

# Submission on the Crown Minerals (Petroleum) Amendment Bill

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Greenpeace New Zealand Incorporated

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## Introduction

Greenpeace of New Zealand Incorporated (**Greenpeace**) is an independent non-governmental organisation that works to protect the environment. A major focus for Greenpeace is working to prevent dangerous climate change.

Greenpeace supports the primary goal of this Amendment to the Crown Minerals Act (**Act**), being to put into legislation the Government's decision of 12 April 2018 (**Decision**) not to award any new petroleum prospecting, exploration or mining permits for climate change reasons.

The Government has an obligation to protect its citizens from climate change. Legislating and end to the offer and award of new petroleum permits is an essential step towards protecting the people of New Zealand, as well as people globally, from catastrophic climate impacts.

The science on climate change is alarming. Governments have a very short window within which to take the action that will have a chance of averting dangerous climate change. On 8 October 2018, the Intergovernmental Panel on Climate Change (**IPCC**), the leading body of scientific research on climate change established by the United Nations, released its summary of the latest climate science, which outlined the steps required to limit temperature rise to 1.5°C above pre industrial levels (**IPCC Report**). It found that we must halve global carbon dioxide emissions (**CO<sub>2</sub>**) caused by burning oil, gas and coal by 2030, and have net zero carbon emissions by 2050.<sup>1</sup> That not only means that the expansion of fossil fuel industries must end immediately, but that we must also make significant and immediate changes to the way we power our societies so that we are cutting existing production and demand in half in the next ten years.

Greenpeace has campaigned to stop the expansion of the oil and gas industry in offshore New Zealand now for eight years. During this time, tens of thousands of New Zealanders have joined this call, including iwi and hapū up and down the country, prominent climate scientists, and the biggest local councils in the country. New Zealanders have already made clear that they support and end to oil and gas exploration outside of this submission process.

We would like to be heard by the Select Committee in support of this submission.

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<sup>1</sup> IPCC (2018) The Summary for Policymakers of the Special Report on Global Warming of 1.5°C (SR15). Intergovernmental Panel on Climate Change. Retrieved from: [http://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf)

## Climate science supports an oil and gas exploration ban

Ending new oil and gas exploration in New Zealand is consistent with the action necessary to avert dangerous climate change as confirmed in the IPCC Report.

The IPCC Report states that 1.5°C is the threshold for dangerous interference with the climate system and beyond this we are facing catastrophic impacts for civilisation, including loss of coastal towns and cities, increased and more extreme weather events, and widespread displacement of people. It further states that limiting global temperature rise to 1.5°C would require “rapid and far-reaching” transitions in land, energy, industry, buildings, transport, and cities. Global human-caused emissions of CO<sub>2</sub> would need to fall by 45 percent from 2010 levels by 2030, reaching ‘net zero’ around 2050<sup>2</sup>

In the words of Hans-Otto Pörtner, Co-Chair of IPCC Working Group II:

*“Every extra bit of warming matters, especially since warming of 1.5°C or higher increases the risk associated with long-lasting or irreversible changes.”<sup>3</sup>*

Even aiming for a 2°C target requires us to keep the majority of oil, gas and coal reserves in the ground. According to McGlade and Ekins (2015):

*“Our results suggest that, globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2°C.”<sup>4</sup>* [Noting that this relates to a 2°C target - these assertions are all the more pointed if we are to stay below 1.5°C degrees]

Regarding oil exploration McGlade and Ekins further noted:

*“Policy makers’ instincts to exploit rapidly and completely their territorial fossil fuels are, in aggregate, inconsistent with their commitments to this [2 °C] temperature limit. Implementation of this policy commitment would also render unnecessary continued substantial expenditure on fossil fuel exploration, because any new discoveries could not lead to increased aggregate production.”<sup>5</sup>*

The science is clear: If the world is to avoid catastrophic climate change, we cannot burn most of the oil and gas that has already been discovered - let alone search for new reserves.

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<sup>2</sup> IPCC (2018) The Summary for Policymakers of the Special Report on Global Warming of 1.5°C (SR15). Intergovernmental Panel on Climate Change. Retrieved from: [http://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf)

<sup>3</sup> Ibid.

<sup>4</sup> McGlade, Christophe, and Paul Ekins. "The geographical distribution of fossil fuels unused when limiting global warming to 2 C." *Nature* 517.7533 (2015): 187.

<sup>5</sup> Ibid.

New reserves of oil and gas will both undermine the transition to clean energy, and undermine the possibility of achieving international climate targets.

