

# Consultation submission form

## A Draft Minerals Strategy for New Zealand to 2040

MAY 2024 Submitter information

The Ministry of Business, Innovation and Employment (MBIE) would appreciate if you would provide some information about yourself. If you choose to provide information in the “About you” section below it will be used to help MBIE understand the impact of our proposals on different occupational groups. Any information you provide will be stored securely.

### A. About you

Name: Prof Victoria Mabin

Email address: Privacy of natural persons

### B. Are you happy for MBIE to contact you if we have questions about your submission?

Yes

No

### C. Are you making this submission on behalf of a business or organisation?

Yes

No

If yes, please tell us the title of your company/organisation:

### D. The best way to describe your role is:

Academic/researcher

Independent expert (please specify below)

Consultant (please specify below)

Business owner (please specify below)

Tradesperson (please specify below)

Student (please specify below)

Industry group (please specify below)

Other (please specify below)

Industry participant (please specify below)

Prefer not to say

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- I would like my submission (or identifiable parts of my submission) to be kept confidential and have stated my reasons and ground under section 9 of the Official Information Act that I believe apply, for consideration by MBIE.

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## A Minerals Strategy for New Zealand to 2040

MBIE is developing a *Minerals Strategy for New Zealand to 2040* to enable us to take a long-term, strategic approach to how we develop our mineral resources. This does not include petroleum which already has an advanced regulatory regime.

Minerals play an essential role in New Zealand's economic growth through high-paying jobs, Crown royalties, direct positive impact in the regions where mining takes place, and through export revenues. Minerals are also critical inputs into products that are necessary for other sectors to thrive, including the use of aggregates in construction and infrastructure.

Minerals will continue to play a major role in New Zealand's export-led economic growth and contribute to our economic functions, but the minerals sector faces some risks and challenges. These include lack of complete understanding about our minerals ecosystem, supply risks, social license, and a regulatory system that needs to be improved to enable investments.

These challenges require a long-term strategic approach to ensure that resource development for our economic prosperity happens in a responsible manner. Developing a minerals strategy is a fundamental first step in ensuring that we have a strategic framework for resource production.

The Minerals Strategy Discussion Document seeks feedback on the context and design of the strategy. It discusses key strategic issues, challenges and opportunities facing the minerals sector in New Zealand, and how we could address them.

The strategy is built on three key pillars, **Enhancing prosperity for New Zealanders**, **Demonstrating the sector's value**, and **Delivering minerals for a clean energy transition**, and identifies specific actions the Government could take to position the minerals sector to deliver value in an environmentally responsible manner.

Please see the Minerals Strategy Discussion Document for more information.

### Questions for the consultation

1. Are the strategic pillars of the Draft Strategy (**Enhancing prosperity for New Zealanders**, **Demonstrating the sector's value**, and **Delivering minerals for a clean energy transition**) suitable or is there more we need to consider?

Yes, they are suitable                       No, they are not suitable                       Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice? Or is there more we need to consider?

The pillars sound reasonable on the surface, but there are a number of issues with them: firstly they are very open to interpretation – eg 'prosperity for New Zealanders' to me means for all New Zealanders equally benefiting from developments. However this does not match the operationalisation of the pillar. It becomes clear that there is little thought to ensuring fairness both intergenerationally and across the population. One can also question whether prosperity is a desirable aim. Many people in the areas in which mining is likely would value their peaceful clean surroundings more than any increase in GDP. None of this is captured in any of the pillars, and therefore they are not a good set.

The burying of the social & environmental impact within the pillar “Demonstrating the sector’s value” prioritises economic value over major, wide-ranging risks of ramping up mining in NZ.

Evaluating the net social & environmental benefits of mining is fraught with subjective measures. How does one balance the cost of toxic tailings, polluted waterways, habitat loss, biodiversity loss, health & safety, and the social cost of locking in communities into dying industries like coal (plus the opportunity cost of not providing realistic options for a just transition away) with the benefits from the extraction? These are difficult things to quantify, and certainly not in dollar amounts. Without a clear evidence-based framework for how one would measure these costs and benefits and weigh them up against each other, this pillar is likely to lead to the overstating of benefits and understating of the significant risks of mining.

