

Report on the Opportunities for Māori Participation in the New Zealand Petroleum Sector **He waka eke noa**



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SPINDLETOP
LEGAL & COMMERCIAL SOLUTIONS

About Spindletop

Spindletop is an independent consultancy specialising in oil, gas and energy projects and related policy development. Our advisers, based in New Plymouth and Wellington New Zealand, have global experience advising multi-national E & Ps, Governments, financial institutions and indigenous peoples on commercial structuring, policy development, disputes, acquisitions and business ethics relevant to energy projects.

We have over 50 years' experience in providing legal, commercial and strategic advice to the oil, gas and energy industry active in the North Sea, North America, CIS, Middle East, Africa and Australasia.

Our advisers are qualified lawyers in their home jurisdiction and have undertaken post-graduate study at Dundee University's Centre for Energy, Mineral and Petroleum Law and Policy. We retain strong links to specialist multi-national legal, technical and financial advisers and independent consultants providing similar services in most jurisdictions in which the industry is active.

Spindletop's Head Office is located in Wellington, New Zealand.



Spindletop Limited

www.spindletop.co.nz

Level 5, Suite 7, 24 Johnston Street,

P O Box 25 480, Featherston Street

Wellington 6146

NEW ZEALAND

E info@spindletop.co.nz

P +64 (0) 27 706 7360 New Zealand

P +44 (0) 7740 183076 United Kingdom

Introduction

Spindletop was invited by New Zealand Petroleum & Minerals (NZP&M) to provide preliminary advice in regards to participation by Māori in New Zealand's petroleum exploration and production sector.

Objectives

The report considers measures that could be adopted under the current petroleum regime to connect Māori interests with opportunities in the petroleum sector.

Scope

NZP&M is seeking to understand and identify opportunities for iwi/Māori to enter the New Zealand petroleum sector in their own right and initiatives that might facilitate greater participation. A broad analysis of the market was sought to ascertain opportunities where, under the current petroleum regime, Government might provide assistance. The resultant report will be used by Government to promote discussion with iwi/Māori regarding their potential interest and opportunities in the oil and gas industry.

In particular we were asked to:

Undertake an initial investigation and evaluation of current arrangements by which iwi/Māori already participate in the sector;

Identify investment strategies common in the petroleum industry and whether iwi investment criteria might be consistent with one or more strategies;

Identify options for iwi/Māori entry into the petroleum sector based on existing and new initiatives that might build on these frameworks to increase participation; and

Identify measures the Government might adopt to support greater iwi/Māori participation in line with their commercial objectives and supporting cultural and social responsibilities of importance.

Sources of Information and Approach

The report has been prepared with the support of a mix of desk top research and interviews with selected iwi/Māori commercial enterprises, industry participants and consideration of international best practices.

As this report is preliminary in nature, we did not consider it appropriate or necessary to identify which iwi and other organisations have contributed to our research. We have reviewed a number of Government commissioned and other publicly available papers in producing this report and they are referenced in the report and listed in the references. Whilst these sources provide suitable benchmarking data for this initial report, updated information should be obtained should some or all of the recommendations set out herein be taken forward.

This report does not undertake any legal or other in depth analysis of Treaty of Waitangi claims to the Crown's petroleum estate. Whilst it is recognised that the Waitangi Tribunal has found that *'it is in breach of Treaty principle for the Crown to exclude petroleum-based remedies from settlements'*¹ it is sufficient to note that such claims exist along with Government statements suggesting a desire to settle all claims by 2020.² It is assumed that any such settlement will be agreed between the Crown and Māori with the intent and outcome that industry participants remain unaffected and existing privileges under permits issued, including fiscal terms, will not be altered. Similarly, this report proceeds on the basis that rights afforded to industry participants under existing permits and the applicable petroleum programme will remain unaffected in line with the Government's stated objective of providing for a stable and coherent regulatory regime.³

- 1 Waitangi Tribunal "The Petroleum Report, Wai 796" (Wellington, Legislation Direct, 2003), p. 79.
- 2 Source: <http://www.parliament.nz/en-nz/parl-support/research-papers/00PLibC5191/historical-treaty-settlements>
- 3 Section 1.3(6) of the *Petroleum Programme (Minerals Programme for Petroleum 2013)*, (referred to herein as the 'Petroleum Programme') issued by the Minerals Programme for Petroleum 2013 Order (No 2) 2013.

Executive Summary

New Zealand's oil and gas industry has a portfolio of business opportunities open to Māori ranging from investment in upstream permit activities through to support services needed to conduct such activities. Some Māori commercial organisations have funds available for investment outside their traditional areas of farming, fisheries and forestry. Other smaller businesses are seeking opportunities to grow, including participating in activities occurring within their *rohe*. The Government recognises that these Māori organisations will come to play a larger and more meaningful role in the New Zealand economy and it has developed a long term strategy to facilitate growth.

Moving from familiar, sustainable industries brings into sharp focus Māori investment criteria and the difficulty in meeting them all through investment in the upstream petroleum sector. Those criteria require the meeting of commercial objectives that are premised on low risk, long term and predictable returns, and the cultural and social objectives, the 'non-commercial' objectives, which pertain to notions of *kaitiakitanga* (guardianship) and the provision of development opportunities for iwi members. Whilst participating in the petroleum sector as permit holders should not be ruled out, we conclude that Māori interests would best be served in the short to medium term by focusing on service sector activities. The high level reasons are:

- Investment in exploration and production activities by permit holders is high cost and high risk and accordingly does not fit well with iwi investment criteria. The management of these risks will require the financial strength and expertise that would likely only be achieved through changes to the current regulatory regime or a broad collective iwi initiative. Whilst neither should be ruled out over time, there are opportunities in the service sector within existing capabilities that can be explored within the existing regulatory environment.
- There is an absence of technical expertise within Māori organisations to manage a portfolio of exploration and production assets. To invest in such assets, prudently, would require a higher understanding of the industry's fundamentals and the recruitment of senior petroleum industry participants.
- There would be significant resistance within some iwi, at grassroots level, for iwi leaders to advocate to participate in petroleum exploration and production activities at the present point in time.
- There are limited opportunities for Government to support Māori, as permit participants, under the current legislative framework and policy.
- There is some uncertainty whether non-commercial objectives, such as the opportunity to exercise *kaitiakitanga* or the provision of employment opportunities would be realised within the usual joint venture management structure and operations.

Whilst participation by Māori in the sector as permit participants in time should not be ruled out, the more natural petroleum sector market entry position for individual iwi/hāpu is as a service provider.

- The petroleum service sector includes a broad range of opportunities for participation from small, localised businesses through to large scale multi-national companies, thereby appealing to wider range of Māori businesses.
- Iwi/hāpu have experience as service providers to established Māori and other commercial ventures which provides familiarity for iwi leaders and the potential to apply existing skills and capital to a new sector.
- The risk profile of the service sector fits more naturally with those that have been documented by the Māori Economic Development Taskforce as acceptable to Māori as 'inter-generational' investors. It is the service sector businesses, rather than the permit holding oil companies, that provide the broader range of skilled and unskilled employment opportunities – an important objective for Māori investment.
- The petroleum industry already recognises the value in involving affected Māori in permit operations and the Government has opportunities to encourage this involvement using tools such as further guidance and Codes of Practice.

We propose several actions for consideration by each of Government, industry and Māori.

Proposal #1: Government to signal to industry that inclusion of affected iwi/Māori in permit operations is viewed as a best practice outcome

Government might consider adding criteria, as part of the technical evaluation, to applications under a Block Offer to commitments by the applicant to obtain a cultural impact assessment (CIA) at appropriate stages of the proposed work programme. This could be outlined in Invitation for Bids for subsequent Block Offers and include government expectations of the CIA's content.

In parallel, Government might develop further 'Guidance Notes' for the industry in regards to its expectations surrounding engagement with affected hāpu/iwi. These could be incorporated into the petroleum regime so that applicant's for permits will understand that the engagement of affected hāpu/iwi is an expectation of the regulator and their involvement in permit operations is a best practice outcome.

More analysis would be needed to develop the content of a 'best practice' CIA and understand the boundaries within which the Guidance could operate.

Proposal #2: Government and industry to develop a non-binding Code of Practice in regards to engagement by permit operators with affected hāpu/iwi

Industry might consider the development of a non-binding code of practice that addresses the engagement of permit participants with affected hāpu/iwi with a view to creating mutual opportunity identification that could lead to greater participation by affected hāpu/iwi in permit operations.

Compliance with the Code could be seen as a 'best practice' standard and could be a helpful benchmarking tool for local body and marine regulators under applicable legislation. It could also be interwoven with the Guidance developed under Proposal #1.

Proposal #3: Government and Iwi to develop pathways for greater iwi investment in petroleum sector activities

Iwi interests might undertake an inventory of extant skills and resources available and identify investment opportunities in petroleum sector services where such skills and resources may be applied. Support for this initiative could be achieved using the mechanisms described in Proposals #1 and #2 to encourage iwi collaboration with existing service providers as a means of building capacity.

Proposal #4: Iwi to test their appetite to partner with other iwi to obtain sufficient scale to enter the upstream exploration market in multiple petroleum basins.

Māori interests might consider the potential for iwi to collaborate in a joint vehicle that could build technical capability and lead to investment across multiple *rohe* as a permit holder in partnership with one or more international oil companies.

Proposal #5: formation of working group, in line with the Business Growth Agenda, to develop proposals set out herein and report to the Māori Economic Development Advisory Board and MBIE.

The forum envisaged in the Business Growth Agenda – Natural Resources Report December 2012 with Māori and the private sector to discuss natural resources opportunities might take responsibility for progressing Proposals #1 - #4 as part of the broader economic development conversation.

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1. He kai kei aku ringa

In 2011, the Ministers for Economic Development and Māori Affairs established an independent Māori Economic Development Panel, tasked with developing a Māori Economic Strategy and Action Plan. The Māori Economic Development *Strategy to 2040*⁴ and *Action Plan 2012 – 2020*⁵ (*He kai kei aku ringa* - providing the food you need with your own hands) was subsequently released in 2012.

Strategy to 2040 and the associated *Action Plan* recognises that Māori development is fundamental to the development of New Zealand. It is part of the Government's Business Growth Agenda. *He kai kei aku ringa* focuses on boosting Māori economic performance, and is being implemented through a Crown Māori Economic Growth Partnership.

The Ministry of Business, Innovation & Employment (MBIE) is the lead public sector agency responsible for coordinating the public sector's role in the partnership. MBIE works with the Māori Economic Development Advisory Board to carry out this role.

MBIE is also responsible for the development of the Crown's petroleum estate under the Crown Minerals Act 1961 (CMA). The CMA is the primary legislation for the 'upstream exploration and production' sector which are the activities associated with exploring for, extracting and producing oil and gas. The CMA requires any entity exercising powers under it to have due regard to the principles of the Treaty of Waitangi. New Zealand Petroleum & Minerals (NZP&M) manages New Zealand's petroleum estate⁶ and is a part of the MBIE reporting to the Minister of Energy and Resources.

The *Action Plan* identifies significant economic growth opportunities for Māori and the wider New Zealand economy to work constructively to realise the potential of petroleum and other mineral resources.⁷ Māori participation in natural resource development is integrated with the Government's⁸ Business Growth Agenda – Building Natural Resources. Although independent of *Strategy to 2040* this report seeks to build on the aspirations set out therein and apply them to the petroleum sector.

4 <http://www.med.govt.nz/business/economic-development/pdf-docs-library/Māori-economic-development/Strategy.pdf>

5 <http://www.med.govt.nz/business/economic-development/pdf-docs-library/Māori-economic-development/Action-Plan.pdf>

6 NZP&M also manage the Government's interests in other minerals including coal, gold and silver – also pursuant to the CMA.

7 See 'Goal 5' of the *Action Plan*.

8 Business Growth Agenda Progress Reports | BUILDING NATURAL RESOURCES, December 2012, page 12.

2. Background to New Zealand Petroleum Sector

Insights

The insights from this section are:

- New Zealand has an embedded, experienced oil and gas industry with established supply chain and necessary regulatory structures in place.
- Recent changes to government policy has promoted activity in New Zealand.
- Despite the industry's long standing presence in New Zealand, exploration activity in most of New Zealand's EEZ is in its infancy and is suitable for long term investment.

2.1 History

The petroleum industry has a long history in New Zealand with oil being first dug out of Taranaki beaches in 1867. But it wasn't until the Shell – Todd joint venture⁹ discovered the Kapuni field that commercial gas began flowing. Todd Petroleum Mining Company was and remains wholly owned by New Zealand's Todd family. Their joint venture with Shell commenced in 1955¹⁰ with Kapuni being discovered 1959 and coming on stream 10 years later.