If we are to achieve the international commitments made under the 2015 Paris Agreement<sup>6</sup> of limiting warming to 1.5°C by the end of the century, all countries must cut their emissions. It is vital for governments to show leadership in taking bold transformational steps. Jim Skea, a co-chair of the IPCC Working Group on Mitigation, said the IPCC Report had presented governments “with pretty hard choices.”

*“We have pointed out the enormous benefits of keeping to 1.5C, and also the unprecedented shift in energy systems and transport that would be needed to achieve that,” Skea said. “We show it can be done within laws of physics and chemistry. Then the final tickbox [is political will](#). We cannot answer that. Only our audience can – and that is the governments that receive it.”<sup>7</sup>*

The New Zealand Decision to stop the search for new oil and gas is an example of the sort of leadership the world needs and this Decision should be cemented in legislation.

### **Public support for the oil and gas ban**

A large number of New Zealanders support ending oil and gas exploration and mining in New Zealand.

With the backing of local communities, New Zealand’s biggest councils have opposed the annual Block Offer process, which has seen hundreds of thousands of square kilometres of New Zealand land and sea being made available for companies to explore for oil and gas.

Auckland Council, Environment Canterbury, Christchurch City Council, Dunedin City Council, Kaikōura District Council and Gisborne District Council are among those that have publicly submitted in the annual Block Offer consultation that exploring for more oil and gas is not in the interests of New Zealanders and that they do not support it. These submissions ought to be a matter of public record, but can be provided if that would be of assistance to the Select Committee.

Iwi and hapū up and down the country have also come out in strong opposition to oil exploration in their customary waters. Recently, an unprecedented alliance of more than 80 hapū on the East Coast rallied against oil exploration by Statoil (now Equinor) and Chevron<sup>8</sup>, and an alliance of Taranaki hapū and local groups formed against the seismic survey ship, *Amazon Warrior*,

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<sup>6</sup> The Paris Agreement was adopted by 195 nations at the 21st Conference of the Parties to the United Nations Framework Convention on Climate (UNFCCC) in December 2015.

<sup>7</sup><https://www.theguardian.com/environment/2018/oct/08/climate-change-what-you-can-do-campaigning-installing-insulation-solar-panels>

<sup>8</sup> <https://www.toko.org.nz/petitions/norway-statoil-is-not-welcome-in-our-waters>

prospecting for Austrian oil company, OMV.<sup>9</sup>

More recently, a national gathering of Māori leaders came to an historic agreement to oppose all seismic testing and oil exploration in the waters of Aotearoa. The Iwi Chairs Forum passed the resolution to seek amendments to the EEZ Act to give effect to this opposition.<sup>10</sup>

Hundreds of thousands of New Zealanders have marched, signed petitions, and lobbied their local representatives to try and stop fossil fuel expansion in New Zealand. Their actions represent the more than two-thirds of New Zealanders who believe the Government should invest in building an economy that's based on clean energy industries.<sup>11</sup>

A petition in 2012 of 142,000 called on Parliament to “permanently stop all plans to open up New Zealand's coastal waters to offshore oil drilling.”<sup>12</sup> In March 2018, the Prime Minister personally received a petition of 45,000 calling for an end to oil exploration, drilling and seismic testing.<sup>13</sup> Also in March 2018, over 60 notable individuals and associations, including scientists, health professionals, iwi leaders, academics, businesspeople, politicians, unions, journalists and members of the arts community, put their name to an open letter (published in the Dominion Post on 21 March), encouraging the Prime Minister and her Government to turn her “passion into action” on climate change by banning oil and gas exploration.<sup>14</sup>

The Council of Trade Unions and other unions have expressed their support for the new exploration ban<sup>15</sup> and advocated for a just transition to non-fossil fuel industries for workers.<sup>16</sup>

### **Recommendations on the Crown Minerals (Petroleum) Amendment**

In terms of the specific wording of the Amendment, we submit that climate change should be clearly expressed as the reason for this Amendment as well as being made a mandatory consideration for the Minister when considering matters relating to existing exploration permits. This will enable the Minister to take into account essential climate issues until such time as a full review of the Act can occur.

We further submit that the Amendment in its entirety must be consistent with the international science on climate change and New Zealand's international commitments to action. This means that as well as clearly legislating that there will be no new oil and gas prospecting, exploration or mining permits offered or awarded offshore, the Amendment should go further and:

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<sup>9</sup> <https://www.toko.org.nz/petitions/halt-seismic-testing-of-taranaki-coast>

<sup>10</sup> <https://www.radionz.co.nz/news/te-manu-korihiki/345129/iwi-leaders-unanimously-oppose-seismic-testing>

<sup>11</sup> Colmar Brunton environmental survey results, September 2014.

