

Secretariat
Environment Select Committee
Select Committee Services
Parliament Buildings
WELLINGTON 6160

10 October 2018

Submission of New Zealand Oil & Gas Limited Crown Minerals (Petroleum) Amendment Bill

SUMMARY

- New Zealand Oil & Gas is the only oil and gas exploration and production company publicly listed on the NZX.
- We submit that the Bill should not proceed.
- We support the government's ambition to achieve a net zero energy system and submit that the best tool to achieve that goal is through a carbon budget and carbon emissions pricing.
- No reputable research or analysis supports a ban on offshore exploration as a means of achieving the net carbon zero goal.
- The ban on exploration is likely to worsen global emissions.
- The Bill fails to distinguish between types of fossil fuel. Low-carbon, job-rich, natural gas from New Zealand is a transition fuel that helps to replace high carbon alternatives such as coal bed methane, Canadian tar sands, Venezuelan bitumen and fracked shale gas in the global energy system.
- We operate the highly prospective Barque prospect, east of Oamaru. Though not directly affected by the ban, the Bill makes development of this prospect materially less likely.
- Independent research demonstrates that lost opportunity from failure to develop Canterbury and Great South basin prospects may seriously impact regional development and cost the government revenues that could be used to achieve policy priorities such as funding essential social services.
- The Amendment is inconsistent with the purposes of the Act. There is no pressing need to pass the Amendment immediately. Therefore, even if the government is determined to stop further offshore exploration, the appropriate mechanism would be to review the Act as a whole rather than piecemeal.
- The manner of the policy announcement and time available for submission are unacceptable, and mock modern constitutional norms and parliamentary processes.
- The policy-making process has not been evidence-based, and the capricious-style of decision-making damages New Zealand's reputation for international investment. This imposes avoidable costs on all New Zealanders.
- If parliament opts to proceed with the Bill, it should be amended as follows:
 - The duration of existing permit commitments should be extended, so that operators have a fair opportunity to respond to the decision and the way it was made.
 - A sunset clause should apply, and the clause should lapse subject to a recommendation from the climate commission.
 - An exception to the ban should exist where a permit joint venture can establish that development of a discovery would be likely to displace higher-carbon sources in the global energy mix.

ABOUT US

New Zealand Oil & Gas is an oil and gas exploration and production company started in 1981 and listed on the NZX. It is the only oil and gas company listed on the NZX.

It has production interests in the offshore Kupe gas field and production facility offshore in South Taranaki, as well as in Indonesia through our ASX-listed subsidiary Cue Energy.

The company has exploration interests in the Canterbury and Great South Basins, onshore Taranaki, offshore Australia and in Indonesia.

We operate the highly prospective Barque prospect in the Clipper permit, east of New Zealand's South Island, which is New Zealand's largest announced hydrocarbon prospect.

1. THE AMENDMENT BILL

New Zealand Oil & Gas submits that the Bill should not proceed.

Introducing the Bill, the Minister claimed its passage would,

"begin the transition to a low-carbon economy that will create jobs and ensure prosperity."

Passage of the Bill will not achieve any of those objectives.

In the following sections we will make the case that the Amendment, if passed, is more likely to increase than to decrease carbon emissions.

Further, it will damage opportunities to create jobs and ensure prosperity. We will show that tens of thousands of jobs and tens of billions of dollars may be lost as the ban on exploration will likely cost considerable opportunities. This will most affect regional New Zealand.

We will submit that the process followed has violated norms of good policy-making, and evidence-based policy, as well as New Zealand's established constitutional best practice. This ground alone is sufficient for the committee to recommend that the Bill should not pass, and that the executive should go back and begin the policy development process again.

We submit that better policy alternatives exist to achieve the stated objective than the policy contained in the Bill. However, if the Bill is progressed, we recommend certain amendments to better give effect to the government's intention that existing permit rights should not be affected.

2. THE AMENDMENT IS MORE LIKELY TO INCREASE THAN TO REDUCE CARBON EMISSIONS

No evidence has been presented, nor has any reputable analyst demonstrated, that passage of the Bill will reduce carbon emissions.

Not a single clause or mechanism in the Bill restricts or reduces New Zealand's carbon emissions.

Analysed in a global context, which is the only sensible framework to analyse climate change policy, the Bill is more likely to increase than to reduce carbon emissions.

