

Questions & Answers

Commonly asked Community questions



Answers to Frequently Asked Questions

We regularly meet with business owners, iwi, environmental groups, community leaders and others in the community. The following questions and answers reflect discussion and questions that are commonly raised.

Let us know if you have other questions you'd like answered – we welcome your feedback. Email us at enquiries@nzog.com

About New Zealand Oil and Gas

Who is New Zealand Oil and Gas?

New Zealand Oil & Gas is a values-based business established in 1981. With around 14,000 shareholders on both the NZX and ASX, and a market capitalisation of around \$200 million, we are New Zealand's largest listed explorer. Our people live here because of a commitment to our country's way of life. We bring our New Zealand values to all that we do and want to be held to account if we are not seen to be upholding this.

We are members of the Petroleum Exploration and Production Association of New Zealand (PEPANZ), along with most of the hydrocarbon producing companies in New Zealand. PEPANZ, as the industry body, promotes the interests of petroleum producers and explorers operating in New Zealand.

As an association, PEPANZ aims to secure conditions that enable member companies to operate safely, sustainably and profitably. The Association also seeks to increase community and government understanding of the upstream petroleum industry by publishing information about the sector's activities and economic importance to the nation.

Find out more about PEPANZ at pepanz.com

Who are our joint venture partners?

Typically both exploration and production activities are undertaken with joint ventures between two or three industry companies. Our activities are no different, and we enjoy strong relationships with our New Zealand and international joint venture partners. By partnering we are able to explore and develop prospects we consider commercially attractive, and also spread our risk across a wider portfolio of production and exploration activity – a prudent investment strategy. We look for partners that share our vision and value set, and who will support the strong relationships we have established in our areas of focus. We consider their safety and environmental records and, naturally, their commerciality. We usually find that our partners make similar considerations, and in this way, strong business partnerships are forged. Check www.nzog.com/where-we-are-exploring for more detail on our joint venture partnerships.

What are New Zealand Oil and Gas's vision and values?

New Zealand Oil & Gas aims to create and sustain an enduring New Zealand oil and gas company at the heart of a successful oil and gas sector.

Our Vision built around this purpose is to become THE New Zealand Oil and Gas Company, by

- creating value through investment and management of our assets; and
- being the partner of choice for communities and industry; and
- operating at industry best practice to ensure business performance, safety and environmental expectations are met.

Our values are Integrity and Trust, Communication, People and Passion, and Commercial Focus. You can find out more about our values on nzog.com

Environmental and Community Aspects

Who regulates what in NZ's offshore waters?

Oil and gas exploration and production is tightly managed at every step with approximately six different agencies involved at different times across the process. Maritime NZ's website provides a useful outline of which agency is responsible for different activities in our waters. www.maritimenz.govt.nz/Environmental/Exploration/default.asp

A summary of these agencies and their roles is provided below:

- New Zealand Petroleum and Minerals (NZP&M): Manages the country's oil, gas, mineral and coal resources in accordance with the Crown Minerals Act 1991. It processes and monitors prospecting, exploration and mining permits. In assessing permit applications NZP&M considers an operator's technical and financial capability, compliance history and undertakes a preliminary, high level assessment of their capability and systems to meet New Zealand's health, safety and environmental legislation.
- Regional Councils: administer the coastal zone out to 12 nautical miles. Resource consent is required from a Regional Council for activities within this zone (eg drilling our proposed Kaheru exploration well, located off the coast of Patea, South Taranaki).
- Environmental Protection Agency (EPA): is responsible for managing the effects of specified restricted activities on the environment beyond the 12nm (Regional Council jurisdiction) zone, within the EEZ (Exclusive Economic Zone). It would be the EPA that would consider any applications for offshore drilling.
- Department of Conservation (DoC): is responsible for protected species and marine mammals. DoC is the key agency NZOG deals with when undertaking seismic acoustic surveys. Seismic surveys are permitted provided they comply with DoC's 'Guidelines for minimising disturbance to marine mammals from seismic survey ('The Code)'. The guidelines require independent, qualified visual and acoustic monitoring professionals are on board seismic surveying vessels to ensure that the survey follows the mitigation requirements specified in the Marine Mammal Impact Assessment (MMIA) submitted by the survey operator (eg New Zealand Oil & Gas).