<sup>12</sup> [https://www.parliament.nz/en/pb/petitions/document/50DBHOH\\_PET3124\\_1/petition-of-simon-boxer-on-behalf-of-greenpeace-new-zealand](https://www.parliament.nz/en/pb/petitions/document/50DBHOH_PET3124_1/petition-of-simon-boxer-on-behalf-of-greenpeace-new-zealand)

<sup>13</sup> <https://www.newshub.co.nz/home/politics/2018/03/government-actively-considering-greenpeace-petition-to-end-oil-and-gas-exploration.html>

<sup>14</sup> <https://act.greenpeace.org/page/21078/1/1?locale=en-NZ>

<sup>15</sup> <http://www.union.org.nz/5441-2/> and <https://www.nbr.co.nz/article/country-needs-proper-plan-transition-oil-industry-be-p-214826>

<sup>16</sup> <https://www.union.org.nz/wp-content/uploads/2017/10/JustTransition.pdf>

1. Expressly state that there will be no new petroleum prospecting, exploration or mining permits granted anywhere offshore or onshore in New Zealand. This must include onshore Taranaki, or, at a very minimum, limit the availability of new permits in this region to the period 2018-2020, to properly reflect the Decision.

2. Revoke all existing petroleum prospecting and exploration permits. At an absolute minimum, the Amendment must make clear that existing exploration permits will not be extended or changed to allow further time for permit operators to meet permit conditions. It is inconsistent with efforts to meet a 1.5°C target to further enable any new discoveries of oil and gas.

We also propose an additional immediate amendment to repeal sections 101A-C of the Act. These sections are inconsistent with the democratic rights of freedom of expression and peaceful protest and were introduced following undemocratic process.

We have tried in this submission to limit our comments to those immediately before the Select Committee (with the exception of the repeal above). However, we support a full review of the Act, which the Government has signalled will occur at a later stage, and respectfully submit that a full review is necessary to make this legislation fit for the 21st century and bring it in line with efforts to tackle the existential threat of climate change.

The world needs pathways to transformational change away from fossil fuels if we are to avoid catastrophic warming. This is the scale of the challenge. The only way we can succeed is with clear purpose and ambitious and complete action, not half hearted measures. New Zealand must be bold and pass strong law for the sake of our precious earth and future generations.

### **Debunking the case against ending new oil and gas exploration**

We are aware of arguments being made against an end to new oil and gas exploration, primarily by the oil industry, and seek briefly to address those arguments below. For the reasons below, we respectfully submit that the Select Committee ought to exercise caution in relying on these arguments. They are flawed, dangerous, and made by an industry that has spent decades and millions of dollars denying climate change and lobbying to delay climate action, and who have economic interests in continued oil and gas exploration.

### **The economic case**

There is a specious argument which states that we must not end offshore exploration because it will lead to the loss of potential future economic value. This is a case commonly made by the oil industry, and is an excuse for inaction on climate change so that the industry may continue to profit. The argument is that oil and gas resources are too valuable, and we are too dependent on them, for us to stop searching for and burning fossil fuels.

The economic value the oil and gas industry has added to the New Zealand economy is much smaller than it is held out to be. Since 1970 New Zealand has received 4.1 billion in royalties from the oil and gas industry, including from the producing Maui field in Taranaki.<sup>17</sup> The projected economic impact of offshore oil and gas exploration is extremely speculative and ranges from 1.2 bn to 23.5 bn, with scientists saying it impossible to calculate.<sup>18</sup> No new find of significant oil and gas reserves has been made outside Taranaki in all the years that exploration has been encouraged.

By comparison, the cost of not decreasing fossil fuel emissions and dependency domestically and globally is orders of magnitude greater than the any value New Zealand would receive from the fossil fuel industry. A Ministry for the Environment report has estimated that property damage from flooding and coastal erosion would cost around \$19 billion.<sup>19</sup> Westpac has recently estimated that New Zealand will be \$30 billion better off if we respond to climate change sooner rather than later.<sup>20</sup> These are conservative figures. The true cost of failing to mitigate climate change would be existential. The worst costs of climate change - species extinction, ecological collapse and water and food shortages and extreme weather events leading to human displacement and death - are immeasurable and irreversible costs.

It is axiomatic that if we are to phase out fossil fuels, in order to tackle climate change, that future potential value in that industry will be lost. It does not matter how much potential there is, the alternative is a risk we simply cannot afford to take. However, there will be, and must be, development of new clean energy production and industries to replace the extinguished fossil fuel industry with new supplies of energy, jobs and economic value.

