

New Zealand's International Scorecard

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Abstract

With the integration of the Fletcher Challenge Energy portfolio into the Shell Petroleum Mining Company, Shell has become the largest producer of Oil and Gas in New Zealand. As the only major oil company with significant Exploration and Production interests in New Zealand, Shell has a unique perspective on New Zealand's E&P industry. Our interest in New Zealand is directly related to both the attractive business environment and our belief that significant exploration potential is possible in one or more of New Zealand frontier basins.

The New Zealand business environment is attractive in many dimensions. As a global company, we try to focus our investments where there is a strong alignment between the values of the country that we are investing and our corporate values, which are reflected in our general business principles. This of course must be coupled with the presence of attractive investment opportunities. New Zealand has both the alignment Shell is looking for and attractive exploration and development opportunities.

In the wake of the reduction in expectation reserves in the Maui field all of the New Zealand industry stakeholders will need to quickly adjust to a new playing field if we are going to avoid a national gas shortfall in the next few years. Shell is prepared to do our part to help secure New Zealand's energy future. We are aggressively working with our partners to accelerate Pohokura development in addition to ramping up our evaluation of the exploration potential in the region.

The biggest challenge New Zealand faces is the reality of international competition for E&P resources. As an industry, we face shortages in technical staff, equipment, and most of all investment capital. Most companies who survived the oil price plummet of the mid 1990's have developed more disciplined approaches to making investments. As a result, New Zealand will be forced to compete on a global scale for available resources in order to meet the gas challenge in the post Maui world.

Introduction

Shell Exploration and Production is one of the largest private Oil and Gas businesses in the world. We operate in 46 different countries across all regions of the globe. Our operations vary from small single string exploration ventures to huge exploration and production operations such as Nigeria and the USA. Shell operates more oil and gas production than any other non-OPEC company. We are unique among the largest multinational E&P companies in that we have a much broader international portfolio. It is our portfolio combined with our experience operating in diverse cultures, which is the source of our strength.

While New Zealand represents a very small portion of our E&P portfolio, it is nonetheless important. In the Asia Pacific region, New Zealand represents an island of stability both economically and politically. In addition, New Zealand is a

relatively unexplored country in regards to Oil and Gas. Less than 500 exploration wells have been drilled in the countries numerous basins since 1900¹. This is a very small fraction of the thousands of wells drilled in more mature exploration provinces such as the Gulf of Mexico or the North Sea.

Shell's interest in New Zealand dates back to one of our earliest exploration ventures in 1911. We began a larger exploration program in the 1950's with the formation of the Shell/BP/Todd Joint Venture. The joint venture formed an operating company to execute the partnership's exploration, development and operational plans. With the departure of BP from New Zealand in 1990, our operating company became Shell Todd Oil Services (STOS). Our first production in New Zealand came from our 1959 discovery of Kapuni. This was followed in 1969 with the discovery of the giant Maui gas field. STOS has played an increasingly important role in finding, developing, and producing oil and gas in the

Taranaki basin. With Shell's successful acquisition of Fletcher Challenge Energy, we are now the largest holder of reserves in New Zealand.

New Zealand Alignment

Shell has long seen New Zealand as a good place to do business. This has had as much to do with the natural alignment between Shell's values and New Zealand's culture, as it has to do with Exploration and Production opportunities. In the increasingly complex global world, large multinational companies, must manage many different types of risk. As a result, when Shell decides to enter a country we look long and hard at the alignment between our values and a country's values. Shell's business principles require our operating companies to balance our responsibilities to shareholders, customers, employees, business partners, and society.