In plain language, this occurs because industries that would use natural gas from New Zealand will not switch to renewables in New Zealand, but instead will relocate to other jurisdictions where they will use higher carbon sources, or they will use higher carbon fuels in New Zealand. As a matter of economics, supply restrictions do not interfere with this process.

For example, consider a hypothetical gas condensate discovery in Canterbury. Gas condensate is a light, high-value product that is commonly used in products such as jet fuel and plastics. No alternative renewable substitute currently exists. If New Zealand does not utilise its own natural resources, the world will not stop using jet fuels and plastics. It will source the necessary petroleum products elsewhere.

An independent study of the economic impact of a discovery in Canterbury (discussed in section 4 below) demonstrates that a methanol manufacturing plant would likely be the first industry established utilising gas piped to shore. If the gas is not discovered in Canterbury, and no methanol manufacturing plant

opens, that won't reduce overall global carbon emissions. Instead, the methanol will be manufactured elsewhere because petrochemical demand, not availability of supply, determines how much methanol is manufactured (and petrochemical demand has been growing for decades and is forecast to continue to grow).

Oil is a globally traded product. Supply from New Zealand is such a tiny fraction of global production that it does not affect the global price. (To be clear about the relative scales: the volume of production from New Zealand is not large enough to affect global prices; but it is large enough to affect the New Zealand economy). Since the global price is unaffected by New Zealand production, reducing the quantity of future oil supplied from New Zealand makes no difference to global demand.

Banning exploration from New Zealand is likely to affect New Zealand's total demand only for very light-impact activities such as LPG barbecues and gas-heated domestic showers (for which renewable alternatives exist) - but these activities are such a small component of total energy use that they are more than offset by **increased** emissions in other parts of the energy system, such as industrial heat.

We submit that banning supply to future domestic LPG barbecues while displacing industrial heat, petrochemicals and manufacturing processes to high carbon jurisdictions is perverse policy.

3. ECONOMIC INSTRUMENTS ARE A BETTER TOOL TO ACHIEVE THE POLICY OBJECTIVE

Paul Romer and William Nordhaus won the Nobel Prize for economics on 8 October 2018. The award recognised their insight that people systematically underestimate the potential to discover better ways to do things.

As the Nobel award was made the same day that the Intergovernmental Panel on Climate Change issued its latest report, Mr Romer's views were sought about whether his insight applied to climate policy. Indeed, Mr Romer asserts, it does;¹

"If we start encouraging people to find ways to produce lower carbon energy, everybody's going to be surprised at the progress we'll make as we go down that path.

"If you just commit to a tax on the usage of fuels that directly or indirectly release greenhouse gases, and then you make that tax increase steadily in the future ... people will see that there's a big profit to be made from figuring out ways to supply energy where they can do it without incurring the tax."

We submit that a price instrument working on the demand side, as Mr Romer suggests, is the best regulatory tool to reduce carbon emissions. New Zealand already has a policy-tool available, designed by a previous Labour-led government: The Emissions Trading Scheme. Combined with a carbon budget, which should be set independently by the Climate Commission, an emissions trading scheme will function to reduce emissions within New Zealand in the most economically efficient way and incentivise creative ways to reduce carbon emissions.

Emissions trading systems (and environmental taxation) are recommended by the OECD as one of the most efficient and effective policy tools.²

"Emission trading systems contributes to economic efficiency by facilitating emission reductions where it is cheapest to achieve them."

In contrast, the OECD's comprehensive and authoritative Database on Policy Instruments for the Environment,³ an inventory of environmental tools globally, presents no evidence of a ban on exploration for petroleum being an effective climate reduction tool anywhere in the world.

1 <https://www.cbc.ca/radio/asithappens/as-it-happens-monday-edition-1.4843029/nobel-prize-winning-economist-says-carbon-taxes-are-the-solution-to-climate-change-1.4854639>

2 <http://www.oecd.org/environment/tools-evaluation/emissiontradingsystems.htm>

3 <https://pinedatabase.oecd.org/Default.aspx?isid=81ba25d1-0f4c-4c74-a950-e888eb272fd4>
www.nzog.com

We note that the Productivity Commission's Low Emissions Economy report of August 2018⁴ did not recommend a ban on new exploration as a policy tool [or indeed any upstream supply-side intervention]. That was a 620-page report that studied in detail virtually every serious policy alternative. To pass this Amendment would be to legislate a policy that is not recommended within a lengthy suite of potential solutions considered by the Commission.