The JV discovered the Māui gas and condensate field, located offshore of Taranaki, in 1969. At that time it was one of the largest gas fields in the world. The Government participated in the development through Petrocorp, which took a 50% participating interest share.

Petrocorp also participated in new exploration activity throughout the 1980s, sometimes partnering with exploration and production (E&P) companies, referred to as International Oil Companies, (IOCs). It was publicly listed in 1987 and eventually bought out by Fletcher Energy who were subsequently acquired by Shell in 2000. The legacy of Petrocorp and Fletchers include the McKee oil and Mangahewa gas fields (both now owned by Todd Energy) and New Zealand's largest field, Pohokura (now owned by Shell, Todd and OMV).

In all New Zealand has 12 producing oil and gas fields all located in the Taranaki basin producing 35,500 barrels of oil per day.

2.2 Current Contribution

Due to the rise in global oil prices and a supportive Government policy oil and gas investment in New Zealand has gradually increased to record levels. A snapshot of the industry notes:

- \$1.5 billion in royalties has been paid over the last 4 years
- 11,720 full time jobs
- Gas reserves increased by 31% (2013 – 2014)
- Drilling activity since 2008 has averaged 40 wells a year
- Oil is New Zealand's 4th highest export earner¹¹

In 2012 the Government introduced the annual 'Block Offer' process by which areas are released annually in response to commitments by IOCs to perform data acquisition or drilling activities. The block offer process has been viewed as successful, attracting new major IOCs to New Zealand, such as Chevron, Statoil, ONGC and Woodside.

2.3 Future Potential

Whilst petroleum exploration and production has played a significant part in New Zealand's economic development, aside from the Taranaki basin, the potential is almost totally unknown. Small-scale discoveries in the East Coast Basin, Canterbury Basin, and Great South Basin along with the presence of gas hydrates prove the presence of effective petroleum systems outside of Taranaki. As McDouall Stuart note in their report to the Ministry of Economic Development, *Stepping Up*¹² it is possible, even likely, that many billions of barrels of oil equivalent are present across New Zealand's sedimentary basins. This makes New Zealand one of the world's most promising regions for exploration. The true extent of New Zealand's petroleum resource will only be fully understood after extensive seismic surveying and, ultimately, drilling.

The push for better data in new basins has commenced but the size of this task should not be underestimated. New Zealand has one of the largest Exclusive Economic Zones and Extended Continental Shelves in the world, with the EEZ alone covering approximately 4 million square kilometres. In comparison, the UK exclusive economic zone covers approximately 776,000 square kilometres. There, although exploration commenced in the 1960's, sizeable discoveries that alone dwarf New Zealand's total daily production, continue to be made and brought into production.¹³

⁹ Originally also included BP.

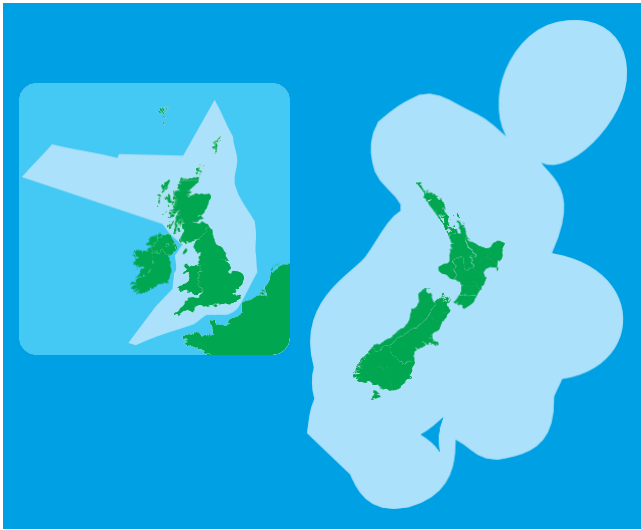
¹⁰ Source http://www.stos.co.nz/our_proud_history.asp0

¹¹ Source: *The Wealth Beneath our Feet – The Next Steps* Venture Taranaki, March 2015.

¹² See page 2 *Stepping Up*.

¹³ For example the 'Golden Eagle' field was discovered in 2007 with recoverable reserve estimates of 140 mmbbl. It is now producing at ~70,000 bbls/day and is expected to produce for a further 18 years.

Figure 1: Size of NZ Continental Shelf vs UK Continental Shelf



Similarly, in the Norwegian sector of the North Sea giant fields, ‘elephants’,¹⁴ continue to be discovered in areas thought to have been fully explored. Statoil’s *Johan Sverdrup* field, discovered in 2010 – 2011 in an area thought thoroughly explored, is expected to produce at up to 650,000 bbls per day when brought on to production in 2019. Under present royalty provisions at a conservative US\$65 a bbl production at those rates would net the New Zealand Treasury ~US\$8.5 million a day or US\$ 3 billion a year. Consequentially, for New Zealand to gain the level of understanding of its offshore areas as the UK and Norway enjoy, an extended, multi-decade period of seismic and drilling activity will need to be undertaken.

With New Zealand being one of a small number of truly ‘frontier’ exploration areas, but being regulated by a Government based on Westminster principles of democracy and English law, major IOCs are attracted by the possibility of uncovering a new and, potentially, prolific hydrocarbon bearing basin.

¹⁴ The term given to a discovery of more than 500,000 boe of recoverable reserves.

3. Investing in the Petroleum Sector

Insights

The insights from this section are:

- Investment strategies involving permit participation can provide flexibility in the value and risk profile of investment in the E & P sector and be structured to optimise royalty recovery for reinvested profits.
- Investment usually requires a portfolio approach so that multiple assets are progressed in parallel that mitigate the risk of one asset failing. Such a portfolio would be costly and be out of reach for small to medium Māori businesses and unlikely to be attractive to iwi without IOC or Government assistance.
- Current Government policy precludes Government investment in E & P activities in partnership with Māori enterprises. Collaboration by such enterprises with an IOC would ameliorate the technical risk and technical expertise could, in time, be transferred but would need to be the subject of an arm's length negotiation between the IOC and iwi.
- The more natural petroleum sector market entry position for individual iwi/hāpu is as a service provider. Iwi/hāpu have experience as service providers to established Māori and other commercial ventures which provides familiarity for iwi leaders and the potential to apply existing skills and capital to a new market.
- There is some capacity for Government to facilitate such a step in the light of its powers and duties under the existing legislation.

3.1 Introduction

The fundamentals of investment in the industry are not materially different to that of other industries. Activities in the earlier, appraisal phase are less complicated, easier to execute and lower cost. As the petroleum potential matures, and with it the prospect of higher rewards, so too do the costs involved – drilling costs and, if successful, significant development costs. Once in the production phase costs reduce to a manageable and predictable fraction of the annual production revenues.

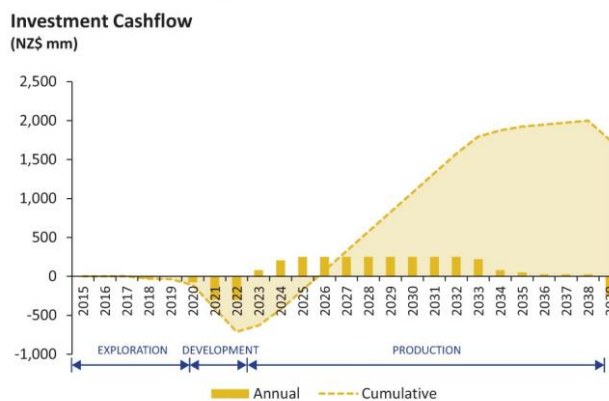
What makes the E & P sector unusual are the significant sums invested that, if successful, are recovered over multiple decades of production. However, like the forestry industry where cutting rights may be sold many times over before the trees are harvested, upstream E & P provides for 'off ramps' at any time so that the IOCs may monetise their interest when optimal for their business.

In addition, the opportunity to participate in the sector as a service provider remains open, particularly to organisations that are local to the site of operations. The service provider's business model is different to that of the IOCs and is reliant on securing project to project business from IOCs to underpin local staffing and overheads and securing new commitments that optimises value from permanent staff and infrastructure with additional support being contracted in on a project to project basis.

3.2 E & P Investment Strategies

Broadly speaking E & P activity is divided into three phases: exploration, development and production. Decommissioning follows thereafter. Each has its own risk/reward dynamic that provides different opportunities to enter or exit a permit interest. There are several strategies available to an investor depending on its appetite for risk. Table 1 sets out the standard discounted cash flow model for the exploration, development, and production of an oil and gas field.

Table 1: Generic oil and gas field discounted cash flow model



Participants are characterised by being well financed and advised by personnel (either internal staff or external consultants) with extensive experience in the technical, financial and legal aspects of the industry. It is ideal for participants to have a portfolio of assets that are being progressed through different phases providing a balanced mix of exploration/development (spend) and producing (earn) assets. We set out below the typical risk/ reward dynamic of each and provide some illustrative case studies from our international and domestic experience. We apply the insights gained from the analysis in this section to Māori in later sections of the report.

Explorer¹⁵

A pure exploration company will acquire seismic data over a permit's area, analyse it and promote either further analysis or drilling to a larger IOC in return for the IOC paying the back costs, an uplift and meeting the drilling costs (the classic 'Farm Out Agreement'). Depending on prospectivity the farm out may commit the new party to 'carry' any subsequent development costs (a 'Carry' Agreement) sometimes with a commitment to repay the carried amount once production commences but often not so that the explorer has no development costs at all, known as a 'free' carry. The interests in farm-out and carry arrangements are valuable in their own right and, to spread risk, can be sold either in whole or in part prior to drilling.

Case Study #1: Reach Exploration

Reach Exploration commenced in 2002 in the UK as the vehicle for geophysicist Isobel Davies and her husband, petroleum geologist, Miles Newman. Reach were able to access the freely available Government held data, screen it for areas of interest and secure exploration permits providing exclusivity to re-interpret the data at minimal cost. Reach was able to attract the interest of larger companies who had reduced the size of their exploration teams in response to lower oil prices and who were responsive to added exploration opportunities. They 'farmed-in' to the permit areas on the promise of funding a well and, if successful, a full carry if a development resulted. To spread risk Reach then sold a part of its interest in the farm out arrangements and reinvested in the acquisition of new permits pursuant to the UK's equivalent to New Zealand's 'block offer' process. Reach was ultimately acquired by Trap Oil in 2011 for £30 million. Although several of Reach's prospects had proved up as hydrocarbon bearing, none of them had been declared 'commercial'. Reach was a pure exploration 'play' with no production but whose value was inherent in the carry agreements to which its partners had agreed.

Case study # 1 provides an example of a pure, low cost, exploration strategy that succeeded because it made use of existing data and filled a temporal gap in the market. In New Zealand offshore permits issued pursuant to Block Offers have a maximum area of 10,000 km² and grant exclusivity to the successful bidder to appraise the permit area for up to 15 years. Work programmes commonly include commitments to acquire 3D seismic in the first 3 – 5 years across just under half of the area awarded followed by a 'drill or drop' well commitment around years 8- 10. The 3D is often 'shot' by speculative seismic survey companies who sell the data acquired to the parties who successfully acquire the permit. Based on cost data supplied by MBIE we estimate that each 10% proportionate working interest

in a frontier 10,000 km², exploration permit would come with an associated commitment of ~\$4 million for 3D acquisition and desktop analysis payable over the 3 – 5 year period during which the parties commit to NZP&M to acquire the 3D data. If the survey identifies prospective drilling targets then the permit immediately becomes more valuable and of interest to other IOCs. Ideally a portfolio of drillable targets will emerge across multiple permits which are ranked and then drilled using cash reserves or farmed out as the Reach case study demonstrates. In New Zealand, exploration costs are deductible from the 20% accounting profit payable as production royalties. Ideally production assets are 'put to work' in financing new exploration by reducing the royalty otherwise payable. As such, it is optimal for exploration activities to be part of a portfolio of assets that provide production revenues.

Developer

If a well encounters strong hydrocarbon shows a period of analysis and appraisal will be undertaken culminating in a declaration of 'commerciality'. A field development plan (FDP) will shortly follow that sets out the key technical and commercial considerations for the field's development. Once commerciality is declared the reserves in the field may be 'booked' i.e. registered as an asset on the IOC's balance sheet. This is important to publicly listed IOCs as it improves their gearing, facilitating borrowing and improving attractiveness to new investors. It is not as important to privately held or national oil companies who are not dependant on public investors.¹⁶ Those companies might monetise the added value accruing to a 'commercial' project once the declaration is made by selling to a publicly listed company who may assign a higher value to the asset. Exiting at this stage also avoids the high costs of development and ongoing, associated, project risks.

