

FLETCHER CHALLENGE AND NEW ZEALAND'S OIL AND GAS INDUSTRY

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Abstract

Fletcher Challenge has invested extensively in New Zealand's oil and gas industry. Fletcher Challenge Petroleum owns 68.75 percent of New Zealand's largest gas field, the Maui field. Also, through its subsidiaries Petrocorp Exploration and Southern Petroleum the group has interests in a number of oil and gas producing properties and prospecting licences in Taranaki.

The Group owns 100 percent of the McKee field, which is New Zealand's largest onshore oil field, currently producing about 7000 barrels of oil per day and 15 million standard cubic feet of gas a day. Following the purchase in 1992 of the Crown's interest, Petrocorp Exploration owns 48.74 percent of the Tariki, Ahuroa, Waihapa and Ngaere fields (the TAWN licences), while Southern Petroleum holds 36.37 percent.

Fletcher Challenge Petroleum and Southern Petroleum each hold 50 percent of the Kaimiro field, which has a deeper gas formation and a shallow oil producing formation.

An exhaustive assessment of the oil and gas exploration potential of New Zealand began in 1992. A long-term exploration strategy was developed, focused on Taranaki. A major exploration programme is underway.

The above and other aspects of Fletcher Challenge's operations will be described and elaborated upon.

I am grateful for the opportunity to speak to you today about Fletcher Challenge's views on the post-Maui challenge.

Introduction

In an energy sense, the year 1994 is memorable for a couple of important milestones.

This year is 25 years since the Maui gas, condensate and now oil field was discovered. This year also marks a decade of production of oil from the onshore Taranaki McKee Field.

Two important milestones in the context of the discovery and production of natural gas and crude oil in New Zealand — important, because they have helped provide New Zealand with energy security, proved very valuable in terms of our balance of payments, and of course there has been the significant benefit of the development of a New Zealand oil and gas industry with its associated skill base, service support and infrastructure.

In more recent times there has also been the discovery of the Waihapa, Ngaere, Kaimiro and Ngatoro onshore fields, as well as the recent 'F' sands oil discovery at Maui. These new resource developments are of fundamental economic importance to New Zealand and should provide some encouragement for explorers.

Despite this however, very few companies are at this stage actively engaged in the search for new supplies of hydrocarbons in New Zealand.

That is what I would like to address in this brief talk today. Why petroleum exploration isn't happening, why it should, and what we think the Government could consider doing, within a neutral fiscal philosophy, to encourage an intensified exploration effort.

But let's go back to some history first. Six years ago Fletcher Challenge became a leading participant in New Zealand's energy sector when it acquired Petrocorp from the Crown and public for around one billion dollars.

Since that acquisition we have invested a further 1.4 billion dollars in additional oil and gas exploration and development activities in New Zealand. As a result of this spend, we today produce 62% of the country's daily gas demand and also account for 71% of New Zealand's total oil and condensate production. This meets 34% of the country's daily liquid fuel demand.

This position did not arise simply by good fortune. It was the result of a number of people over more than a decade building a viable industry in New Zealand from the ground up — a very risky enterprise. It is worth remembering, that despite best intentions, during this period more economic value was destroyed than created.

Maui

Much of the New Zealand daily liquid fuel demand is met from the Maui field, of which Fletcher Challenge holds a 68.75% interest. It is a substantial field, which will continue to be a big part of New Zealand's future for some time to come.

Last year exploration deepening of a Maui B gas well discovered 17 million barrels of oil reserves in the so-called 'F' sands — an amount, incidentally which is roughly the equivalent of the onshore Waihapa oil field near Stratford, and substantially more than was originally believed to be in the McKee field when it was first discovered more than a decade ago.

A 10th well on Maui B is now being drilled specifically to test and evaluate additional oil which has been found in some of the gas sands which had not earlier been considered prospective for oil.

In the future, we may drill additional wells from the Maui B platform to further develop the oil that has now been discovered.

In addition to the oil discovery, there are further exploration leads within the Maui licence and the surrounding licence blocks that, given reasonable gas prices, and fiscal regimes, we believe have the potential to be explored in the future.

Therefore, at a time when we quite rightly reflect on the post-Maui challenge, it is Maui itself which has provided the greatest improvement to New Zealand's hydrocarbon inventory.

Other Fields

Apart from Maui, Fletcher Challenge continues to support hydrocarbon developments in other parts of New Zealand, primarily in Taranaki.

We have initiated, through Petrocorp Exploration and Southern Petroleum, a concentrated effort to re-explore and develop onshore oil and gas potential in Taranaki. In particular we are looking at the more shallow horizons first commercially produced in our Kaimiro-2 well.

In doing this, Petrocorp has reinvested heavily in technology and personnel to ensure state-of-the-art approaches to exploration, development and the optimisation of hydrocarbon recovery.

We have also acquired more onshore and offshore exploration licences, and we are initiating an offshore Taranaki Exploration Study Group to evaluate additional oil and gas prospects and move forward to exploration of those prospects that are considered to be economically attractive.

Exploration Industry Overall

Fletcher Challenge is trying to make things happen. But we need to acknowledge that, given New Zealand's petroleum needs and proven reserves position, not nearly enough is happening. There is a distinct lack of offshore exploration activity in New Zealand at present. Drilling is proceeding in onshore Taranaki, but off our coastline things are disturbingly quiet.

It must be clear to all that the reason for this is that organisations such as ours, in attempting to establish joint venture exploration vehicles, are proving unsuccessful in attracting sufficient exploration funds from overseas.

And it hasn't been for lack of opportunity either. Petrocorp, for example, has developed a very sound portfolio-based joint venture proposal for offshore exploration, and has been actively looking for two or three international partners with which to share the exploration effort.