4. ECONOMIC IMPACT

BARQUE

We are able to make a reasonable estimate about the potential impact of the ban on new exploration permits.

In 2017, New Zealand Oil & Gas, on behalf of the PEP52717 [Clipper] joint venture, commissioned an independent regional economic impact study. Consultants MartinJenkins worked with Beca, Methanex, Coogee, Ravensdown, Fonterra, PrimePort Timaru and others to assess likely industrial development that would result from a large Canterbury basin discovery, where no gas market currently exists. From the detail supplied by industry participants the study was able to calculate the likely economic impact on the regional and national economy.⁵

It found that, in a gas discovery case, methanol and fertiliser manufacturing would relocate from overseas to onshore Canterbury. The Timaru Port would be redeveloped, and dairy drying plants would be likely to convert from coal to low-carbon, job-rich, natural gas.

The study found that under a scenario in which gas was brought to shore:

- Over the 12-year construction phase about \$4 billion would be spent in the region, generating \$3.7 billion in GDP (\$307m annually) and creating over 37,000 jobs (3,100 annually). \$6.3 billion would be spent in New Zealand, generating over \$7 billion in GDP (\$591m annually) and creating over 68,000 jobs (5,740 annually).
- Over 20 years of ongoing operations, about \$333 million would be spent each year in the region, generating \$269 million in GDP and creating 1,980 jobs. \$411 million would be spent each year in New Zealand generating \$446 million in GDP and creating 3,220 jobs.

These sums dwarf so-called 'Just Transition' funding.

It is important to record that Barque is only one of five drill-ready prospects in the Canterbury-Great South basins. A discovery in any of them would likely produce comparable economic impacts. Similarly-sized impacts would be expected in prospects that will not now be identified because of the ban. That is, even if Barque is successful, other opportunities will be foregone and the scale of those lost opportunities can be estimated by extrapolating from the Barque study.

Furthermore, while we welcome the government's confirmation that it will allow exploration in existing permits and development to be consented under existing rules, we wish to be crystal clear that the 12 April announcement about new exploration permits has had a chilling effect on potential investment in existing exploration permits.

Since being awarded the permit, the Clipper joint venture has spent NZD\$18 million on geological and geophysical acquisition and studies and global farm out endeavours. Our farm out efforts have involved multiple trips to present and exhibit globally at international conferences and, since 2017, contact with hundreds of oil and gas companies. Many have progressed to signing confidentiality agreements and conducting their own reviews of the Barque prospect.

⁴ <https://www.productivity.govt.nz/inquiry-content/3254?stage=4>

⁵ A copy of the study is available here: <https://www.nzog.com/dmsdocument/333>
www.nzog.com

Since the 12 April announcement, some of those companies have declined to progress further. We present a sample of their comments:

- Looks interesting but given state of play in NZ at the moment I don't think we will get much airplay internally. So will pass on this one. [Global major]
- I'm sorry to inform you but we excluded New Zealand from our area of interest for new ventures after series of opportunities review and recent political issues. [Large regional conglomerate]
- It's been an education for me seeing the reaction by even discussing NZ here! the NZ government has thrown a spanner in the works stopping future exploration licences. [Major international company]

Ministers have spoken about economic impacts as if they are distant and decades away. The reality is that effects have already occurred.

MBIE ANALYSIS

The cost of the Amendment has been modelled by MBIE⁶, and its assessment was reviewed by Treasury and industry experts Woodward Partners, all of whom found the MBIE analysis credible.

Ministerial comments disparaging this analysis and disputing its relevance are disappointing. If Ministers have an alternative valuation, it should be set out and defended so that industry and the wider community can test it. Once a bill is before the House it needs to be assessed on the basis of generally accepted, public, defensible assessments of policy cost. Then participants can debate whether the policy initiative is worth the cost.

We have identified no credible challenge to MBIE's assessment. The models used are comparable to the models the industry would use to analyse an investment decision. Uncertainty is inherent in the industry, and to disparage modelling on the basis of that uncertainty misunderstands the key economic considerations and standard industry best practices.

MBIE's Regulatory Impact Assessment models the fiscal cost to the Crown in a range from \$1.8 billion (P90) to \$26.7 billion (P10) in today's dollars. The P90 case models a low level of exploration, low oil price and high carbon price. The P10 case models high exploration, high oil price and a high carbon price.