- Worksafe NZ: is responsible for rules that manage the operational side, from design through construction, maintenance, operation and to site retirement.
- Maritime New Zealand: manages the marine environment in relation to waste disposal, and oil spill preparedness and response.

How would a big oil spill be managed?

In New Zealand it is the responsibility of Maritime New Zealand to manage the response to marine oil spills of any size. One of the agency's primary functions is to manage a nationwide oil spill capability through partnerships with Regional Councils, the oil industry, and overseas agencies. Through a tiered-response system there is a domestic capability to counter a spill of up to 3,500 tonnes (deemed to be a 'one in a hundred year' event). Larger events would trigger an international response.

Along with others in the industry, New Zealand Oil & Gas contributes to the Oil Pollution Levy which covers oil spill preparedness. In the event of a spill the polluter is liable for all costs associated with the response.

More information on oil spill response is available on Maritime New Zealand's website

www.maritimenz.govt.nz/Environmental/Responding-to-spills-and-pollution/Responding-to-spills-and-pollution.asp

How do we ensure environmental and social aspects of our Indonesian operations meet our New Zealand values?

We bring our New Zealand values everywhere we go, whether it be working in Taranaki or working with our international partners.

Our interests in Indonesia are managed through our locally based joint venture partners. Working with these partners we contribute to the corporate responsibility aspects of development proposals. In entering partnerships we ensure a good match with our own values, and develop strong working relationships to ensure we maintain these values.

See www.nzog.com/where-we-are-exploring/indonesia

How are we investing in our local communities?

NZOG is a proud supporter of science in our community, including two feature sponsorships:

- Sponsor of 'Dinosaur Footprints' national touring exhibition touring the country, currently at Nelson Provincial Museum.
- Sponsor of PhD research in to the habitats of the Great White Shark population around New Zealand.

We have also supported primary teachers from our community areas to attend the Sir Paul Callaghan Science Academy science course.

Exploration and Production - Technical

Do drilling permits expire if not activated?

Permits are issued by New Zealand Petroleum and Minerals, and do expire if not activated.

Prospecting permits, required for seismic surveys, are valid for up to four years. Exploration permits, required for example for exploratory drilling or seismic surveys – essentially the further work required to identify the presence of commercially recoverable oil and gas – are valid for up to 15 years.

If not activated, or if no longer wanted, permits are returned to the government.

What is a seismic acoustic survey?

Seismic surveys are undertaken to find out more about the geological structures of a survey area, providing important clues as to the presence of oil and gas reservoirs.

Seismic waves are generated from a survey vessel, intermittently releasing pulses or bubbles of compressed air which generate a low frequency sound wave that travels towards the sea floor and is reflected back to surface receivers. The speed with which waves return to the surface provides valuable information about the properties of the Earth's subsurface – i.e. the potential for hydrocarbon deposits. Site surveys are weather dependent, and therefore vary in duration with typical ranges of 30-70 days.

More information on seismic surveys, including the regulation process and other environmental effects, is available on the New Zealand Petroleum & Minerals website: www.nzpam.govt.nz/cms/iwi-communities/government-role/offshore-seismic-surveying

Do seismic surveys harm marine life? How is this managed?

One of the main issues around seismic surveys is whether the practice causes harm to marine mammals or other marine life. There is a large body of research in to this issue, with wide ranging results including for example observations of mammals moving away from and towards operating vessels.

In New Zealand the Department of Conservation (DoC) is charged with managing the impact of seismic surveys on mammals, which it does through its 2013 Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations (the Code).