It is necessary for the flourishing of the new clean energy industries to strongly indicate a political intention to end the fossil fuel industry. If we wait for clean energy to compete on a level footing with the might and energy-system advantages of the fossil fuel industry, then we will fail to make the rapid transition necessary to avert dangerous climate change.

Examples from around the world show that investing in clean energy is smarter than continuing to support outdated energy. The International Renewable Energy Agency has found that solar creates twice the number of jobs per unit of electricity produced, compared to coal or gas.<sup>21</sup> In the U.S, solar jobs are growing up to 12 times faster than the rest of the economy.<sup>22</sup>

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<sup>17</sup>Minister of Energy Megan Woods Interview 25 Sept 2018 retrieved at [https://www.radionz.co.nz/audio/player?audio\\_id=2018663983](https://www.radionz.co.nz/audio/player?audio_id=2018663983)

<sup>18</sup> Ibid.

<sup>19</sup> MfE (2017) Coastal Hazards and Climate Change: Guidance for local government. Retrieved from: [https://www.greens.org.nz/sites/default/files/CH\\_Guide\\_Draft4-webversion.pdf](https://www.greens.org.nz/sites/default/files/CH_Guide_Draft4-webversion.pdf)

<sup>20</sup> Westpac NZ (2018) Climate Change Impact Report. Retrieved from: <https://www.westpac.co.nz/assets/Sustainability/Westpac-NZ-Climate-Change-Impact-Report.pdf>

<sup>21</sup> IRENA (2017). Renewable Energy and Jobs Annual Review 2017. Retrieved from: [http://www.irena.org/documentdownloads/publications/irena\\_re\\_jobs\\_annual\\_review\\_2017.pdf](http://www.irena.org/documentdownloads/publications/irena_re_jobs_annual_review_2017.pdf)

<sup>22</sup> EDF (2017) Now hiring: The growth of America's clean energy and sustainability jobs. Retrieved from [http://edfclimatecorps.org/sites/edfclimatecorps.org/files/casestudy/the\\_growth\\_of\\_americas\\_clean\\_energy\\_and\\_sustainability\\_jobs.pdf](http://edfclimatecorps.org/sites/edfclimatecorps.org/files/casestudy/the_growth_of_americas_clean_energy_and_sustainability_jobs.pdf)

## The gas transition myth

The oil industry suggests that natural (fossil) gas should be developed as a 'bridging fuel' to displace coal. However, evidence shows convincingly that expanding fossil gas will negatively affect our ability to meet climate targets and transition towards a clean energy system. It also shows that alternatives are entirely feasible with the right policy signals.<sup>23</sup>

Emissions from gas plants are significantly higher than from a renewable energy plant of similar generation output. The key point is that when fossil gas is combusted, CO<sub>2</sub> is still produced in relatively large quantities.

Rather than just replacing coal use, new gas can also displace and delay renewable energy. This risk is high somewhere like New Zealand with already large renewable and low carbon sector and less coal to replace. With respect to the US fracking boom, McJeon et al (2014) found that an abundance of cheap gas has the perverse effect of displacing zero carbon energy as well as coal.<sup>24</sup> These conclusions mirror earlier findings by the Energy Modeling Forum at Stanford University.<sup>25</sup>

Reaching 100% renewable electricity in New Zealand is technically feasible. To provide grid reliability, especially in dry-hydro periods, a back-up generation plant could be geothermal or fuelled by stored biogas, or biomass (possibly in a modified existing coal plant) using stored wood chips. Smarter combinations of renewables, demand management and battery storage will also reduce risk. Genesis, the largest gas user in the electricity sector has itself publicly stated that it is unconcerned about gas supplies impacting electricity generation, following the Government's announcement banning offshore oil and gas.<sup>26</sup>

Process heat, even at high-grade temperatures, can be provided by renewable resources including geothermal heat (where the demand is close to the fields), hydrogen produced from renewable energy (as is planned for a new Swedish steel plant), or biomass from forest or agricultural residues.

Any short term cost savings from increased use of new gas supplies would likely delay development of renewable energy projects, produce more greenhouse gases, and lead to greater costs of energy supply in the longer term.

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<sup>23</sup> For example see Oil Change International and others "Debunked: The G20 Clean Gas Myth" retrieved at [http://priceofoil.org/content/uploads/2018/06/debunked\\_g20\\_eng\\_07\\_web.pdf](http://priceofoil.org/content/uploads/2018/06/debunked_g20_eng_07_web.pdf); and Professor Ralph Sims on the New Zealand situation at <https://theconversation.com/why-new-zealand-should-not-explore-for-more-natural-gas-reserves-91544>

<sup>24</sup> McJeon, Haewon, et al. "Limited impact on decadal-scale climate change from increased use of natural gas." *Nature* 514.7523 (2014): 482-485.

