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THE REAL OIL

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THE RECENT BOUT of global fuel price increases was an unpleasant reminder of the oil shocks of the 1970s. At that time, the New Zealand government took measures to reduce this country's vulnerability to the policies of OPEC. Now, 30 years on, the question must be asked: have our energy policies worked?

The first oil price hikes in 1973–1974 pushed the cost of oil imports from five per cent of export earnings to 30 per cent. After the second oil crisis in 1979, carless days were introduced in a bid to reduce the country's burgeoning fuel bills and the Muldoon government, in a push to reduce our reliance on imported fuels, initiated the subsequently much maligned Think Big projects. These included the Huntly, New Plymouth and Marsden Point power stations, an expensive upgrade to the Marsden Point oil refinery, a plant for converting natural gas to urea at Kapuni, a gas-to-methanol plant at Waitara, and—the crown jewel—the natural gas-to-synthetic petrol plant at Motunui.

Much of this superstructure was designed to tap in to large subterranean reserves of natural gas which had recently been discovered at Kapuni and in the Maui field off the Taranaki Coast. The dream was to make the country something better than 50 per cent self-sufficient in liquid fuels. Motunui alone was going to be able to produce a third of our petrol requirements. Its main product was 91 octane unleaded petrol which required no refining or blending. At that time the public was being encouraged to use CNG and LPG as car fuels, and a few methanol-powered buses even cruised the streets of Auckland.

Twenty years on, New Zealand seems to have again become hostage to high international oil prices. What has happened to the dream of locally produced petrol and other automotive fuels? Shouldn't such fuels be less expensive than overseas-sourced product?

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The answer to the price question is that New Zealand-sourced petrol would not be cheaper at the pump. Most of the oil companies operating here are multinationals, which buy and sell at international prices, regardless of the cost of production. New Zealand companies such as Fletcher Challenge Energy do likewise.

A few years ago, Maui oil was selling for \$US10 a barrel (159 litres). Today it is fetching over \$US30 a barrel. The difference represents a windfall profit for Fletcher Challenge shareholders, not cheap petrol for car owners.

The only circumstances in which New Zealand oil might sell for less than prevailing international prices would be if the government owned and produced it and chose to sell at a low price. All that local production of oil accomplishes is a reduction of the country's balance-of-payments deficit, since less fuel is imported.

In recent years, several factors, including the relatively low cost of petrol the Maui offshore gas field—by far our largest known reservoir of hydrocarbons—is 20 years into its 30-year life. Drilling to improve the recovery of oil is continuing at Maui B, and in September 2000 a new well producing 10,000 barrels of oil per day was brought into production. Despite this activity, it is unlikely that oil production from Maui will be economic beyond about 2006, and gas beyond 2011. By then all our known oil and gas reserves will be exhausted.

Maui and Kapuni are New Zealand's main hydrocarbon fields, but oil and gas are also produced in modest but economic amounts from a series of small fields across inland Taranaki, representing about 20 per cent of the country's current oil production and reserves.

The biggest recent change in the indigenous-petrol picture has been the cessation of manufacture of synthetic petrol at Motunui. Since 1997, the plant has only converted gas into methanol, whereas originally the methanol was further processed to form petrol, and there was capacity to make 750,000 tonnes a year. The Canadian Methanex Corporation now produces some 2 million tonnes of methanol per year in Taranaki, which it exports to Asia. World methanol production is 26 million tonnes, so the New Zealand operation is large. However, its future depends upon fresh discoveries of large amounts of gas which can be tapped inexpensively.



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Energy has found oil and gas in its Rimu 1 field in south Taranaki, and GEL (also from Houston) is drilling the Crusader 1 well on the outskirts of New Plymouth. Westech is drilling the Windsor 1 (which has struck gas) and Maketawa 1 wells near the existing Ngatoro and Kaimiro production wells.

The Maari field, discovered in 1998 south of Maui, holds an estimated 46 million barrels of oil, and developing the Kupe field off Hawera. Not far north of Motunui, Fletcher Challenge Energy has struck worthwhile amounts of gas and condensate at Mangahewa (onshore) and in their Pohokura well just offshore. Gas was found near Wairoa—the first commercial discovery outside of Taranaki—in 1998.

In May 1999, the brand new 105,000-tonne drilling ship *Discovery Frontier* sank a wildcat well in 1460 m of water 50 km west of Northland for the large American oil company Conoco, the first well drilled offshore in this large basin. And, in a nice link with the past, GeoSphere Exploration has started pumping a few tens of barrels a day from the country's first oilfield, the Republic 4 well in the Moturoa field beside the port of New Plymouth.

New Zealand is now producing oil and gas equivalent to some 43 per cent of its liquid fuel (including gas) usage, and given a reasonable level of exploration, new discoveries should be sufficient to sustain or improve on this level.

What they will not do, however, is lower the cost of filling the tank.

More by [Warren Judd](#)