Our responsibility to our shareholders is clear. We must protect their investment in the Shell Group and at the same time provide an acceptable market rate of return. We accomplish this through various means, but primarily by ensuring all investments pass a series of reviews. The review process looks at the technical challenges of a project as well as the financial bottom line. In addition, the projects are screened to be sure we have solid alignment with our sustainable development goals. Even after a project passes these quality reviews, it must rank high enough against all other projects to get funded. It is in this capital allocation process that many good projects are rejected to allow us to invest only in the very best projects worldwide. In order to compete for its share of Shell's global exploration funding, Shell Petroleum Mining will need to develop prospects that are world class in both materiality and profitability. Only prospects the size of Maui or perhaps Pohokura will be able to meet the materiality test. Therefore, Shell will focus its resources only on those basins that have the potential for large hydrocarbon accumulations.

Our responsibility to our customers is to develop and provide products and services that offer value in terms of price, quality, safety and environmental impact. In the Exploration and Production business this means that we find and develop oil and gas fields to provide energy to both industry and consumers. In countries where oil and gas is not plentiful, it means that we will endeavor to build oil and LNG importation facilities to provide the needed energy.

Our responsibility to our employees is to respect human rights; provide good and safe conditions of work, good and competitive terms and conditions; develop and make the best use of human talent and equal opportunity employment; involve employees. We take this responsibility very seriously because we recognize that the success or failure of our projects is related to our ability to attract and retain the best engineering and scientific talent in the world. One of our key concerns when we enter a new venture is whether we can attract talented people to work in the venture. New Zealand has proven to have a strong supply of talented local

staff. Many have risen to leadership roles in both STOS and Shell Petroleum Mining, as well as in Shell globally.

Our responsibility to business partners is to seek mutually beneficial relationships with contractors, suppliers and joint ventures – and promote application of the Shell principles. In most of our ventures around the world, we have one or more business partners. Working with partners allows us to spread business risk and also leverage the special strengths that each partner brings to a project. In all of our ventures we rely on the skills of contractors and suppliers to help design and execute our projects. In many areas, New Zealand has some of the best contractors available anywhere in the world. Unfortunately the relative isolation of the country's small Exploration and Production industry results in substantially higher costs for drilling rigs and other major equipment.

Probably our most important responsibility is to society in general. We strive to conduct business as a responsible corporate member of society; observe the laws of countries; express support for human rights, give proper regard to HSE; contribute to sustainable development. In some parts of the world this is also our toughest responsibility. In every country we do business in it is our policy to stand by our values and to try to influence positive change. New Zealand is ranked among the best in the world for countries where honesty and integrity are cultural values. Kiwis also place strong value on health, safety and protecting the environment. These are strong values in Shell globally and STOS locally. In fact, STOS was one of the first Shell Operating Units to receive ISO 14001 certification for environmental performance.

In all five of these areas, New Zealand has scored very well in the past. Certainly, the culture, business climate and political stability of New Zealand are among the very best in the world. Our business in New Zealand has thrived both because of the natural alignment we have, but also because of the solid Oil and Gas investments we have made here.

New Zealand's Challenges

The oil and gas industry today faces a significant shortage of trained staff, rigs and equipment, and even investment capital. In the mid 1990's the industry faced a crisis. As oil prices dropped to the \$10/bbl range, many recent growth investments were challenged in terms of their long-term profitability. The lasting legacy of this low oil price period is the requirement for capital discipline.

In Shell this discipline is achieved through our capital allocation process. In simple terms, every project from every corner of the world must compete for its capital against all other projects. Gone are the days where a country chairman can survey just his or her local projects and choose which ones to invest in. What this means is that projects must not only be aligned with our business principles, but they must also meet very stringent financial criteria. As you have already seen, New Zealand ranks extremely well against our business principles. The challenge is for our New Zealand investments to rank amongst the biggest and best projects in

the world. The good news is that in the past two years our New Zealand operations have been very successful at attracting capital for both exploration and development projects. Clearly projects like Pohokura are capable of meeting the capital allocation challenge. Unfortunately some of the smaller projects such as Maari, while profitable, may not compete in terms of scale and total investment return in Shell. In those cases where profitable projects do not pass our capital allocation screening, we will divest or farm out our interest to others. Our experience shows that many of our smaller competitors will find these opportunities very attractive.

