250,000 oz/y once the new mine is on-stream in 2003.

Gold output from the Martha mine (67% Normandy Mining, now Newmont, and 33% Otter Gold Mines Ltd) at Waihi in the North Island reached record levels as a result of its recently completed expansion project, which included the open-pit, ore treatment and tailings storage facilities. The mine produced 111,841 oz of gold and 864,283 oz of silver in 2001, and the mine life has been extended until 2007. Normandy/Newmont is continuing with its efforts to take over Otter Gold Mines, which would give it 100% ownership of the mine.

Recent exploration drilling of prospects located near the Martha mine has produced excellent results. At Favona, adjacent to the Martha ore-treatment plant, results have included 16 m at 27.8 g/t Au, 10 m at 20.8 g/t Au, 30 m at 10.1g/t Au and 6 m at 83.0 g/t Au, delineating parallel high-grade quartz veins over a strike length of about 400 m. The company intends to seek approvals to develop an underground mine on this high-grade deposit, which could be worked in

conjunction with the nearby open pit for a combined annual production of about 200,000 oz of gold at Waihi.

Placer gold mining in the west and south of the South Island contributed about 35,000 oz in 2001 from operations in the West Coast, Otago and Southland regions. L & M Mining Ltd has been the main producer. The company's Earnsclough placer gold project in Otago has been granted approvals to work the deposit, but two appeals need to be heard before work can commence. The company's new operation at Waikaka in Southland commenced production in April 2001. It has a planned output of 20,000 oz/y over an eight-year life. In December L & M ceased placer gold production on the West Coast where it had been operating continuously since the early 1980s, though it may return there in the future. Its current activities are focussed on the longer life operations in Otago and Southland.

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).

BHP New Zealand Steel has continued to produce more than 2 Mt of titanomagnetite ironsand concentrate each year from North Island coastal deposits, about equally divided between exports from Taharoa 150 km south of Auckland (where production was down in 2001), and for steel-making at the integrated Glenbrook steel mill 50 km south of Auckland.

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 for thermal power generation at the Huntly power station (200,000 t). Bituminous coal produced in the West Coast region, 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 70% of the coal mined in New Zealand, is planning to double its combined domestic and export production from 3 Mt to 6.5 Mt/y over the next five years. The company is developing a new opencast mine at Strongman North, near Greymouth, and is investigating a new mine at Ohai in Southland. It has reached an agreement with Francis Mining for both companies to increase their international sales.

NZ Oil and Gas is seeking approvals for its Pike River underground export coal mine, located 30 km north of Greymouth. The field has recoverable resources of about 20 Mt of high-quality coking coal and its development is awaiting approval to construct a road through land administered by the Department of Conservation, which is expected by mid-2002.

Mineral Production Statistics

	1999	2000	2001
Gold (t)	8.6	9.8	9.85
Silver (t)	24.3	22.9	26.9
Ironsand Concentrate (Mt)	2.3	2.7	1.6
Coal (Mt)	3.5	3.6	3.9