However, it is important to recognise that once a FDP has been approved a project is 'bankable' and can therefore be project financed or farmed out to third parties. Development costs may be in the many millions. Cheal was estimated to cost \$25 million,¹⁷ Tui \$350 million, Pohokura \$1 billion and Kupe \$1.1 billion. Despite the high costs, they can be recovered in short order. Tui, for example, recovered its outlay from 4 and a half months of production.¹⁸ It is this capacity for a successful oil and gas industry to generate enormous wealth over a long period of time that sets it apart from other industries.

15 The McDouall Stuart *Stepping Up* report identifies an earlier 'Investigation' phase which is limited to non-drilling exploration activity (essentially 2 and 3D seismic). For the purposes of this report this has been consolidated under the one 'Exploration' heading.

16 Although lenders will still be interested in the reserve base.

17 Source: *Infratil News* <http://www.infratil.com/infratil-news/2006/austral-pacific-energy-ltd-cheal-oil-field-development-gets-green-light/>

18 Source: *The New Zealand Petroleum Industry 2008* by Alpha Communications Ltd for Venture Taranaki Trust, page 4

Case Study #2: Intrepid Energy

Intrepid Energy was an independent, privately held, UK North Sea oil and gas company. It was established in October 1996 by its Chief Executive Mike Lynch as a vehicle for US institutional investment in the UK sector of the North Sea. With oil prices hovering around US\$10/barrel in the latter part of the 1990s, Intrepid were able to acquire interests in older, producing fields, in a buyer's market reflective of the depressed oil price but that provided a steady revenue stream, which financed overheads and an exploration programme. When a consortium in which Intrepid participated struck oil in 2001, the subsequent appraisal proved up a 450 million barrel field, named 'Buzzard'. Rather than stay in the partnership, the institutional investors decided to exit. The field development plan provided more certainty around development costs and expected production profile, 200,000 barrels a day for a 6 year plateau period, significantly de-risking the project. After an intense auction process the interest in Buzzard sold to Petro-Canada for US\$840 million and the older producing assets to Talisman for US\$137.5 million.

Case study #2 provides a good example of maximising the added value generated by approving a field development plan, thereby allowing the reserves to be booked, without incurring the full development costs. In New Zealand development costs are also deductible against production royalties and so are ideally part of a wider portfolio that includes producing assets. Case Study #2 is also another example of timing investment in the industry when the oil price is at a low level. Industry participants will usually seek to support cash flow that is reduced due to low oil prices by selling non-core assets. This creates a buyer's market with the dual effect of acquiring assets and good prices which, when oil price improves, will increase in value without any further expenditure.

Producer

Risk averse investors may acquire an asset after production has commenced. At this stage of a field's life the exploration risks have been minimised and the costs involved in bringing production on will be fixed. Many New Zealand fields are gas rich and therefore are partially insulated from variations in global oil prices, particularly where long term gas sale contracts have been concluded. Accordingly, the risks are more predictable and, with a good operations and maintenance programme, centre on reducing operating costs and increasing the reserve estimates. Buying once production has commenced allows the near term costs and revenues to be well understood but earning consequential lower rates of return. Whilst not a true utility model, the investor will likely be well financed and seeking a longer term, lower risk investment that might provide an upside through reserve increases, cost savings, liquids price inflation and higher production rates. Strategic considerations may also come into play, such as the desire to establish a footprint in a

new country and acquire cash flow to fund staffing costs. As previously highlighted, capital expenditures on exploration and development are deductible from royalties paid on production and so buying into production is a sensible way to fund the exploration and development expenditure being incurred on other permits.

Case Study #3: Apache

In 2003, US based Apache purchased BP's Forties field for US\$630 million. Forties had been the most prolific oil field in the UK but production rates had fallen and BP sold out in order to focus on high growth, international opportunities - to chase 'elephants.' Since acquiring the Forties Field in 2003, Apache has drilled about 100 development wells, invested \$3.2 billion, produced approximately 161 MMboe (millions of barrels of oil equivalent) — more than the proved reserves at the time of the acquisition — and added an estimated 171 MMboe in new reserves. Second-quarter 2011 net production from Forties averaged 56,985 barrels of oil per day, up from approximately 33,000 barrels per day in the second quarter of 2003, after Apache assumed operations.

In 2011 Apache acquired the Beryl field from ExxonMobil for US\$1.75 billion with a similar strategy of increasing efficiencies and finding new reserves to extend field life. Beryl is, similarly, an older and previously prolific producer.

Companies such as Apache find maturing fields more economically viable than do the oil majors, because they have lower overhead costs, are more flexible, and employ newer production and recovery technology. The assets bring immediate production revenues and the quality reservoirs contain pockets of additional reserves that are often overlooked or fail to meet materiality thresholds by major operators who favour larger prospects in their international portfolio.

Case Study #3 highlights how different IOCs can have divergent views on an asset's value depending on their primary investment strategy. BP relies on its exploration and engineering expertise to find and monetise giant discoveries leaving companies like Apache to use their expertise to 'scavenge' through the field's reservoir and extract volumes BP would leave behind.

More recently a new breed of investor has been acquiring interests in fields in later life. These investors specialise in extracting more production from fields in late life and deferring decommissioning costs. An exiting IOC will take account of the estimated decommissioning cost, discounted to a present value, as a deduction from the predicted revenues when considering its holding value. If the predicted revenues can be increased then decommissioning may be deferred. If decommissioning is deferred then the present value of the estimated costs are discounted for each year of deferral, reducing the present value of the decommissioning costs and improving the overall

asset value. Decommissioning also represents a tremendous opportunity for a decommissioning service provider and such companies have sought to take ownership positions in older assets to secure decommissioning deconstruction contracts.¹⁹

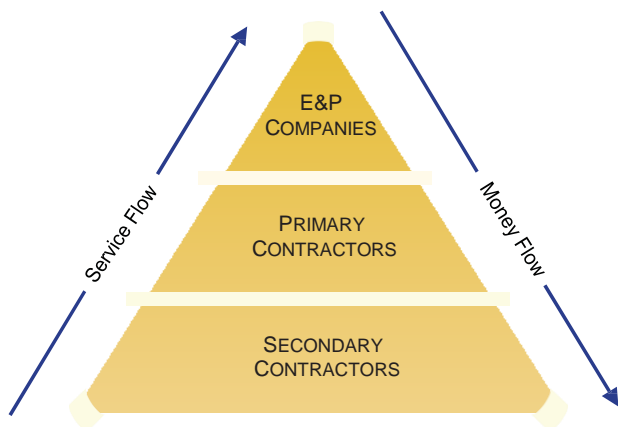
As the case studies highlight there are a range of IOCs varying in size and objectives. New Zealand has a healthy mix of smaller exploration companies focusing mainly on cheaper exploration plays through to the super majors, Shell and Chevron, a former national oil company, Statoil, in which the Norwegian Government continues to hold a significant share, and CNOOC, a Chinese national oil company. In all there are 83 permits being actively worked in a wide range of locations both on and offshore New Zealand.²⁰

In addition to entering the sector pursuant to the Block Offer the market contains a number of farm out and corporate acquisition market entry opportunities.

3.3 Service Company

Whilst it is the E & P companies that make the critical decisions relating to development within a permit area, all of them will outsource work to external service providers. The basic funds and work flow is illustrated by the below diagram.²¹

Figure 2: Oil & Gas Sector funds and work flow

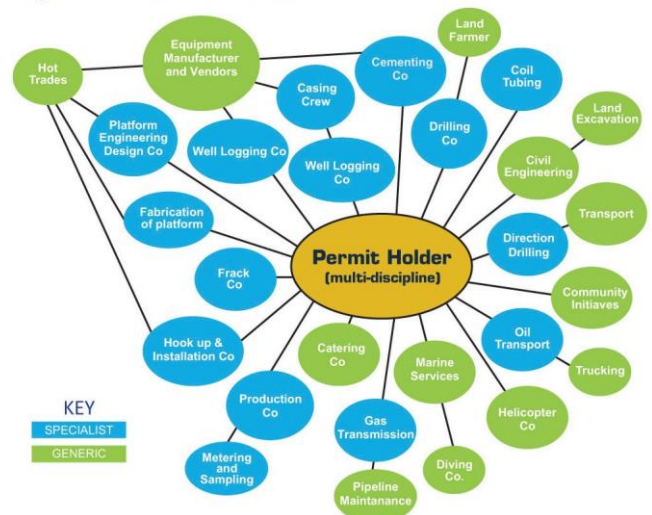


Source: McDouall Stuart Research

Organisations provide services of varying materiality to IOC operations, either specifically as oil field service providers or as part of a wider diversified portfolio of related industries such as the construction, infrastructure operations and maintenance, environmental benchmarking, marine services and logistics markets. Service companies are linked by externalities and complementarities of different types and are usually located

near each other forming an industrial 'cluster'.²² The services are broadly categorised into specialist and generic services and may develop organically in response to the needs of the permit holder cascading through the service sector as illustrated in Figure 3.

Figure 3: Service sector 'cluster'



The service company business model is broadly based on successfully tendering for business and the ability to source goods and services to fulfil the contract requirements in the most efficient manner and at, or below, the price submitted in the tender submission. The key uncontrolled exposure arises from a downturn in the industry leading to the inability to continue paying fixed costs such as staff wages, equipment rentals and overheads.

To manage this risk, two types of service provider emerge that are reflected in the bottom two layers in Figure 2. The first being specialised in oil and gas activities but are part of a wider global group that can therefore mitigate a downturn in one local market by moving staff and equipment to another. Examples are seismic surveying, offshore drilling and oil field services.

The second group are generic providers who service the oil and gas sector along with other related industries. Risk of a downturn in the local market is therefore hedged by the potential to apply the same skills and equipment to another sector. Examples include engineering firms, land excavation, marine services, transport and logistics and can extend to much smaller operations – taxi services, waste removal and catering.

¹⁹ For example Petrofac provide an 'integrated energy service' which is able to provide construction, development and operations management services, including decommissioning. See <http://www.petrofac.com/services/integrated-services.aspx>

²⁰ As at end of Q1 2012 (source: PEPANZ).

²¹ Source: McDouall Stuart, *Stepping Up*.

²² For a discussion on industrial clusters more generally see Shakya M, *Clusters for Competitiveness – A practical Guide & Policy Implications for Developing Cluster Initiatives*, International Trade Department, World Bank, Washington DC, February 2009, page 1.

A feature of both types of service provider, when compared to the permit holders, is the greater involvement of both skilled and unskilled workers to execute projects giving rise to a work force that is more reflective of the communities in which they operate.

3.4 State Role

Governments globally have a significant role in facilitating investment in the petroleum sector by both IOCs and service companies. Further investment by IOCs results in more revenue in the form of royalties. The development of capacity for local service providers to support the IOCs results in employment opportunities and the reinvestment of production profits in the domestic economy. This leads to a multiplier effect where reinvestment stimulates further growth, employment and tax revenue. It is estimated that every dollar spent by the industry in Taranaki has a 7-fold multiplier effect through the economy.²³

Government support can take many forms, including tax incentives, the provision of infrastructure, equity participation in petroleum projects and publicly financed exploration. In New Zealand the State's role is primarily that of a regulator and tax recipient but the Government has intervened in the sector primarily to fill a void in the market or to achieve other public policy objectives.

Indirect Measures

Governments can facilitate new E & P activity as well as develop local capacity to service E & P projects. In New Zealand, to facilitate new E & P projects, the Government agreed to buy all gas produced from Māui, Kapuni and Kupe thereby underpinning each project's investment. Kapuni gas was originally destined for a local power station due to the cost of building the gas transmission infrastructure needed to reach the key Auckland and Wellington markets. The Government, through the Ministry of Works, agreed to construct the Kapuni gas transmission pipelines providing gas to the North Island and significant employment opportunities:

'The pipeline laying began with two separate crews, each with around 180 men, working on trench diggers, banded machines, pipe-liners, welders, bulldozers and trucks. Work progressed at a rate of two to three kilometres a day on easy ground, but was often stalled on rougher contours.

*Pipeline 'camps' were set up and followed the men as they progressed along the route, feeding and housing them.'*²⁴

Construction of the larger Māui pipeline followed and, when in 2003 it seemed Māui had little gas left, it was the Government that underwrote the Kupe development by agreeing, through Genesis, to buy all gas produced from the Kupe partners at premium prices.