<sup>25</sup> Huntington, Hillard. "EMF 26: Changing the Game? Emissions and Market Implications of New Natural Gas Supplies Report." Energy Modeling Forum (2013).

<sup>26</sup> New Zealand Herald (2018) "Genesis Energy sure of gas supply into 2030s" Retrieved from: [https://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=12115833](https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12115833)

The same arguments apply internationally: substituting one fossil fuel with another, albeit less polluting fossil fuel, will hinder our ability to meet climate targets and transition towards a clean energy system. Any suggestion that by exporting gas from New Zealand we will help other countries to lower their climate (coal) emissions is flawed and entirely speculative. All countries must do their bit to cut their emissions and with the current exception of the United States, are committed to doing so under the Paris Agreement. We must assume that they will take their own steps to do this and not speculate on how they will achieve their targets.

### **Domestic emissions**

There is another oil industry argument which asserts that stopping offshore exploration will have no impact on global or domestic emissions or that it will actually lead to an increase in emissions due to dirtier production overseas or the importation of offshore fossil fuels.

This presumes that we will not phase out and replace our current fossil fuel sources but will only substitute existing domestic sources of fossil fuels, such as gas, with other offshore sources or dirtier sources such as coal. Of course we must phase out our use of fossil fuels, at every level of society, as all countries must. The end of new oil and gas exploration cannot exist in a vacuum of status quo energy use, indeed it was an essential part of the Decision that by closing this door on an oil and gas future we would begin the essential transition to replacing these fuels with clean, renewable sources of energy.

The argument that New Zealand's emissions are irrelevant on a global scale also seems to suggest that, because we can't control the actions of other countries, who may be dirtier producers than us, we should therefore do nothing. This is the logic by which the oil industry argue for changing nothing.

The practical reality is that if everyone waits for others to act then no one will ever act. We can never control the actions of others, we can only control our own action; it is that by which we will be held to account. All countries have an independent obligation to reduce emissions, as committed to under the Paris Agreement and a Court in the Hague has just confirmed.<sup>27</sup>

### **IPCC Report shows the need for action is more urgent than ever**

The IPCC Report confirms that the wide-ranging impacts of climate change will be much worse at 2°C of warming than at 1.5°C.

The Paris Agreement committed countries to collectively respond to the threat of climate change by “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels”.

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<sup>27</sup> *Urgenda Foundation v Kingdom of the Netherlands*, reported at <https://www.theguardian.com/environment/2018/oct/09/dutch-appeals-court-upholds-landmark-climate-change-ruling>

We know know that aiming for 2°C is not good enough. The latest IPCC Report warns that there may be a huge difference in climate change impacts in a 1.5°C world compared to 2°C world. For instance, by 2100, global sea level rise would be 10 cm lower with global warming of 1.5°C compared with 2°C. The likelihood of an Arctic Ocean free of sea ice in summer would be once per century with global warming of 1.5°C, compared with at least once per decade with 2°C. Coral reefs would decline by 70-90 percent with global warming of 1.5°C, whereas virtually all (> 99 percent) would be lost if we hit 2°C. Leading experts have said in response to the IPCC Report:

*“The report shows clearly the far-reaching and severe impacts of climate change beyond 1.5°C – from the loss of Arctic sea ice to the demise of tropical coral reefs, and rapidly escalating risk of climate extremes. Exceeding 1.5°C means very grave risks for people and vulnerable systems around the globe”* - Dr Carl Friedrich-Schleussner, Head of Science and Impacts (Climate Analytics) said.<sup>28</sup>

*“The IPCC confirms that it is feasible to hold warming to 1.5°C, or very close to it, throughout the 21st Century, but that there is no time for complacency. It also confirms that the Paris Agreement commitments fall far short of what is needed,”* - Dr Michiel Schaeffer, Director of Science (Climate Analytics).<sup>29</sup>

## **Conclusion**

The Decision to ban new oil and gas exploration on 12 April 2018 was the right decision. It has been further confirmed as necessary by the latest science on climate change in the IPCC Report. Through Amending the Act the Government shows its true commitment to action on climate change and binds that resolve into law.

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<sup>28</sup> <https://climateanalytics.org/latest/ipcc-shows-1-5c-warming-limit-is-feasible-inaction-will-have-major-consequences/>

<sup>29</sup> Ibid