In practice the industry makes its economic decisions on the basis of P50 modelling - that is the level at which the outcome is as likely to be higher as lower.

[In the P50 case, the real cost in today's dollars is \\$9.8 billion.](#)

To put \$9.8 billion in perspective, in 2017 the prime minister estimated⁷ that 290,000 New Zealand children were living in poverty. \$9.8 billion is enough to give each of them \$33,000. In the P10 scenario the government would have enough revenue to give each of them nearly \$100,000.

\$9.8 billion is nearly double the sum that the government claimed is sufficient to lift 88,000 children out of poverty.⁸

Because the product is mostly exported, royalties received by the government are not revenues switched from other parts of the New Zealand economy - the revenue is all new.

For an example of the impact of these revenues in helping to achieve beneficial outcomes for New Zealand, consider the effects of Norway's oil and gas revenues.⁹

6 <https://www.mbie.govt.nz/info-services/sectors-industries/natural-resources/oil-and-gas/overview-crown-minerals-act-regime/pdf-document-library/regulatory-impact-statement-proposed-changes-to-the-crown-minerals-amendment-act-1991.pdf>

7 <https://www.radionz.co.nz/news/political/338701/labour-would-lift-100-000-children-out-of-poverty-by-2020-ardern>

8 <https://www.newshub.co.nz/home/politics/2017/12/labour-introduces-major-5b-plan-to-halve-child-poverty.html>

9 <https://www.norskpetroleum.no/en/production-and-exports/exports-of-oil-and-gas/>
www.nzog.com

Norway produces around 2% of global oil demand. Its oil revenues have delivered the world's highest standard of living and a future fund that will provide for the Norway population for centuries. It is also helping to fund Norway's uptake of electric vehicles.

5. THE AMENDMENT IS POOR LEGISLATION

The Amendment is inconsistent with the purpose of the Act.

The purpose of the principal Act, the Crown Minerals Act 1991, states:

Section 1A(1) The purpose of this Act is to promote prospecting for, exploration for, and mining of Crown owned minerals for the benefit of New Zealand.

By banning exploration, the Bill amends the Act to conflict with the purpose. Reversing the stated purpose of an Act by amending a section of it is exceptionally poor legislative tradecraft.

A consensus approach to legislating might have seen the government negotiate a pause in new exploration permits while it worked through the Climate Commission to review policy across the entire energy sector. There is, after all, no urgent need to pass the Amendment, nor to ban offshore exploration.

Even if the government is determined to stop further offshore exploration, the appropriate mechanism would be to review the Act as a whole rather than piecemeal, and legislate a fresh framework consistent with the purpose of the Act.

6. THE POLICY PROCESS IS FATALLY FLAWED

The process of devising and legislating the policy is unacceptable.

The process followed has mocked modern constitutional norms and parliamentary processes. It has been capricious, deprecated the role of evidence, science, economics and community participation in decision-making, and it has avoidably increased sovereign risk.

New Zealand has established world class constitutional and parliamentary processes for devising policy, review of proposals by professional advisers, and consultation through participatory parliamentary processes. These processes exist to improve democratic participation, strengthen the quality of New Zealand's institutions - and to facilitate challenge out of a convention that policy outcomes are improved through discourse. Democratic practice depends on the openness of executive government to the possibility that it may be wrong, and that ideas may be improvable.

Those best-practice policy processes have not been respected. Defects in the development of this policy include:

- The policy-making process was not evidence-based. Evidence was not sought.
- The policy objective is poorly stated, and no connection exists between the vague objective and the policy instrument.
- Policy is not supported by official advice, by the independent Commission established to study low carbon policy, nor by international practice. The limited advice that was sought was then ignored.
- The policy announcement was not taken through normal Cabinet processes.
- Risks, costs and alternatives were not considered by Ministers before decisions were made.
- The Bill has been introduced under urgency, when there is no relevant legislative urgency.
- Submitters have been given two weeks to review the Amendments, seek evidence the government did not obtain itself, and prepare submissions.

Capricious decision-making damages New Zealand's reputation as a destination for international investment. It affects other business investment as other industries ask 'could this happen to my sector?'