More recently in 2007 and 2008 the Government acquired and made freely available seismic data in offshore areas.²⁵ Other contributions take the form of tax incentives, such as those adopted for non-resident mobile offshore drilling units (MODU's), and the funding of Crown entities, such as GNS, that advises the Government in petroleum technical matters (in 2009 calculated at \$3.8 million annually) but is also available to the private sector.²⁶

Governments also have an interest in the development of local service providers to support E & P activity. It is common in many oil and gas producing countries for the mining permit to require a proportion of services to be sourced locally - known in the industry as the 'local content' requirement. McDouall Stuart's *Stepping Up* report notes significant onward economic benefits may be realised from incremental work flow. A 2009 report showed that each \$1 million won by local business creates 9 new jobs and results in an additional \$0.9 million in overall value added.²⁷ Unlike other comparator commonwealth jurisdictions with a developing petroleum sector (e.g. Trinidad and Tobago, the Falkland Islands and Newfoundland & Labrador) the New Zealand petroleum framework does not contain any requirement to utilise local goods and services. This local content requirement is common across developing petroleum jurisdictions²⁸ and has some relevance when considering the participation in activities by local businesses, including Māori. The use of local services, where appropriate, is often preferred by the IOCs due to cost and the desire to reinvest in the communities in which they operate but can lead to market distortions when imposed by Government.

In regards to Māori interests, the Petroleum Programme specifically requires all persons exercising functions and powers under the CMA to have regard to the principles of the Treaty of Waitangi and for the Crown to undertake consultation prior to launching each annual Block Offer round²⁹ and award of a mining permit.³⁰ The CMA also requires permit holders to engage with iwi whose rohe includes some or all of the permit area or who may be otherwise directly affected by the permit. The permit holder is then required to report to NZP&M on its engagement with the purpose of encouraging permit holders to engage with relevant iwi and hāpu in a positive and constructive manner.³¹

²³ Source: <http://www.beehive.govt.nz/?q=node/30339>

²⁴ Source: Puke Ariki - the Taranaki Story - Kapuni.

²⁵ This particular market failure has now been addressed through amendments to the CMA's provisions on data release incentivising non-proprietary multi-client surveys.

²⁶ See *Stepping Up* page 33. Interestingly the report notes that GNS consultancy work for the industry now exceeds the income from the primary research funding.

²⁷ See *Stepping Up* page 53. They cite: BERL (2009) *"Updated Manufacturing Multipliers from 2007/08 Data"*, report for ICN.

²⁸ See; *Local content in the oil and gas sector*. Tordo, S et al, A World Bank study. Washington DC.

²⁹ Clause 7.3(2) Petroleum Programme 2013.

³⁰ Clause 8.2(6) Petroleum Programme 2013.

³¹ Clause 2.11 Petroleum programme 2013.

Direct State Participation

Direct participation as a permit holder by State owned organisations ('State Participation') is a common feature of the upstream petroleum industry.³² The ownership interest share that comes with State Participation provides a right to jointly manage and direct the enterprise and to receive a financial benefit generated by project revenues. The Government historically participated as a permit participant through the Petroleum Corporation of New Zealand Limited (Petrocorp). With its 51% majority shareholding in Genesis Energy the Government remains a direct participant in the E & P sector through Genesis's 31% ownership interest in the Kupe field.³³

Case Study #5: Nalcor Energy

In 2007, the Province of Newfoundland and Labrador, Canada unveiled the Newfoundland and Labrador Energy Plan. The plan set out an aspiration to obtain a 10% equity interest position in future offshore petroleum projects. Since 2007 the Province has incorporated a wholly owned subsidiary, 'Nalcor Energy', which acquired equity interests in each of the producing Hibernia South Extension and White Rose Expansion fields and the Hebron development.

Nalcor Energy also undertakes strategic investments in new data acquisition and analysis at the front end of the exploration cycle to enhance knowledge of the prospectivity of offshore Newfoundland and Labrador's frontier basins, open new areas to industry exploration, and increase Newfoundland and Labrador's global competitiveness to attract exploration investment.

In addition to the economic value created through its ownership interests, as a partner Nalcor gains important insight into a project's realities, challenges and opportunities. Nalcor considers that this experience puts it 'in a position to ensure Newfoundlanders and Labradoreans will benefit from offshore oil and gas resources for generations to come.'

The Nalcor case study represents a classic national oil company participant imposed on industry and the acquisitions were resisted by the IOCs but were popular with voters. Unlike the Government participation in Māui and Kupe, the involvement of the Newfoundland and Labrador Government was not necessary to facilitate the various developments as they were being sanctioned consequent to the oil price spikes of the mid – 2000s. Accordingly the participation by Nalcor was not welcomed by industry. AUPEC's Report, *"Evaluation of the Petroleum Tax and Licensing Regime of New Zealand"* (2009) advises that direct State Participation is considered unnecessary except to correct a market failure.³⁴

New Zealand Government Policy

The Government's current policy is to provide support to the industry through fiscal mechanisms rather than take a permit interest.³⁵ Whilst the potential for a Government owned entity to partner with Māori interests in a permit holding vehicle should not be ruled out the focus of this report will be on the mechanisms open to Government, in an indirect sense, to improve Māori participation in the sector.

³² See *National Oil Companies and Value Creation Volume II Case Studies* (March 2011), World Bank.

³³ See <https://www.genesisenergy.co.nz/kupe-joint-venture>.

³⁴ See AUPEC's *'Evaluation of the Petroleum Tax and Licensing Regime of New Zealand'* Final Report to the Ministry of Economic Development, July 2009, page 8 and Chapter 8, pp. 107 – 120 for their analysis of State Participation generally.

³⁵ Paragraph 1.3(4) of the Petroleum Programme 2013.

4. The Māori Economy

Insights

The insights from this section are:

- The Māori economy is important to New Zealand's economic future and is growing and becoming diversified.
- Investment in the petroleum service sector may be attractive to smaller businesses operating within the regions and could expand on extant skills and equipment currently applied in other iwi ventures.
- The identification by permit holders of the extent of skills and other resources within the relevant *rohe* affected by petroleum operations could be an important first step to constructive dialogue and then possible involvement of Māori in permit operations.
- Larger scale investments in petroleum infrastructure or service sector companies are more likely to meet Māori investment criteria and build on extant capabilities rather than permit participation.
- Market entry to the service sector and ongoing profitability may be facilitated by the preferential tax position that can apply to Māori organisations.

4.1 Asset Base

The Māori asset base is conservatively estimated to be worth \$36.9 billion and is continuing to grow. The key contributors to the Māori asset base- fishing, forestry, agriculture and tourism- are all known to be New Zealand's biggest export earners. Māori assets range from high value joint venture partnerships through to individual, hāpu owned, businesses. They are comprised of trusts and incorporations of \$4 billion, other Māori entities of \$6.7 billion, businesses of self-employed Māori of \$5.4 billion, businesses of Māori employers \$20.8 billion.³⁶ With the growth of this asset base, Māori business will play an increasingly important role in New Zealand's economy. Facilitating investment by Māori business so that New Zealand experiences a transformational change in national economic direction is a cornerstone of the Government's *Strategy to 2040*.

Discussion with large Māori commercial representatives suggest that significant sums³⁷ are available to Māori commercial interests for investment.³⁸ This, coupled with a desire to diversify into new businesses, sets the context for the potential for major investment in the petroleum sector.

For small to medium enterprises, Māori interests provide services to a variety of industries but some iwi have no formal register of available skills within their membership. The identification of the available skills within a relevant *rohe* and matching them to opportunities in the petroleum sector could increase participation by Māori interests at a localised level.

4.2 Tax

A key differential between Māori organisations and non – Māori is the applicable tax rate. Many Māori organisations are registered as charities, reflecting their social objectives, and accordingly pay very little tax. For example in the fiscal year 2013/14 Te Rūnanga o Ngāi Tahu recorded a \$132.1 mm net profit (before taxation and Crown settlements) across commercial activities that included tourism, agriculture and other investments. The total taxation liability that resulted was \$409,000 indicating that the iwi's preferential tax status flows through to the majority of its commercial operations. Whether tax treatment flows through to the investing iwi organization depends on the vehicle in which it invests. If it is a partnership or an unincorporated joint venture vehicle (as is common in upstream E & P) then the applicable tax rate will be the investor's marginal tax rate.⁴⁰ As such, if the charitable status were to extend to revenue derived from oil and gas activities then the potential to participate profitably is significantly enhanced. Otherwise approved Māori organisations are able to enjoy a preferential tax rate of 17.5% versus 28% for non-Māori enterprises.⁴¹

The applicable corporate tax rate of enterprises, and the overall Government take, has a significant bearing on investment decision making in the petroleum industry as lower tax rates improve the overall attractiveness of projects.⁴² Investment decisions are typically informed by an assessment of the net present value (NPV) of the opportunity and would generally only proceed if the NPV is calculated to be positive. The NPV for a petroleum investment is a function of several variables that reflect the incoming revenues and outgoing costs of the investment over the estimated life of the project, discounted to present day values by the company's weighted average cost of capital. If the cost of tax is less for one party then it will improve the overall cash flow and increase the NPV of the project – making it more attractive. The economic implications of the differences in tax treatment between Māori and IOC enterprises will, if all other variables are equal, result in a higher NPV for the

³⁶ BERL (2011). *The Asset Base, Income, Expenditure and GDP of the 2010 Māori Economy*. Wellington, New Zealand p.4.

³⁷ Whilst more research is needed to obtain firm data, discussions we have had suggest that several hundreds of millions are available for investment.

³⁸ These comments are supported by earlier research undertaken for *Strategy to 2040*. See BERL (2011). *the Asset Base, Income, Expenditure and GDP of the 2010 Māori Economy*. Wellington, New Zealand.

³⁹ Source: Ngai Tahu Annual Report 2014.

⁴⁰ See para. 39 on page 102 of the Māori Economic Development Taskforce's *Infrastructure and Investment Report* of May 2010.

⁴¹ See the Inland Revenue's commentary at <http://www.ird.govt.nz/maori-organisations/introduction/>

⁴² Dr. R.D Seller *The Economic Analysis of International Petroleum Ventures* (2009) Ch 2. *Royalty and Income Systems*, page 263. However, a lower tax rate will make the project more sensitive to cost escalation because a lower tax rate produces a higher effective cost to the permit holder.

Māori investor than to its IOC competitor. This would be even more so if charitable status is retained. The result would be that Māori can either pay more for an asset than the market value and receive the same return as a standard tax paying investor or pay the market value for the asset and obtain premium returns.

For upstream activities the preferential tax position may allow Māori to have a competitive advantage in auction and tender processes and to continue to produce from older fields otherwise considered non-profitable and ready for decommissioning. It may also incentivise permit holders to sell down interests in existing permits should Māori offer more than the IOC's internal valuation (essentially sharing the preferential tax benefit).

For service sector activities, the preferential tax position could manifest itself in a cheaper, more competitive, service.

4.3 Criteria

Iwi describe themselves as 'intergenerational investors'⁴³ entrusted with stewarding the asset base to deliver growth for future generations. Accordingly, investment criteria is characterised by being conservative, long term and lower risk with investment in infrastructure identified as producing a good fit with iwi objectives.⁴⁴ Similarly, Māori organisations already provide support services to other industries and, with appropriate encouragement, could diversify to provide similar services to support the petroleum sector. Conversely the extraction of minerals, including petroleum, has been deemed too risky by the Māori Economic Taskforce:

Resource extraction is associated with high (although potentially volatile) returns and high upfront risk. The risk can potentially be mitigated through joint venture arrangements for initial drilling costs and diversified portfolios of properties. However, as a result of this volatility and risk, resource extraction probably does not meet the desired medium to long-term sustainable return profile of Māori investors.⁴⁵

Unless the volatility and risk, identified as a barrier to investment in petroleum extraction, is addressed this conclusion would appear to rule out investment in petroleum exploration or mining permits by Māori in the immediate future.

⁴³ The description of iwi being an 'intergenerational investor' is repeated throughout the Māori Economic Development Taskforce's *Infrastructure and Investment Report* of May 2010 and its *Wananga Report* of August 2010.

⁴⁴ See para. 55 of the Māori Economic Development Taskforce's *Infrastructure and Investment Report* of May 2010.

⁴⁵ See the Māori Development Taskforce's 'Iwi Infrastructure and Investment' May 2010, para. 103.