So far (and we'll use a fishing term here, since we are in Rotorua) we've had a few bites, but nothing has actually been hooked.

Why?

Let's look at prospectivity first. It has long been the opinion of international explorers that New Zealand is a country of low prospectivity, with only one producing horizon.

Petrocorp has not totally agreed with that, and this different opinion has been supported within the last decade with the discoveries of the onshore McKee oil field, the Tikorangi limestone oil accumulation at Waihapa and Ngaere, shallow Miocene oil at Kaimiro and Ngatoro, and the recent F sands oil discovery at Maui.

Nevertheless, it must be acknowledged that with only one demonstrably commercial offshore find in 25 years, which on a net present value (NPV) basis itself has not created value for its shareholders at Maui gas prices, the risk of economic failure is very real.

What about market considerations? New Zealand has also had a reputation for being gas-prone with a gas market whose demands are fully satisfied. This statement is true today. And it is true that because of these market constraints, very few companies have been actively engaging in the search for gas specifically.

But the decline of Maui is due to begin within the next decade, and, as you heard from the Ministry of Commerce on Monday, that means a significant natural gas market opportunity is due to open up in New Zealand.

Given the lead time to conduct a successful offshore exploration programme, it is clear a market will be available when new gas is ready to be produced from offshore. These facts are generally well known, so that means that the "gas-market-is-satisfied" argument against renewed offshore exploration is no longer valid.

However it does require higher gas prices. At the netback from Maui gas prices no gas exploration prospect is going to have a positive expected NPV. Higher gas prices, and the certainty of them if a find results, are two necessary conditions for moving forward.

This is because while some will reject exploration solely because of inadequate probability of exploration success, for others such as Fletcher Challenge it is more likely to be an inadequate expected value. For people in this camp the reluctance to spend reflects the inadequacy of financial return even with exploration success.

Despite the fact that Fletcher Challenge is a New Zealand company and will spend money here in preference to elsewhere, we do just as any other oil and gas company, and look worldwide for investment opportunities. It is a simple fact that New Zealand must compete in every respect against these other opportunities if it is to attract the international oil and gas exploration dollar.

How can New Zealand compete? Or more to the point, how can New Zealand become more competitive in attracting foreign investment?

Besides through technology and people skill improving the probability of exploration success and reducing the cost of finding and development, and apart from product prices, the other key value driver that determines expected NPV is the size of the Government take.

The amount of exploration capital available worldwide is reducing, and there are an increasing number of industry participants, including the large state-owned oil companies, chasing these fewer dollars.

Many countries are recognising the need to take a serious look at their Government's total take of any exploration find, and in fact many countries have lowered their takes to reflect the need of industry to provide an adequate

return to their shareholders in a risky and volatile environment.

New Zealand needs to do the same. This has been recognised and it is encouraging that the Crown is moving to provide a more positive fiscal regime.

We hope this movement continues, because, in our assessment, New Zealand has not moved as far nor as rapidly as it must to compete for the international exploration dollar. It will always be important that the Government understands that until we are a North Sea, we are in a very competitive environment in the attraction of foreign capital, specifically, risk equity.

It is quite obvious from the current general lack of activity in both proven and frontier basins that there needs to be further reductions in the disincentives to invest in the New Zealand oil and gas exploration effort. Reduced Government royalties are the obvious area. It may be appropriate to establish a royalty rate of 10% on net profits in onshore Taranaki and complete elimination of royalties in offshore and frontier areas.

What is the Government's downside? Someone discovers another Maui and makes a lot of money. But the Government gets a corporate tax take on no investment or risk which without exploration it will never enjoy.

Not only must the fiscal regime be progressive, so too must the regulatory regime. This observation applies to all aspects of energy development including the impact of resource management and environmental law.

In conclusion, urgency is required. Maui is potentially a mature field and without further exploration success will move into decline some time in the next decade.

If future gas market demands are to be met, exploration efforts have to intensify. For this to happen, international investment in New Zealand has to be increased. Lead times are long in offshore exploration and development, so now is the time to start exploring for the means to satisfy this market.

This requires action on three fronts:

- relentless continual improvement of our human skills to increase the probability of exploration success and reduce the capital cost including the time of development
- higher and certain gas prices for any success
- lower and certain royalties for any success

The time for all three is now.

Fletcher Challenge is committed to investing in New Zealand. We are expanding our exploration investment, and with even-handed and proactive support from the customers and Government, we are confident we can look forward to the investment and development opportunities being brought on by the post-Maui challenge.

For our part, we offer all interested stakeholders any reasonable assistance we can to ensure a sustainable, efficient and environmentally acceptable New Zealand oil and gas industry.

Author

HUGH FLETCHER became Chief Executive Officer of Fletcher Challenge Limited in October 1987. For six years prior to this he was Managing Director and Chief Operating Officer responsible for all New Zealand headquartered activities of the Group.

Fletcher Challenge is a diversified company which has used expertise developed in its New Zealand-based businesses to grow international operations. Its core business areas are Pulp and Paper, Building Industries and Energy. The Group's headquarters are in New Zealand and it has operating subsidiaries in Australia, Brazil, Canada, Chile, Oceania, South East Asia, the United Kingdom and the United States. The Group's products and services are sold throughout the world, with most of its annual revenues of US\$10 billion being generated around the Pacific Rim.

Mr Fletcher was born in Auckland, New Zealand in 1947. He is married and has two sons. He has a M.Com with Honours in Economics and a B.Sc. in Mathematics from Auckland University and an M.B.A. from Stanford University USA.