With the recent announcement by Maui Development Limited of the anticipated downgrade of Maui gas reserves, New Zealand is forced to face the future earlier than expected. With overall energy demand projected to grow at 1.1% p.a. and Maui gas running out as early as 2007, New Zealand will be forced to find new sources of gas². The real difficulty lays in the fact that new gas fields such as Pohokura take some 5-7 years to come on stream after discovery. This is one reason why Shell and our partners, are moving aggressively to accelerate the development of Pohokura to enable first production in 2005. While Pohokura is a large field it is only about one quarter the size of Maui. What this means is that the New Zealand exploration community will need to find additional Pohokura sized or larger fields in the next few years or the nation will face a significant gas shortfall in the 2007 – 2009 time frame

Exploration Opportunities

Fortunately, New Zealand has several potentially attractive frontier and deepwater basins, which have yet to be extensively explored. In order to assess the exploration potential of these new areas, Shell has commissioned two major regional studies for 2002. They will focus on the potential for hydrocarbon formation in the Haast Basin on the west coast of the south island and the deepwater Taranaki. Our Asian-Pacific Exploration Team, which is located in Houston, will perform the deepwater Taranaki study. This study will be done in Houston to draw upon Shell's world-class deepwater exploration and development skills. It is the Taranaki deepwater, which we believe could hold the most potential for finding large hydrocarbon accumulations.

Importance of Technology

Technology will also play a greater role in the future of the New Zealand Oil and Gas industry. If we are to find indigenous gas supplies of sufficient size and quality, we will need to look in areas that are more remote, and technically challenging. Shell is prepared to bring its vast technical resources to bear in our efforts to find new gas for New Zealand. We will utilize many new tools, but among the key ones are: expandable tubulars to cut the time, cost and environmental impact of wells; 4D reservoir imaging – integrating data to improve understanding of the subsurface; Smart wells to manage production in the bore hole, giving more production with fewer wells; and under balanced

drilling to drill faster and produce higher productivity wells. If competitive projects are identified, we will be prepared to combine the resources of our best in class New Zealand operating company (STOS) with our Global Deepwater Services organization, and other Shell global capabilities, to quickly evaluate and if competitive develop deepwater discoveries. As the only major oil company currently operating in New Zealand, we believe we are uniquely positioned and qualified to find and bring new frontier developments to the market quickly.

What is required of New Zealand

As already stated, New Zealand ranks near the top of the international scorecard as far as culture, business terms and conditions, and stability. The quality of the technical and business resources available to the industry is also excellent. The biggest challenge is to be able to successfully compete with other countries for investment capital. The quality of the geological opportunities is fixed by nature, but the terms and conditions under which they are evaluated are not. The successful exploration and development of new gas in the Taranaki deepwater and other frontier basins will likely require investments in the billions of dollars category. These types of investments require larger investment returns to offset the inherent risk of exploring in frontier areas. In order for New Zealand to compete globally, it will need keep its current terms and conditions aligned with those developed in other countries such as the United States to encourage frontier oil and gas investment. Time to drill/drop decisions will need to be extended, and the size of exploration blocks will need to be enlarged, but most of all gas prices will need to migrate toward the global norm. This means that the current average New Zealand wellhead price of less than \$US1.00 will need to increase to at least \$US3.00.

Summary

As the largest reserves holder in New Zealand, Shell remains committed to utilizing its world-wide technical and financial strength to search for new indigenous gas supplies to meet the nation's need post Maui. With recent subsurface modeling indicating reduced remaining recoverable reserves in Maui, Shell and our partners are moving quickly to find and develop additional indigenous gas supplies to meet the needs of our customers. We are prepared to leverage our strong global technology and operating capabilities to explore the frontier deepwater basins in New Zealand. With best in class frontier terms and conditions, and globally competitive gas prices New Zealand will be well placed to compete for the scarce investment capital needed to meet the nation's future energy needs.

1. New Zealand Ministry of Economic Development Petroleum Web Page
2. New Zealand Energy Outlook to 2002, February 2000, Ministry of Economic Development.