I would suggest the addition of a strategic pillar that is specifically about managing risks. In particular, it should focus on evaluating risk to various stakeholders before taking on a project, giving it the same priority as assessing the economic value of a project. This would create a more balanced strategy, that at least mitigates the negative impacts.

Also a pillar that explicitly includes maintaining our ecosystems, biodiversity etc.

The choice of minerals that we allow should be those that help us towards a zero carbon future. Coal is absolutely not one of these. New Zealand is in a lucky position to be able to increase its share of renewable energy to close to 100% in the near future, if we choose to.

Also, looking at the new minerals that are looking to be mined, while many of these may be important for the energy transition, this should not give them an automatic greenlight without careful due diligence that scientifically proves their necessity and value over the known negative impacts of mining. And clearly justifies their mining here in NZ.

2. Are the key actions the right ones to deliver on our strategic pillars, and are they ambitious enough?

- Yes, the actions are the right ones and are ambitious enough
- No, the actions are not the right ones ~~and not ambitious enough~~
- Not sure/no preference

If **No**, what else might we need to consider?

Firstly, the answer options to this question are biased and leading. I do not think the actions are the right ones, and not because I don't think they are ambitious enough. I think the actions do not achieve the strategic pillars of enhancing the prosperity of NZers, nor are they the best way of supporting a clean energy transition.

They are very narrowly focused on achieving a set of targets that can be ticked off, without considering the wider implications.

I am strongly opposed to the Fast-track Approvals Bill. This sells out NZ's precious natural resources to large overseas corporations. The undemocratic, absolute control that this bill gives to 3 MPs makes us vulnerable to corruption, in this current government but also for future governments to come. The Fast-track Approvals Bill is in no way necessary for a safe, productive, high-value minerals sector.

Secondly, I am aware of the many problems that typically occur with mining. Some of this awareness comes from supervising PhD research into gold mining in a major African country that depends on income from its minerals for its very survival. But the problems they face, even in this well-developed industry, are widespread and serious, and to think that we can have a mining experience free of similar issues is naïve in the extreme. They face supply chain leakages and value chain leakages leading to poor revenues from international companies investing in mining, low Crown royalties, coupled with ill effects of illegal artisanal mining which adversely affects communities' health and economic well-being, environmental damage including severely polluted waterways, leakage of toxic minerals which are taken up by crops, and poor wages for the locals employed in mining, to name just a few.

Hence I would call into question the statement in the brief above that:

"Minerals play an essential role in New Zealand's economic growth through high-paying jobs, Crown royalties, direct positive impact in the regions where mining takes place, and through export revenue." as these are all directly contradicted by the experience of this mining nation. NZ's mining industry is stated to make \$1.03bn currently with 5000 jobs and yielding \$21m in Crown royalties (which is just 2% of the export value). The intention is to attract international investment to double export earnings to \$2bn, hoping that this will bring in Crown royalties up to 2% of that.

The draft strategy acknowledges that the industry has significant shortcomings; These include lack of complete understanding about our minerals ecosystem, supply risks, social license, and a regulatory system that needs to be improved to enable investments. I would agree with each of these, and argue that these need to be dealt with BEFORE approving new mining operations in NZ. Fast-tracking approvals before such processes and understandings are in place is **not** a sensible, responsible or sustainable strategy.

The Fast-track approvals process is patently designed to approve applications quickly, with insufficient scrutiny or evidence, leaving too much room for unforeseen consequences. More due diligence needs to be done at the outset, before approval, rather than leaving a mess (often quite literally) to clean up later.

The argument that by mining some of these minerals ourselves, we ensure a continuity of supply of clean-energy resources/equipment, is very spurious.

Third, I am strongly opposed to the continuation or expansion of coal mining for climate reasons. There is no world in which new coal mines support a clean energy transition. This

is backed by an overwhelming scientific consensus. The stated intention (Draft Strategy p9) to ‘manage our extensive coal reserves’ runs counter to this evidence.