5. Māori Perspectives

Insights

The insights from this section are:

- The exercise of *kaitiakitanga* by Māori within their *rohe* remains an important objective to *hāpu/iwi*.
- The statutory regime provides Māori with opportunities to exercise *kaitiakitanga* in circumstances where the regulatory authority is under a statutory duty to consider representations and apply the principles of the Treaty of Waitangi in decision making.
- Conversely, the opportunity to exercise *kaitiakitanga* as a permit holder is limited. Decisions are subject only to the commercial considerations relevant to each permit participant. In addition, participation in the sector as a permit holder is fraught with risks and significant barriers. The size of the investment would rule out individual *hāpu* or even *iwi* from investing and grass root resistance would add challenges.
- Participation in the sector as a service provider has the potential to appeal to a wide range of Māori investors both in terms of size and skill sets. The service sector also provides the widest range of needs in terms of skilled and unskilled labour and investment opportunities and the preferential tax position should provide an advantage to market entry and competitive tendering.
- For smaller businesses, use of extant capabilities within the relevant *rohe* by the petroleum sector could be beneficial to both parties. A partnership championed by the permit holder between an international service provider and Māori interests could provide a transformational step change in capacity and expansion into new industries.
- Consequently, a strategy which focuses on using the various statutory processes to accommodate Māori needs to exercise *kaitiakitanga*, in regards to petroleum activities, and utilising existing skills and talents to service the sector is more likely to deliver both cultural and commercial benefits than permit participation.

5.1 Sources

We visited with a select number of *iwi* representatives and have documented perspectives from others through *hui* attended⁴⁶ and publicly available sources. Several themes emerged in respect to participation in the petroleum sector which are broadly consistent with submissions documented in the consultation in relation to the proposed Block Offer 2014⁴⁷ and set out in Venture Taranaki's *The Wealth Beneath Our Feet - The Next Steps: 'What does oil and gas mean for Māori?'*⁴⁸

5.2 Benefits

Most *iwi* raised environmental concerns resulting from oil and gas E & P activity as a barrier to investment. The two key issues are (i) the potential for an offshore spill to have a profound effect on the coastal inhabitants and (ii) damage to aquifers caused, inadvertently, by fracking.

We tested these concerns with individuals interviewed. The conclusions of the Parliamentary Commissioner for the Environment that fracking can be executed safely has alleviated concerns in regards to that particular issue. However, whilst the risks of adverse events were acknowledged as remote the lack of clear and measurable benefits accruing to the communities put at risk is a major blocker to industry's social licence to operate. We provided examples where industry activity had resulted in major employment opportunities to ordinary communities, citing the construction of the Kapuni and Māui pipelines and that of the Hibernia platform (Newfoundland & Labrador), which employed ~6,000 locals at the peak of its construction.⁴⁹ These and other examples, such as that set out in Case Study #6, of real jobs for both skilled and unskilled workers resonated with *iwi* representatives suggesting that if opportunities during development could be signalled by industry during exploration then a greater acceptance of activity might be forthcoming.

Case Study #6: Poinsetta field platform fabrication, Trinidad & Tobago

BG Group is the operator of two off-shore blocks in Trinidad and Tobago, one of which is the North Coast Marine Area (NCMA). This block contains six gas fields, including the Poinsettia field. Phase 3c in the development of the NCMA included a new drilling and production platform on the Poinsettia field. The platform consisted of a 10,000 ton jacket, fabricated on the Gulf coast of the United States, and a 4,200 ton deck (the topside), constructed in Trinidad by TOFCO Ltd. TOFCO Ltd is a 50/50 joint venture between CMC of Louisiana, the United States (with construction facilities in Harvey and Houma) and Welfab Limited, a Trinidadian services company. The Poinsettia topside was constructed in the TOFCO fabrication yard in La Brea, on the west coast of Trinidad. In a case study prepared by BG Group, it was reported that an estimated 99 percent of the 1.1 million hours work on the Poinsettia topsides were undertaken by Trinidadian nationals, demonstrating a particularly high level of local content in all management, technical, and administrative positions.

⁴⁶ In particular *The Symposium on Māori Engagement with Extractive Industry: Innovative Legal Solutions* - 12 June 2015, Auckland.

⁴⁷ See *Report on Consultation in relation to proposed Block Offer 2014*, MBIE, February 2014.

⁴⁸ *The Wealth Beneath Our Feet – The Next Steps* Venture Taranaki, March 2015, from p. 28.

⁴⁹ Source: <http://www.hibernia.ca/exploration.html>.

In New Zealand there is no Government policy statement to use 'local content,' as there is in Trinidad and Tobago, and no direct requirement in the Petroleum Programme requiring permit holders to use local content.⁵⁰ The use of local services is left to the market. However, it may be possible that a form of local content specific to affected Māori could be developed as part of the Government's commitment to apply the principles of the Treaty of Waitangi. This concept is developed later in the report.

5.3 Decision Making

'The cultural relationship with the environment remains such that Māori continue to view themselves as kaitiaki of the environment irrespective of ownership. This powerful position of Māori continuing to hold kaitiaki responsibility to the environment is a key factor in considering Māori attitudes to the oil and gas sector or any industry affecting the environment.'

- Dion Tuuta (Ngāti Mutanga, Ngāti Tama and CEO of Parininihi ki Waitōtara Inc), *The Wealth Beneath our Feet – The Next Steps Venture Taranaki*, March 2015, p. 28.

In general iwi were concerned that decisions affecting their *rohe* were being made without providing an opportunity for them to fulfill their *kaitiaki* responsibility. Decision making in regards to oil and gas activities are made by various regulatory authorities pursuant to several statutory instruments, the key ones being the CMA and, for onshore activities the Resource Management Act 1991 (RMA) and, for the offshore the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ). Embedded in each are requirements that the principles of the Treaty of Waitangi be observed by the relevant decision maker and rights of consultation with affected hāpu/iwi. These processes have the capacity to provide a limited opportunity by which Māori may be *kaitiaki* of the environment.

For example, the mechanism the Government uses to give effect to the Principles of the Treaty of Waitangi under the CMA is the process of consultation with affected Māori groups before areas are released under a Block Offer. Under this process the Crown has responded to iwi *kaitiaki* and removed areas identified as culturally sensitive.

Decisions made by permit holders provide different opportunities for Māori to exercise *kaitiaki* responsibility. The Block Offer process is open to all that qualify – Māori can participate - but in practice the process is limited to those oil companies with the appetite for risk coupled with adequate financial and technical capacity. Once a permit has been issued, the key decisions that arise thereafter lie with the permit participants, within the framework of the approved work programme, where decisions are made within the standard joint venture forum of the operating committee. Most operational decisions are made by majority vote so that some permit participants views, although expressed, may

not be accepted. Regulators under the RMA and EEZ provide consents for petroleum activities regulated by those statutes and the consenting process provides opportunities for Māori to highlight matters of cultural significance to the decision makers in a process similar to that under the CMA. Under the CMA the permit holder is also required to produce an annual report to NZP&M detailing their engagement with affected hāpu/iwi. The report is designed to encourage constructive dialogue between the permit holders and hāpu/iwi affected.

The opportunities for Māori perspectives to be considered under the legislation do not result in a veto on further activities and the regulators must balance the relative merits of approving ongoing activity with representations made by *kaitiaki*. An optimal outcome of constructive dialogue between permit holders and hāpu/iwi would be the permit holder, where possible, accommodating the exercise of *kaitiakitanga* when undertaking permit activities. This outcome could be reinforced by regulatory decision makers in the event agreement between permit holder and affected Māori cannot be landed.

5.4 Market Entry

Several Māori commercial interests expressed measured support for the participation, in the industry, as a permit holder, but faced the hurdle of meeting risk management requirements and what would likely be resistance from iwi at the grass roots level. Participation as a service provider was also supported as providing a lower risk entry position that could build skills and provide a source of revenue.

• Direct Participation

The direct participation in the extractive industries is regarded by the UN's (now former) *Special Rapporteur* as the preferred model where indigenous peoples participate through their own initiatives and enterprises.⁵¹ Indeed the *Special Rapporteur* recommends State support be provided for indigenous peoples seeking to acquire any necessary permits and that it would be justified to give preference to indigenous peoples' initiatives when granting permits for resource extraction. He states *'that recognising a priority for indigenous peoples for the extraction of resources...is a matter of equity if not entitlement.'*⁵² Under New Zealand's regime, provided a Māori vehicle can satisfy the technical and financial requirements, then it may participate in permit activities. The preferential tax position could be considered as a form of state support. However, the risks involved in petroleum E & P are far removed from those within the capacity of iwi and are usually mitigated by the collaboration with multiple partners in several projects with a range of risks.

Building on that model, iwi might collaborate, pooling their interests, in a similar manner to the fishery and forestry interests, in an unincorporated joint venturing mechanism common to the industry. Such a vehicle would align with standard industry practice and allow a flow through of each

⁵⁰ See http://www.energy.gov.tt/wp-content/uploads/2013/11/Local_Content_Policy_Framework.pdf

⁵¹ See *Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya. Extractive Industries and indigenous peoples A/HRC/24/41*, July 2013.

⁵² A/HRC/24/41 paras 9 – 17.

iwi's preferential tax position. The vehicle would also have the capacity to both spread risk across several basins and provide a centralised resource to assist in regional governance to achieve social and cultural objectives of many iwi. Collaboration in this manner was a feature of the Māori Economic Development Taskforce's *Iwi Infrastructure and Investment* report⁵³ signalling some appetite to at least consider the opportunity although the same report dismissed resource extraction as a viable investment opportunity due to risks arising from price volatility. Furthermore, the challenge of garnering sufficient iwi support should not be underestimated.

Overall, market entry as a permit provider is likely to be fraught with economic, technical and political risks that may be overcome by Māori organisations in time but are unlikely to provide opportunities for *kaitiaki* responsibilities to be discharged in a manner that improves upon the statutory regime. Accordingly, for present purposes other opportunities for Government to assist Māori to participate in the sector should be examined in priority.

• Service Provider

Participation as a service provider to the industry may be an important first step in building in-house petroleum sector capability. The World Bank's study *Local content in the oil and gas sector* gives guidance on the best way in which skills and knowledge can be transferred. Case Studies #7, #8 and #9 set out below show how small incremental capacity build can lead to a larger national footprint and even an international presence.

Case Study #7 Todd Energy, ESS Catering Services and Otaraua Hāpu

Otaraua Hāpu (the hāpu) have created a partnership with ESS Catering Services (ESS), an international catering service, to provide local support for land based drilling campaigns in Taranaki, in the form of rig camp catering and hospitality services. Currently these services are being delivered to Todd Energy, the owner of the drilling rig, Big Ben. The partnership has created an independent business that promotes the interest of the hāpu without creating a liability risk for them. The relationship between the hāpu and ESS enables the hāpu to access commercial experience to refine their existing hospitality traditions, into a specific business opportunity.

This opportunity arose through the alignment of interests between the hāpu and Todd Energy. Todd Energy seeks to engage local services whenever possible and understood that the Otaraua Hāpu possessed a historic reputation as a community experienced in hospitality.

Todd Energy supported the hāpu in building business capability, creating a new income stream and providing employment opportunities for local Waitara people.

Notwithstanding the tradition of being hosts for other hāpu, the Otaraua Hāpu initially faced challenges of adjusting their practices from periodic large community events to the needs of a fully serviced camp that housed work crews with 24-hour needs. Further, a transition from providing cultural services towards a commercially motivated enterprise was required.

As part of the ongoing support for the program, Todd Energy demonstrated, in some circumstances, that they were willing to reach beyond contractual obligations to help facilitate the success of the hāpu. This support mitigated any preliminary risk that the hāpu might have faced and in fact provided assistance to facilitate the hāpu reaching the critical mass to become a sustainable commercial enterprise.

The rewards for the parties have been broad. Not only have both the hāpu and Todd Energy become more sensitive to the needs of one another, but also they have become cooperative business participants, able to trust and rely upon each other. As a direct result of gaining further resources and experience, the Otaraua Hāpu have built internal infrastructure and increased their capacity to look into other ventures.

Success of this venture for the hāpu has been contingent upon seizing an appropriate opportunity; a prospect that levers off the existing hāpu skill sets and strengths and using expertise to transition into a new venture. Without doubt, the commitment by the permit holder, Todd Energy, has been significant in de-risking what would otherwise be considered a startup venture in a new market for the hāpu. While the activity of camp catering and hospitality services is an integral component of the energy industry, these services are applicable outside the industry to large primary industry contracts, construction sites or festivals.