This sovereign risk imposes avoidable costs on all New Zealanders. That in turn increases the cost of capital for investment in New Zealand. In other words, anyone who wishes to invest in New Zealand - the government, New Zealand businesses, overseas lenders and funders - must pay more, either directly or in higher opportunity costs, which reduces the sum available to be spent on things that provide benefits. Every New Zealander, including future New Zealanders, is left worse off not just because of the substance of this legislation, but because of the way that decisions have been made. These costs could have been avoided.

The appropriate parliamentary response is to direct the executive to go back and begin the process again.

7. AMENDMENTS

If parliament opts to proceed with the Bill, it should make amendments that achieve a better balance between the objectives, better democratic policy review and access to resources within existing permit.

A. The duration of existing permit commitments should be extended.

Permit holders have been impacted by the policy announcement in avoidable ways. It will be difficult to reverse perceptions that New Zealand is not welcoming even for utilisation of existing permits, but it is the government's stated policy that it wishes to see development in existing acreage. The Minister stated in her speech in the House introducing this Amendment, that,

"it guarantees the protection of existing permits, as we promised to do—permits that cover over a hundred thousand square kilometres of existing acreage. If a discovery is made that is commercially viable, existing permit holders will still be able to apply for a subsequent petroleum mining permit in accordance with the Crown Minerals Act as it was prior to this bill coming into force. Existing rights and existing privileges under the existing Crown Minerals Act will be preserved."

While this confirmation is welcome, it will be difficult to achieve in practice without a fair opportunity to recover from the impact of the decision and the way it was made.

- **We request the Committee to insert a new clause amending Section 36 of the principal Act, to extend all existing commitment dates by three years.**

B. A sunset clause should apply.

The Bill should include a clause providing that Part 1 [at least clauses 4-7] will lapse unless a specific recommendation to retain that Part is made by the Climate Commission within two years of its establishment.

This proposal would mean that the Bill's policy would be studied by the Climate Commission and then remain in effect only if the Commission considered the evidence demonstrated that it makes a worthwhile, cost-effective contribution to carbon reduction.

This proposal would reconcile the Bill with claims that it is an effective carbon reduction policy tool.

If parliament is confident that the policy makes a difference to climate change, and that difference can be demonstrated, then a clause such as this would provide credible evidence and a mechanism to avoid a mistake.

C. Provide for an exception to avoid using higher carbon sources elsewhere.

An exception to the ban should exist where a permit joint venture can establish that development of a discovery would be likely to displace higher-carbon sources in the global energy mix.

As the policy objective is to respond to climate change, the Bill should not restrict exploration that makes a positive difference to global carbon emissions.

Therefore, the Bill should be amended to include a clause providing for new permits to be granted where operators can persuade the Ministry, EPA, or other competent authority, that a discovery would be likely to produce resources that displace higher-carbon fuels.

8. CLIMATE CHANGE AND PETROLEUM

For the purpose of avoiding doubt: New Zealand Oil & Gas accepts that carbon emissions cause climate change and supports realistic and urgent steps to reduce carbon emissions. We are not against climate measures, nor against efficient economic instruments applying to production from the oil and gas sector.

We support the government's ambition to achieve a net zero energy system and to progressively reduce global net carbon emissions.

Our submission is about the right policy tool to achieve the outcome. Objectors argue as follows: Climate change requires a reduction in carbon emissions. Petroleum use emits carbon. Therefore banning exploration for petroleum in New Zealand will help to reduce climate change. This conclusion does not follow from the premises.

We support the Zero Carbon legislation process. We have publicly stated our support for the process of establishing the Zero Carbon legislation, the principle of a carbon budget and the use of an emissions trading scheme as the main policy tool to achieve the net carbon zero policy target.

Oil and gas has an important part to play in the energy transition and will continue to have important role to play in a carbon neutral economy.

Natural gas remains the best thermal fuel to support renewable electricity generation and the transition to a lower carbon energy system. It provides affordable and reliable baseload supply to cover shortfalls in generation from hydro, wind, and solar.

Natural gas is a lower-carbon, cost-effective alternative to higher emissions fuels such as coal, bitumen and tar sands for those energy uses where no viable and economic alternative technology currently exists.

Sector-specific bans are likely to induce inefficient energy sources that cost more, produce less energy and result in higher emissions per dollar spent.

The best way to reduce carbon emissions is a tradeable emissions price. When combined with a carbon budget, a tradeable price incentivises the most economically efficient use of emissions and the lowest cost alternative technologies.

NEW ZEALAND OIL & GAS LTD