Fourth, I do not support seabed mining within NZ territorial waters or beyond. Since 2022, the NZ government has supported the moratorium on deep sea mining in areas beyond national jurisdiction, recognising the need for adequate knowledge and understanding of the impacts involved. <https://www.beehive.govt.nz/release/nz-backs-conditional-moratorium-seabed-mining-international-waters>

Off the Taranaki coast, hapū and iwi are strongly against seabed mining. Seabed mining threatens the ability of the marine environments to provide kaimoana and support fisheries, not just for these hapu but for the whole nation. The Draft Strategy purports to recognise the interests of Treaty partners in the protection and management of mineral resources. If that is the case, then seabed mining in these areas would be excluded outright, given the opposition expressed to such activity.

Recent discoveries of mineral-rich nodules deep in the Pacific Ocean that are releasing oxygen into the ocean through electrolysis in a little-understood mechanism, should be sufficient cause for a halt to seabed mining – we simply do not understand enough of the science to appreciate the value of such nodules. To consider mining nodules off Taranaki or elsewhere before we understand them, seems foolhardy. It could be the equivalent of the fabled killing the goose that lays the golden egg.

The Draft Strategy promises to “**find out more about deep-seabed minerals and assess the challenges and opportunities of extracting them**” (bolding mine). It should also assess the advantages of leaving them where they are to continue releasing oxygen, or whatever important role they are currently playing that we don’t understand yet. Leave them for future generations who might understand them better.

Fifth, the ocean is also our world’s largest carbon sink, absorbing 25 percent of all carbon dioxide emissions and absorbing 90 percent of the excess heat generated by these emissions. However, due to marine biodiversity loss from plastic pollution, warming waters, ocean acidification (due to excess CO2 absorption), shipping, and cruise ships, the ocean is losing its ability to do most of the work of climate action for us.

Seabed mining, which we know will massively damage the marine ecosystems, will further devastate the ocean’s ability to sequester carbon, with extremely negative impacts on global warming. New Zealand must become the solution to restoring ocean health, not a country that adds to the problem.

Lastly, the Coalition Government came in with the promise that it would make ‘evidence-based’ decisions. Decisions made to date across a broad range of portfolios have seemed to be just the opposite with many decisions flying in the face of established scientific, medical and other publicly-available evidence.

I implore you to make decisions on mining that buck this trend – please use the evidence available and respect the knowledge of locals and scientists in this regard.

The precautionary principle should be used where evidence is lacking.

### 3. Are there opportunities for our minerals sector we haven't considered?

- Yes, there are       No, there are none       Not sure/no preference

If **Yes**, what are the opportunities for our minerals sectors we should consider?

Committing to no new mines, and having strong frameworks for assessing the new minerals we extract based on how they provide value to the modern decarbonised world economy. We could sell this knowledge and be a global leader in conscious mining, recycling of metals, and a just transition from coal mining to a clean energy future.

### 4. Are there challenges for our minerals sector we haven't considered?

- Yes, there are other challenges not considered  
 No, all challenges have been considered  
 Not sure/no preference

Is there anything you would like to tell us about the reason(s) for your choice?

Environmental, human health, legal challenges, land ownership challenges.

Economic challenges: There are significant challenges faced by countries (even those who depend primarily on mining) to actually capture the potential benefits of mining. I have elaborated on some of those under paragraph 3 question 2. In my experience, and from my own research, I am aware that it is very difficult for countries to capture the potential benefits. Most of the earnings are taken offshore by the mining companies. Very little is captured by the host country. Taxes are dodged, local people poorly paid, and we are left to deal with the negative side effects.

We need to be savvy rather than naïve thinking this won't happen to us. It has already happened here, many times, over decades, and will happen again all too easily.

There are dozens of examples already in NZ of mining companies closing (often because they didn't make sufficient profit for their owners) and leaving behind significant toxic waste dumps, ponds and tailings requiring extensive remediation which falls to the government to deal with at great expense. Many are still on the toxic waste cleanup list, high up on that list, decades later, but still in the too-hard, too-expensive basket.