Partnering with an international service provider, in the manner the Otaraua Trust have done to provide catering services to the Todd rig camp as a first step to providing a more diverse service offering across a number of industries, appears to be a positive step. Such steps have allowed iwi/hāpu to explore commercial opportunities where they have extant skills/equipment. However, it could not have been achieved without the permit holder, Todd, championing the Trust's participation with its service provider, ESS.

Case Study #8 summarises a higher scale expansion of the Tuaropaki Trust's geothermal activities into drilling and well site services, including operation of a rig servicing the petroleum sector.

⁵³ See *Iwi Infrastructure and Investment* Māori Economic Development Taskforce, May 2012, para. 5 page 2.

Case Study #8: Acquisition of MB Century by Tuaropaki Trust

Tuaropaki Trust (the Trust or Tuaropaki) acquired Taupo based energy services company MB Century as a continuation of the Trust's investment strategy.

Tuaropaki is an Ahu Whenua Trust established by the Māori Land Court under the Te Ture Whenua Māori Act (1993). The Trust Order directs the administration of the Tuaropaki E lands and investments for the long-term benefit of its owners and their descendants from the northwest of Taupo.

MB Century (MBC) is NZ's leading specialist in geothermal well drilling, field development and geothermal power station and steam field maintenance. It also owns and operates a fleet of conventional drilling rigs deployed in the international oil and gas industry. Prior to the acquisition by Tuaropaki, MBC was owned by an overseas entity that held a vast number varied of commercial interests, most of which required more attention than MBC.

Originally, the Trust's interests were based upon a diverse operation including geothermal electricity generation to temperature controlled horticulture and dairy processing utilizing the geothermal resource at Mokai. Tuaropaki also has pastoral farming, viticulture, horticulture in Canada and various telecommunication investments.

The acquisition of MBC by Tuaropaki is the result of synergies to create an opportunity for both parties. For Tuaropaki the potential to broaden its investment portfolio by acquiring a business that supported its geothermal activities but with the capacity to expand into new markets, including oil and gas. At the same time, MBC was seeking an opportunity to refocus its efforts to achieve their corporate objectives, with a more locally responsive ownership body.

With the convergence of the MBC and Tuaropaki interests, an opportunity was realized.

As a result of the acquisition, Tuaropaki was able to obtain a commercially viable and robust entity that facilitated entry into the oil and gas sector, while providing MBC the potential to re-enliven their long-term corporate goals. Not only has Tuaropaki gained access into a new market sector, but also they have done so in such a way as to retain the support and mentorship of a highly experienced and professional structure within MBC. Tuaropaki should continue to reap cash flow based income, experience and industry knowledge from their investment in MBC, which could enable the Trust to lever into other related opportunities.

The Tuaropaki Trust's expansion into drilling activities is, like the Otaraua Trust's, a build on existing skills and capabilities. On this occasion, due to the Trust's financial strength, the acquisition was achieved on a strictly commercial basis without the need for a permit holder's support. The incremental building of capability can culminate in a market leading international service provider of choice, as Case Study #9 highlights.

Case Study #9: NANA Development Company

The NANA Development Company (NDC) is an Alaska Native Corporation, whose earnings have a direct positive impact on the more than 13,500 Iñupiat of northwest Alaska who own NANA. NDC was initially funded from benefits received under the Alaska Native Claims Settlement Act, approved by President Nixon in 1971. The settlement resolved the issues around the land claims of Alaska Native peoples by transferring government-held titles of Alaska land to 12 Alaska Native regional corporations and more than 200 village corporations. A 13th regional corporation was eventually created for Alaska Natives who no longer lived in Alaska. The regional corporations formed themselves into a collective and commenced providing services in support of oil and gas development occurring on the Alaskan Northern Slopes. Today NDC is a leader in engineering and construction; resource development; facilities management and logistics; real estate and hotel development; and information technology and telecommunications. It employs 15,000 individuals throughout the United States and around the globe and operates a shareholder employment scheme that works directly with NANA business units to help create career development opportunities for shareholders and facilitate internships.

The case studies demonstrate that one way for Māori to enter the industry is to build capability, incrementally, based on existing skills and talent. Their preferential tax position is a form of government support to facilitate market entry. Iwi/hāpu might therefore consider whether extant capabilities in areas such as marine transport, civil engineering, land management, impact assessment and environmental benchmarking might be adapted for use in the petroleum sector and, if so, enter into dialogues with permit holders active within their *rohe* facilitated by the CMA engagement process. Such a step could be reinforced by partnering with a domestic petroleum sector specialist seeking to strengthen its attractiveness to permit operators in competitive tenders or an international organisation seeking to build a domestic footprint.

6. Industry & Government Initiatives

Insights

The insights from this section are:

- The oil and gas companies are themselves incentivised to utilise local services. Some have already taken steps to agree bi-lateral arrangements with hāpu/iwi that offer support and the prospect of greater participation in the sector.
- Best practice could include the standardisation of these arrangements into a code of practice which would embody what industry considers as good industry practice in this area.
- Alternatively or in parallel guidance to permit holders on government expectations in regards to engagement with affected hāpu/iwi that could be evolved to facilitate greater participation by iwi/hāpu in permit activities. Guidance around expectations for annual iwi engagement reporting could be a good first step.
- A Government guideline as to what it considers is within the range of 'best practice' could act as sufficient incentive for IOCs to undertake measures to support affected iwi/hāpu initiatives that are practicable and within applicable financial or other constraints.

6.1 Sources

We engaged with several industry participants and analysed publicly available statements of others. A consistent theme emerged of industry willing to involve local communities, including iwi/hāpu. Doing so is regarded as best practice due to the reinforcement of the social licence to operate and the likelihood that local services will, over the long term, inevitably be cheaper to source and maintain than those imported.

6.2 Industry Initiatives

PEPANZ's⁵⁴ values statement 'Industry engagement: open, transparent, neighbourly, kanohi ki te kanohi (face to face)' states:

"Engaging with communities is a priority for the oil and gas industry and PEPANZ likes to do so face to face. It believes growing the oil and gas industry in a responsible way will protect the environment and enrich communities. As an association PEPANZ proactively looks to engage with communities where the oil and gas sector is operating or expanding so communities feel confident in future projects that may take place. PEPANZ also thinks it is important to engage with young Kiwis, and work hard to attend career days, support

*scholarships and help fund local science fairs. Engaging communities is about gaining a social licence to operate, with the goal of becoming part of the community you operate in."*⁵⁵

PEPANZ has been involved, voluntarily, with a Marine Mammal Observation training programme whereby members of affected hāpu/iwi are selected for training and participation in seismic surveys taking place within their rohe. This programme has been supported by the major offshore operators and generally welcomed by iwi.

Shell's position is expressed as follows:

"We aim to encourage economic and social development while reducing any negative impact of our operations. The benefits we bring to local people can include jobs, capacity building, technology, contracting and business opportunities and social investment.

*We work to manage any negative effect on the culture, livelihood, health, safety, lifestyle, security and economic development of communities"*⁵⁶

New Zealand Energy Corp entered into a Cooperation Agreement with Te Runanga o Ngati Ruanui Trust ("TRoNRT") on February 22, 2012. Under the terms of the agreement:

*"TRoNRT will support NZEC's exploration, development and production activities within the Ngati Ruanui area and NZEC will contribute to positive cultural, economic and social outcomes for the development of Ngati Ruanui and its communities. NZEC and TRoNRT have agreed to establish clear process and communication protocols and to share relevant environmental and technical information. TRoNRT will provide relevant cultural advice and support as NZEC moves through the resource consent, permitting and development process. In addition, NZEC will provide a right of first opportunity to TRoNRT's members for business, employment, educational and training opportunities in South Taranaki."*⁵⁷

Case Study #7 shows how Todd assisted the Otaraua Hāpu. Other industry participants have made other arrangements with iwi/hāpu to standardise their interactions and develop opportunities to participate in their work programmes.⁵⁸

⁵⁴ PEPANZ is the Petroleum Exploration and Production Association of New Zealand, New Zealand's oil and gas trade association.

⁵⁵ Source: <http://www.pepanz.com/about/about-us/what-is-pepanz/>

⁵⁶ Source: <http://www.shell.com/global/environment-society/society/our-neighbours/impact.html>

⁵⁷ Source: <http://www.newzealandenergy.com/News-and-Events/News-Releases/News-Releases-Details/2012/New-Zealand-Energy-Enters-into-Cooperation-Agreement-with-Te-Runanga-o-Ngati-Ruanui-Trust1128378/default.aspx>

⁵⁸ See, for example, the STOS 'Partnership Agreement' with Taranaki iwi described at http://www.epa.govt.nz/EEZ/EEZ000010/EEZ000010_6.%20Bridget%20Abernethy%20-%20Statement%20of%20Evidence.pdf para. 34. Note also the PEPANZ Marine Mammal Observer scheme.

Further, most major IOCs have corporate social responsibility objectives that align with the development of iwi capability.⁵⁹

PEPANZ, in discussion, confirmed support for measures that provide greater participation by local hāpu and iwi and noted that it is currently engaged in adopting a code of principles for its members that is likely to include community interaction and benefits. The incorporation of the affected hāpu into the permit operator's activities, as demonstrated by the Todd – Otaraua Hāpu case study, has the capacity to build incremental skills for affected hāpu/iwi that can lead to sustainable opportunities in other industries and business growth generally. The wider industry itself benefits by involving its local communities, underpinning its social licence to operate, and adding skills and resources to the Taranaki cluster, potentially at better rates due to the preferential tax position enjoyed by many Māori organisations.

6.3 Government Initiatives

There are numerous strands to the Government's initiatives in regards to iwi economic development and opportunities for advancement within the petroleum sector.

Strategy to 2040 – Economic Policy in regards to Iwi

At a higher, cross industry, level, the *Strategy to 2040* report and associated *Action Plan 2012 – 2017*,⁶⁰ issued in November 2012, has broad socio – economic objectives with measurable metrics and defined outcomes to 2040. It recognises that the Māori economy is already significant and that by growing a more productive, innovative and internationally connected economic sector it will deliver prosperity to Māori, and resilience and growth to the national economy that furthers all New Zealanders. The view of MBIE's predecessor, the MED, in regards specifically to iwi petroleum sector participation, was set out in the *Review of the Crown Minerals Act 1991 Regime*,⁶¹ March, 2012, Discussion Paper.⁶² It aligns broadly with the *Strategy to 2040* and identifies the need for developing pathways for Māori to invest more actively in the minerals sector if they wish to do so and how Māori and industry can work together.

Regulatory Framework

The development of specific options for Government to bring Māori/iwi investment to the petroleum sector requires an examination of the legislative framework applicable and powers available to decision makers.

As described in section 5.3 there are several levels of decision making by regulators under the petroleum regime. Firstly,

under the CMA the Government determines which areas will be made available in the annual Block Offer process. Prior to doing so the Government must consult with affected hāpu/iwi groups. Acreage is then awarded to the successful bidder in the Block Offer based on technical and financial criteria set out in the Petroleum Programme and the Invitation for Bids document.⁶²

The RMA (for onshore) and EEZ (for offshore) provide the mechanisms by which local councils and the relevant authority approve permitted activities, including some petroleum operations, within a permit area.⁶³ Both provide processes by which affected iwi/hāpu may make submissions in regards to activities to be undertaken within their *rohe*. The RMA specifically recognizes iwi management plans as a relevant planning document that must be taken into account when preparing or changing regional policy.

Persons exercising powers and functions under the CMA, RMA and EEZ must have due regard to the principles of the Treaty of Waitangi. The commonly accepted principles are broad in scope and mixes notions of partnership, good faith, freedom to govern, management of resources and specific commitments set out in the treaty. Giving effect to such broad principles provides some flexibility to the regulatory authorities to apply the provisions of the applicable legislation in order to support Māori interests.

Regulatory Tools

Under the current petroleum framework the duty of permit holders in regards to Māori is limited to providing an annual report to the Minister on the holder's engagement. Whilst the purpose of the report is to encourage permit holders to engage with relevant iwi, and hāpu and they are encouraged to consult with iwi/hāpu before its submission, there is no explicit permit obligation or other regulatory requirement in the petroleum legislation to do so.

Nevertheless, tools are available to Government to encourage desired behaviors by non-regulatory means such as the use of Guidance. Guidance is often used by Governments to fill interpretative gaps in the legislation in a manner that encourages desired outcomes, and provides more detail as to the regulator's expectations.

59 Information on major IOCs' corporate social responsibility was sourced on the websites of Statoil, Chevron and Shell. We assume that other majors have similar programmes.