The objectives of the Code are to:

- minimise disturbance to marine mammals from seismic survey activities;
- minimise noise in the marine environment arising from seismic survey activities;
- contribute to the body of scientific knowledge on the physical and behavioural impacts of seismic surveys on marine mammals through improved, standardised observation and reporting;

- provide for the conduct of seismic surveys in New Zealand continental waters in an environmentally responsible and sustainable manner; and,
- build effective working relationships between government, industry and research stakeholders.

The Guidelines were updated in 2012 and 2013 to reflect developments in international best practice, and are being reviewed in 2015. More information is on DoC's website www.doc.govt.nz/our-work/seismic-surveys-code-of-conduct

What is 'Deep-sea' drilling?

Deep-sea, or deep-water drilling is offshore drilling for oil and gas at significant depth. There is no one 'rule' for what is deemed to be 'deep' but the general understanding is 'deep-water' is beyond conventional depths of approximately up to 300m, to around 1000m, with ultra-deep water being depths of 1.5kms or more. These concepts are fluid as technology, expertise and experience develops making previously unconventional depths more commonplace and less technically challenging.

Venture Taranaki's *The Wealth Beneath Our Feet* report notes that as at 2015, over 200 offshore wells have been drilled in New Zealand, of which 10 have been in deep water, without any significant incidents.

More information on deep sea drilling is available on www.nzpam.govt.nz/cms/iwi-communities/government-role/deep-sea-drilling

If a discovery was made in the Great South or Canterbury Basins, how would it be developed?

There are a number of scenarios that could occur if a commercial discovery was made in the Great South or Canterbury Basins.

The two most likely options for production are either through:

- FPSO (Floating Platform Storage and Offloading) where the resource would be processed at sea and shipped to market. In this scenario service hubs would develop onshore (eg helicopters, supply ships, accommodation and other services); or
- Establishing a platform well head with a seabed-laid pipe to shore, connected to an onshore processing plant (such as exists at Kupe, South Taranaki).

These options are based on very long lead times, for example anywhere between 5-30 years from initial exploration well to establishing a production site.

How are wells and permits named?

New Zealand Petroleum and Minerals (NZP&M) manage the allocation of exploration permits, under the annual Block Offer. Permit numbers are numbered sequentially starting from 51000 (this includes Petroleum, Minerals and coal permits).

Wells are named by the permit operator, typically after discussion amongst joint venture partners and possibly after consultation with the local community or iwi. Well names must be unique, so NZP&M check whether a name has already been used and if it has, request an alternative.

Benefits

What are the benefits of the oil and gas industry to the country?

Oil is New Zealand's 4th largest export (after dairy, meat and wood), with a value of around \$2.2 billion.

Venture Taranaki's *The Wealth Beneath Our Feet* publication documents in detail the contribution that the oil and gas sector has made to Taranaki, and to the country as a whole, and addresses a range of issues relating to the industry. This can be found on Venture Taranaki's website www.taranaki.info/news/files/1405.pdf

New Zealand Petroleum & Minerals, within the Ministry of Business, Innovation and Enterprise also outlines benefits of the oil and gas industry to New Zealand on its website www.nzpam.govt.nz/cms/iwi-communities/industry/benefits-to-NZ

How does the royalties scheme work? Do royalties stay in the regions?

Oil and Gas producers are required to pay royalties to the government. This is calculated as the higher of either 5% of net sales revenue or 20% of accounting profit. The industry also pays company tax.

Royalties are paid to the government. While regions may receive the benefits of the government purse through improvements in infrastructure, health or education, there is no direct return to the region of origin.

Over the last few years the industry has contributed around \$300-400 million in royalties per annum from petroleum. However this figure is linked to oil price, and with the current low oil market the royalty payment has reduced in 2015 to approximately \$278 million, with projections for 2016 reducing further to approximately \$220 million.