It is truly worrying to envisage mining activities that risk damaging ecosystems irreparably – such as the pristine and unique waters of Te Waikoropupu, with World Heritage Site status, and protected by its own water conservation order. Mining upstream risks damaging this, with a high likelihood of leaching from ponds and irreparably damaging the unique biota in the subterranean aquifer at some stage over the mine's life (until full remediation).

The economic benefits of mining often simply do not stack up – in the short or long term. There are better industries to invest in. The size of our mining sector, even if we ramped up, would add little to NZ's economy, and would make a very small contribution to meeting

world demand for 'clean-energy' minerals, or even to be self-sufficient, as has been claimed by the Minister for Resources.

5. Are there any other things we have missed that we should include, or things we should not include?

These things could be economic/financial, environmental, health and safety related, or other areas.

We should not be locking our economy into being reliant on mining, and especially not fossil fuel expansion in the form of new coal mines. There are always other options for decentralised regional income through high-value economies such as value-added products and IT. While some minerals will be necessary for the renewables transition, these are far more niche than the proposed strategy suggests.

Mining as an activity is well-known to pose many hazards, some due to the equipment used, some to the operations involved (mine collapses etc). The pursuit of profit exacerbates the pressures and risks – as with the Pike River mine disaster.

Many minerals are very harmful to human health, posing an unnecessary risk to our population. Gold is often found in areas rich with arsenic and other hazardous chemicals.

Antimony is harmful to the eyes and skin, and can also cause problems with the lungs, heart and stomach. Workers may be harmed from exposure to antimony. There are many industries and economies which do not rely on our population being exposed to dangerous elements, and these should be given preference. Further, as we are not currently mining these minerals, we will be unlikely to be world class in this area, and it would cost a lot of money to build up these industries. Importing the skills / knowledge to do this safely is both an economic and safety risk.

Conservation lands should be protected from all mining for their biodiversity values and ecosystem services.

Water conservation and other protection orders should be honoured.

Where extensive evidence has been considered in previous hearings, decisions should not be overturned unless there is significant new evidence to validly justify such reversal.



# Thank you

Thanks for your feedback, we really appreciate your insight. It helps us establish a long-term strategic approach to ensure that resource development for our economic prosperity happens in a responsible manner.

To help us continue to develop a Minerals Strategy for New Zealand to 2040, we would appreciate any additional suggestions or comments you may have.

Please leave your feedback here:

Above all, the Fast-track Approvals Bill must be dropped. This bill is actively harmful for all sectors, mining included. This is because it opens up workers and mining regions to exploitation from overseas corporations, with no opportunity for input from local communities, let alone the environmental, social, and public health impacts of some of the proposed projects. An effective, long-lasting, sustainable, and robust mineral strategy should not rely on anti-democratic legislation like the Fast-track Approvals Bill.

It should not rely on short-term thinking based on economic factors only, especially when those economic factors often do not stack up in reality eg due to supply and value chain leakages as discussed above. And may be truly uneconomic in the longer term, when remediation is taken into account. And finally, it is often impossible to remediate ecosystem damage and biodiversity loss.

Developments should be undertaken only if they can be clearly shown to be in the best interests of New Zealanders, having taken all such evidence into account. This requires openly inviting the best evidence, not being selective and exclusionary with regard to collection of evidence, as in the Fast-track Approvals Bill.

I am alarmed at the overly economic tenor of the whole strategy – it implies that if it can't be turned into money, it will attract no investment from the government. Science is worth investing in to enhance our understanding, not just to exploit a resource for short-term economic benefit.

I applaud the efforts towards accelerating a circular economy.

I would also encourage a long-term policy of more careful use of materials to avoid waste rather than encouraging growth requiring more and more minerals extraction, given the Earth's finite resources. For this reason, I would caution against "promoting investment opportunities in New Zealand to increase the scale and pace of development" which I view as a short-term strategy that will actually lead to a decline in quality of life.

I trust the feedback from consultation will be considered carefully and incorporated to create a more robust strategy that will consider the interests of all New Zealanders, now and in the future.