60 Both available from the MBIE website <http://www.mbie.govt.nz/what-we-do/Māori-economic-development>

61 Available at <https://www.med.govt.nz/sectors-industries/natural-resources/pdf-docs-library/oil-and-gas/crown-minerals-act-review/Review%20of%20the%20Crown%20Minerals%20Act%201991%20regime%20-%20Discussion%20paper.pdf>

62 See the invitation for bids in regards to Block Offer 2015 at <http://www.nzpam.govt.nz/cms/investors/permits/block-offers/block-offer-2015/images-and-files/Block%20Offer%202015%20Invitation%20for%20Bids.pdf>

63 The Marine and Coastal Area (Takutai Moana) Act 2011 also provides for rights for Maori in regards to activities undertaken within the marine and coastal area by Maori applicant groups able to demonstrate exclusive use and occupation since 1840 without substantial interruption.

If the desired behavior is for permit holders to engage meaningfully with affected hāpu/iwi with a view to identifying opportunities for greater participation, then the Government might encourage this activity by issuing guidelines highlighting the importance given to a proper awareness by permit applicants of the cultural sensitivities in the area of operation and steps an applicant commits to take to ensure an ongoing understanding is maintained. For example, Government could encourage the submission of ‘cultural impact assessments’ a (CIA) as part of the work programme submitted in a Block Offer. CIA’s should be regarded as ‘technical advice, much like any other technical report such as ecological or hydrological.’⁶⁴ It is a report most commonly seen in an RMA process and is usually prepared by the affected hāpu/iwi at the applicant’s expense, documenting Māori cultural values, interests and associations with an area or a resource, and the potential impacts of a proposed activity on these. It could therefore be part of the technical evaluation of an applicant’s capability in a Block Offer. The consequential behavioral response from permit holders could be to detail how permit operations will affect hapu/iwi, including employment opportunities or other commitments, as part of the work programme. Guidance would need to be carefully drafted, in line with legal constraints and policy objectives.

Another, or additional, option is to encourage industry to establish a non-binding Code of Practice in regards to iwi engagement and participation. Voluntary codes are a form of industry self-regulation and the principles can be asserted as embodying ‘good oil field practice’ in a particular area providing the regulator with some leverage in the case of a failure to comply. Undertaking permit operations in accordance with ‘good industry practice’ is a condition of each permit.

Guidance issued by a regulator can act as a constraint when discretions are exercised – in certain circumstances guidance that creates a legitimate expectation can form the basis for a judicial reviewed where the guidance has not been followed by the regulator. Conversely, a non-binding code, commits industry participants to adhere to the conduct set out therein and compliance may be reinforced by the threat of regulation.

⁶⁴ Source: The Ministry for the Environment.

⁶⁵ See page 29 *Action Plan 2012 – 2017*.

7. Opportunities in the sector

Insights

The insights from this section are:

- A preferential tax position should assist Māori in market entry.
- Of the types of investment examined:
 - Small businesses providing services that can be adapted from and to other industries should be considered as they apply to a broad range of hāpu/iwi in terms of financial strength and resources.
 - At the higher end, investments of the kind advocated for in the Māori Economic Development Taskforces *Iwi Infrastructure and Investment* report, might be available to well-funded Māori organisations for larger scale investments in infrastructure that either moves product to market or processes it into a more valuable product.
 - Iwi investment as a permit participant would require a level of experience and comfort with the sector that does not exist at this time.
- Investments that provide a measure of insulation from market fluctuations, either by a diversified offering or contractual hedges, de-risk investments to acceptable levels.
- Similarly, a careful gap analysis of the service sector might disclose opportunities for new investment in areas that iwi have some familiarity and extant skills and equipment.
- Constructive dialogue between permit holders and hāpu/iwi has the capacity for small, but significant, steps to be made in building capacity for smaller businesses. Consequently, the structuring of incentives for permit holders to do so should be considered by Government.

7.1 Overview

The petroleum industry is currently capital constrained due to decreased cash revenues associated with low oil prices. Internationally this has triggered a round of merger and acquisition activity as companies seek to reduce costs and rationalise portfolios. In an industry where cash is currently 'king' attractive opportunities are, or will likely, come to the market.

Investment opportunities for Māori need to be structured to meet iwi investment criteria, including the non-commercial aspects. As such, elements of *kaitiakitanga* (guardianship), iwi development and intergenerational investment need to feature strongly.

Discussion with industry investment specialists⁶⁵ confirm that there are a range of investment opportunities that broadly

fit into 2 categories: permit participant and service providers (both to E & P activities and in the downstream sector, including as infrastructure owners or operators).

7.2 Permit participants

In general terms the costs and uncertainties associated with the E & P industry do not sit well with iwi commercial criteria. As noted in the Māori Development Taskforce's *Iwi Infrastructure and Investment*⁶⁶ risk needs to be offset by the adoption of joint venture mechanisms. In addition risk may be managed by the different investment strategies that attract greater or lesser returns.

There is a balance between commercial imperatives and those, such as to be *kaitiaki*, which are non-commercial (from an IOC's perspective). Ultimately each opportunity will be different. If iwi were to invest as permit holders many factors could be called upon to justify doing so from commercial or non-commercial aspects that would need to be weighed at the time.

A complication to participating as a permit holder is the lack of experience within current iwi management. This gap may be addressed by participating as a non-operator, leaving the technical aspects to operations to an experienced international partner. Alternatively capability may be acquired, often as part of an acquisition where people follow the asset, or through partnering with an established service provider who can provide technical expertise while internal capability is acquired. For iwi, the likely outcome would be a hybrid of each where iwi take a non-operator's position, seek technical advice from external advisers and acquire an internal capability that can transition to iwi members over time.

Exploration

Investment in the exploration phase requires relatively modest sums over a short to medium period for a highly speculative return. This commercial reality should be balanced by the opportunity participation brings to exercise *kaitiakitanga* particularly across the extensive areas available in the offshore. A smaller, more speculative investment might therefore be balanced by a desire to actively participate in operations within the *rohe* and protect areas of special significance. However, the realities of voting arrangements under joint venture contracts would likely result in iwi views being expressed, accommodated where practicable but, ultimately dismissed if following iwi recommendations might negatively affect a project's economics. It will be up to the iwi investor to decide whether the limited opportunity to exercise *kaitiakitanga* in this manner is worth the risk of a failed exploration campaign.

Were iwi to pool together and obtain exploration acreage, in partnership with IOCs, then the risk of exploration failure

⁶⁵ Woodward & Partners.

⁶⁶ See *Iwi Infrastructure and Investment* Māori Economic Development Taskforce, May 2012 para. 103 page 30.

– the failure to find a drillable prospect - would be mitigated by spreading it across several exploration programmes. In the event of a discovery drilling and development risks can be mitigated by farm-in arrangements that are sometimes coupled with carry arrangements should development result.

Market entry in exploration can be achieved by either buying in to existing acreage and work commitments or making a bid, potentially with other more experienced operators, in the annual Block Offer process. An iwi vehicle could be a non-operator partner of choice for international operators due to:

- the mitigation of political risk
- furtherance of corporate social responsibility objectives
- the in country presence and local knowledge
- such an entity may serve to lower the average cost of capital for a resultant project.

Iwi are also regarded as having a superior understanding of the environment and concerns of the community within its *rohe*. As such, permit operators may be prepared to partner with iwi on existing and new exploration permits.

Aside from areas in which high prospectivity has already been identified, buying in to existing exploration permits is likely to be within iwi means (certainly as a collective). Conceivably, and depending on the rules of representation on the operating committee,⁶⁷ if iwi solely wanted to exercise a limited form of *kaitiakitanga* by having representation (albeit no veto) at operating committee meetings then, if the incumbent permit holder was agreeable, it could buy a minimal ownership interest for a relatively nominal price. Acquisition for these non-commercial reasons might be balanced with larger positions elsewhere reflecting better prospectivity and more attractive commercial objectives.

Production

Investing in an existing producing field is likely to require a larger investment but is much less speculative and accordingly aligns more closely with iwi investment criteria. For example, recent publicly available data⁶⁸ suggests a 10% working interest in the Kupe field is valued at approximately \$100 million with estimates of annual EBITDA⁶⁹ being calculated by McDouall Stuart⁷⁰ at ~\$35 million. But with the field producing there is less ability to protect areas of significance that may have already been disturbed. As such, a larger, but less speculative, investment providing solid, predictable returns might be balanced with a lesser opportunity to exercise *kaitiakitanga*. Again, the balance between iwi commercial and non-commercial objectives would have to be weighed at the time and in the context of the proposed acquisition.

Iwi non-commercial criteria might act as a catalyst for investment. For example investment in a producing field with several years' worth of reserves yet to produce is likely to attract a premium price that results in the delivery of modest returns which is less attractive to the major industry participants active in New Zealand. They see New Zealand's potential in the frontier exploration areas and not older producing assets. For iwi, such an asset would be valuable in building capacity whilst at the same time attracting production returns that could underwrite initial start-up and exploration expenses.

Unlike exploration where market entry is available through the Block Offer process, interests in producing fields seldom come to the market. Nevertheless, it is likely that each of the upstream participants are, or have been, engaged in an internal portfolio review due to current cash constraints and cost escalation. These reviews have already thrown up significant M & A activity abroad and could result in New Zealand producing assets being marketed. The market for buying and selling producing assets in New Zealand is relatively illiquid when compared to other jurisdictions where there are significant numbers of buyers and sellers for different assets. Recent examples of producing assets on the market, Origins' Rimu and Kauri fields and Kea's Puka, demonstrate the difficulty sellers have in today's market in securing sales to adequately financed companies, at least for those smaller onshore producing assets. Iwi would be well placed to acquire assets such as these because they are well financed and could even pay a premium if the preferential tax position applied. Provided the amount offered was close to that offered by the proposed purchasers an iwi vehicle would be an attractive purchaser to the sellers.

For the bigger offshore producing assets iwi might have to compete with other well-funded IOCs although most are currently capital constrained and may not be in the market for new producing acreage. A barrier to buying into a producing asset are pre-emption rights. Pre-emption rights under joint operating agreements require any seller to offer the interest to the existing partners on the same terms as a third party has offered. This creates a barrier to entry, affecting market liquidity. This barrier was identified by the UK's Progressive Partnership Working Group, a working committee of the joint industry – Government steering committee 'PILOT', as one of the barriers to robust commercial activity on the UK Continental Shelf. The regulator subsequently banned pre-emption rights from new joint operating agreements from ~2002. However, pre-emption rights are only a barrier where the internal value held by incumbent owners is greater than that bid for by a bona fide third party purchaser. As noted above, due to their preferential tax position production revenues from an asset like Kupe would carry no corporate tax liability. Consequently, an iwi vehicle's profits would be higher than an IOC's who pays 30% of its profits to the Government. Iwi may therefore be well placed to compete in acquisitions, even where pre-emption rights exist, because they can place a higher value on a producing asset and outbid incumbent owners.

⁶⁷ Representation often requires a minimum threshold usually ranging between 5% to 15% ownership interests.

⁶⁸ Extrapolated from Woodward Partners 'April wrap' which notes Origin's 50% share as valued at approximately 550 million giving Kupe a value of just over \$1 billion or \$100 million for each 10% interest.

⁶⁹ Earnings before interest, taxes, depreciation and amortisation.

⁷⁰ Extrapolated from McDouall Stuart's *Stepping* report page 99.

7.3 Service Provider

The provision of services (including the supply of goods) to the petroleum sector takes several forms from the provision for resource exploration and extraction services, through to infrastructure that brings extracted products to market and the small businesses that provide secondary and tertiary services to both. The basic model is to secure contracts for the provision of services going forward, seek supplies and staff where necessary to perform them and collect a return on the investment made. The inherent value of a service company is measured by its forward pipeline of work, known as its 'backlog'. The model is much lower risk because the variable costs of performing services are only incurred after the contract is in place and there is more certainty that they will be recovered, with an uplift.

Exploration and Extraction Services

Each business supporting exploration and extraction operations will have its fixed capital and operating costs that need a minimum baseline of activity. In the event work in the New Zealand petroleum sector dwindles, as is the current situation, then staff may be made redundant and equipment mothballed or relocated abroad. For this reason, the service providers to the petroleum sector fall, broadly, into two categories – either specialists to the sector but being part of a multi-national offering (e.g. a Halliburton), or, as Case Study #9 describes, providing services to the sector locally but being flexible enough to offer like services to other sectors.

Case Study #9: UNIMAR Offshore Support Services*

UNIMAR, a Nelson-based, New Zealand-owned company, was founded in late 2004 specifically to cater to the growing offshore support services industry within New Zealand. Although UNIMAR's core target market is the offshore OG&M [Oil, gas and minerals] sector, the company also services the deep sea fishing fleet, among other clients. UNIMAR has contracting units, engineering facilities, offshore supply and support base operations in Port Nelson and Picton's deep water Shakespeare's Bay, as well as offices in New Plymouth.

Since its inception, UNIMAR has grown quickly, demonstrating that the market niche existed, and has been involved in several key projects in the OG&M industry, including roles in the Tui and Maari developments. UNIMAR's revenue has grown from zero four years ago to around \$20 million today, most of which feeds back to local suppliers.

Late in 2008, UNIMAR successfully raised further capital to meet its initial investment requirements for a specialised Anchor Handling Tug Supply ('AHTS') vessel. The investment case highlighted the opportunity presented by the absence of any New Zealand-owned and based vessel capable of providing heavy maritime support services, such as anchor handling and drilling rig servicing to the OG&M sector. Vessels providing these services in local waters have tended to be Asian-based ships chartered for specified periods to match local work programmes. The absence of a locally owned and based vessel was considered a factor weighing on decisions by local operators and explorers to commit to work programmes. Lower mobilisation cost was another key aspect of the business case, and potentially of significant advantage to potential customers. The absence of a locally based vessel also meant that the timeliness of response to a local offshore incident, such as a FPSO losing its mooring, was limited to those (if any) vessels immediately in the region and able to respond.

The capital raising was undertaken by McDouall Stuart to enable UNIMAR to fund an initial instalment on a AHTS vessel, with the intention to purchase the vessel after a period of time. Significantly, the major new shareholders are a unique combination of New Zealand investors: Port Nelson Ltd, the local Port company, and Putake Ltd, the investment arm of the Iwi-owned Lake Taupo Forestry Trust.

As the number of projects operating within the Taranaki and other basins has risen, the viability of locally-provided support services has increased. The economics of basing a vessel permanently in New Zealand have improved markedly, and annual utilisation for the new vessel is expected to run at between 65% and 85%.

UNIMAR's forward pipeline of work is ultimately dependent on the level of seaborne exploration undertaken in New Zealand waters, but there is significant reason to be upbeat. AWE and Origin are each undertaking sizeable offshore exploration campaigns in 2009, and further out there is the prospect of servicing the work programmes of operators targeting the Canterbury and Great South Basins.

UNIMAR founder Calum MacLean is a firm believer in the participation of New Zealand companies so that value is captured by New Zealanders, and has demonstrated that locally based services can in fact be advantageously placed to service OG&M exploration and production activity.

As much of the infrastructure needed to support heavy-duty oil and gas exploration is currently imported as needed, the opportunity for 'more UNIMARs' clearly exists. The key aspect of business cases like UNIMAR's is ensuring that a minimum level of baseline activity exists to support investment decisions.

**from Stepping Up – Options for developing the potential of New Zealand's Oil, Gas and Minerals Sector, McDouall Stuart, June 2009.*

The Unimar example provides good insight to investment planning to identify a gap in the New Zealand market for input services that, if filled locally, would give rise to a competitive advantage over foreign competitors. It made sense for the consortium to step out to provide tug services but it should be recognised that Unimar already was in the offshore service support market and the acquisition of the AHTS was a natural step further in its capability development.

Infrastructure Service Providers

The business of large scale petroleum infrastructure service providers relies on significant capital investments and the receipt of petroleum products into that infrastructure over a period for fees that are sufficient to repay capital. Usually the infrastructure in some way adds value to the product received – either by transporting it to market (transmission, storage, tanker) or by processing it into a more valuable product (methanol, fertiliser, electricity). It is this added value that provides the basis for a profitable investment.

Investment in infrastructure as part of a Government – iwi partnership has been reviewed with approval by the Māori Economic Development Taskforce.⁷¹ The investments are typically long term, inter-generational, with a predictable revenue stream. Investment in privately held infrastructure, such as that common to the petroleum sector, has the same attributes.

In the petroleum sector, infrastructure ownership may be either linked with participation in the field for which the infrastructure was built to service (e.g. Cheal processing facilities) or built by a third party who buys the field's output (e.g. Methanex). Infrastructure owned and operated by field participants often becomes stranded capital. This is so because the asset is de-risked once operational and capital tied up in the asset is not making the return expected of an E & P investment. Often it may be sold to a specialist infrastructure company. The infrastructure company acquires the existing infrastructure and agrees to provide some or all of the production, processing, refining or other functions in return for a per barrel tariff – essentially a lump sum monetising of the investment in the infrastructure on the basis that production throughput over the remaining life of the user fields will return the infrastructure investor's capital outlay with an uplift reflecting its required rate of return. The structure releases capital for investment in new, higher risk, E & P projects that attract consequential higher returns. The infrastructure provides the owners with a stable, predictable utility type of investment. Case Study #11 describes how infrastructure may transfer to a specialist operator.

Case Study #11: Infrastructure Management : Enbridge pipelines

Enbridge Inc, a North American pipeline owner/operator, agreed to buy Shell's Gulf of Mexico gas gathering and gas transmission business. The sale was stated to be part of Shell's ongoing program to grow its upstream business. Shell had interests in 11 gulf pipelines in operation or under construction. After the deal completed, Shell's exploration and production business retained contracted long-term access to the pipelines as an Enbridge customer.

In New Zealand, the Vector and Māui pipeline systems were both constructed, respectively, as part of a dedicated E & P development, Kapuni and Māui. Over time as production from both fields declined it was clear that capacity available in the facilities could be opened up for use by 3rd parties on a 'common carrier' basis whereby any 3rd party could ship its gas in either system on similar terms to other users, even the owners. Both are now subject to regulated rates of return and transmit gas throughout the North Island. The Vector system has recently been placed on the market for sale.

Meanwhile, Shell's subsidiary, Energy Infrastructure Limited, owns tank storage and wharf facilities near the Port of Taranaki, storing and transshipping the majority of New Zealand's oil and condensate. Other facilities, such as LPG units and gas processing facilities are spread across Taranaki. Once separated from the permit holders, these infrastructure assets, and others like them, provide a stable predictable source of tariff revenue for so long as their input product is being produced.

Case Study #12 : Infrastructure Management - Māui pipeline

The Māui Pipeline is New Zealand's largest high pressure transmission pipeline. It runs 307km from the Oaonui Production Station (south of New Plymouth) to the Huntly Power Station (south of Auckland) in the North Island of New Zealand. The pipeline is made of steel and ranges in diameter from 750mm to 850mm. It traverses through remote areas and across some of New Zealand's most inhospitable terrain.

The pipeline commenced life as part of the upstream E & P facilities of the Māui owners, carrying Māui gas through to customers in the North Island. However, since 2004, the pipeline has been operated as a 'common carrier' shipping gas from Māui and other gas fields in Taranaki as a gas utility rather than an E & P business. There are currently 12 different parties who ship gas through the pipeline accounting for approximately 80% of New Zealand's gas supply.

⁷¹ See *Iwi Infrastructure and Investment* Māori Economic Development Taskforce, May 2012.

Whilst the ownership of the pipeline remains with the Māui owners, Shell, OMV and Todd, by virtue of their management company, Māui Development Limited, it is operated by three independent operators, the Commercial Operator (Transact), the System Operator and the Technical Operator (both Vector).

The pipeline is subject to regulated rates of return on its approved capital asset base, earning approximately \$22 million annually. These types of assets have been attractive investments for risk averse investment funds. They provide low risk, long term and predictable returns. Of particular interest to Māori if investing in this type of asset is the added opportunity to participate in the provision of maintenance services which accounts for the major annual technical operating costs. Assets such as these need regular servicing, integrity monitoring and sometimes labour intensive modifications.

Small Business Service Providers

For smaller, more localised Māori businesses, opportunities to participate in petroleum sector activities are more limited without the requisite skills and equipment. The 'constructive' dialogue envisaged under the Petroleum Programme has the capacity to improve the opportunities whether they be for input or output services. The Todd – Otaraua Hāpu partnership is an example of an input service being delivered by an hāpu with extant capability in the general service required. A downstream corollary might be the trucking of condensate by hāpu owner-drivers funded by oil company contracts but contracted to larger, recognised transport companies, who are content to secure the business. Hidden opportunities such as these will only become visible with a good measure of willingness by the permit holder, hāpu and, associated service provider. The effect on incumbent businesses will also need to be considered.

8. Conclusions

Whilst participating in the petroleum sector should not be ruled out, we conclude that Māori interests would best be served in the short to medium term by focusing on service sector activities as opposed to participating as permit holders. The high level reasons are:

- Investment in E & P activities is high cost and high risk and accordingly does not meet iwi investment criteria. The management of these risks will require financial strength and expertise that could only be achieved through changes to the current regulatory regime or a broad collective iwi initiative. Whilst neither should be ruled out over time, there are opportunities within existing iwi capabilities that can be facilitated by Government.
- E & P activities are at odds with many Māori at the grassroots level and would be politically challenging for iwi leaders at this time.
- The ability to provide support to iwi as permit participants under the current legislative and policy framework is limited.
- Exercising *kaitiaki* responsibility as a permit holder, amongst a joint venture, is more limited. A more effective means already exists under the regulatory framework.

Conversely, investment in services that support the petroleum sector has many immediate attractions:

- Māori are already service providers to various sectors and adapting to service the petroleum sector may be viewed as a natural expansion of current business.
- Investment by Māori in the service sector fits more naturally with iwi investment criteria and is in line with opportunities identified by the Māori Economic Development taskforce.
- Māori preferential tax position could give a competitive advantage when building a 'backlog' of work and might facilitate a partnership with a local or international specialist service provider
- Industry have already shown willingness to involve local Māori groups in their operations. Building on this goodwill would be good for Māori, local businesses and reinforce the industry's social licence to operate.
- There is potential to incentivise permit holder behaviour to achieve desired outcomes, such as greater participation of affected hāpu/iwi in permit activities, by using tools such as Guidance and codes of practice.

The service sector provides a broad suite of opportunities to a wide range of skilled and unskilled workers providing more opportunity to iwi membership to achieve economic independence, in line with aspiration set out in *Strategy to 2040*.

9. Proposals

We set out our proposed next steps for consideration.

9.1

Proposal #1: Government to signal to industry that inclusion of affected iwi/Māori in permit operations is viewed as a best practice outcome

Government might consider adding criteria, as part of the technical evaluation, to applications under a Block Offer to commitments by the applicant to obtain a cultural impact assessment (CIA) at appropriate stages of the proposed work programme. This could be outlined in Invitation for Bids for subsequent Block Offers and include government expectations of the CIA's content.

In parallel, Government might develop further 'Guidance Notes' for the industry in regards to its expectations surrounding engagement with affected hāpu/iwi. These could be incorporated into the petroleum regime so that applicant's for permits will understand that the engagement of affected hāpu/iwi is an expectation of the regulator and their involvement in permit operations is a best practice outcome.

More analysis would be needed to develop the content of a 'best practice' CIA and understand the boundaries within which the Guidance could operate.

9.2

Proposal #2: Government and industry to develop a non-binding Code of Practice in regards to engagement by permit operators with affected hāpu/iwi

Industry might consider the development of a non-binding code of practice that addresses the engagement of permit participants with affected hāpu/iwi with a view to creating mutual opportunity identification that could lead to greater participation by affected hāpu/iwi in permit operations.

Compliance with the Code could be seen as a 'best practice' standard and could be a helpful benchmarking tool for local body and marine regulators under applicable legislation. It could also be interwoven with the Guidance developed under Proposal #1.

9.3

Proposal #3: Government and Iwi to develop pathways for greater iwi investment in petroleum sector activities

Iwi interests might undertake an inventory of extant skills and resources available and identify investment opportunities in petroleum sector services where such skills and resources may be applied. Support for this initiative could be achieved using the mechanisms described in Proposals #1 and #2 to encourage iwi collaboration with existing service providers..

9.4

Proposal #4: Iwi to test their appetite to partner with other iwi to obtain sufficient scale to enter the upstream exploration market in multiple petroleum basins.

Māori interests might consider the potential for iwi to collaborate in a joint vehicle that could build technical capability and lead to investment across multiple rohe as a permit holder in partnership with one or more international oil companies..

9.5

Proposal #5: Formation of working group, in line with the Business Growth Agenda, to develop proposals set out herein and report to the Māori Economic Development Advisory Board and MBIE.

The forum envisaged in the Business Growth Agenda – Natural Resources Report December 2012 with Māori and the private sector to discuss natural resources opportunities might take responsibility for progressing Proposals #1 - #4 as part of the broader economic development conversation.⁷²

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