

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:

Dr David C. Bull CEnvP-SC CChem

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

Please specify here:

My principal employment is as a site contamination specialist. I am also a land developer. I am a director of those businesses and of others.

E. Privacy information

- The Privacy Act 2020 applies to submissions. Please check the box if you do not wish your name or other personal information to be included in any information about submissions that MBIE may publish.
- MBIE may upload submissions, or a summary of submissions, received to MBIE's website at www.mbie.govt.nz. If you do not want your submission or a summary of your submission to be placed on our website, please check the box and type an explanation below:

I do not want my submission placed on MBIE's website because... [insert reasoning here]

F. Confidential information

- 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.

If you have checked this box, please tell us what parts of your submission are to be kept confidential.

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?

I agree with the choice of strategic pillars, but I do not think that the strategy delivers on them.

I do not understand what the strategy is proposing in relation to hydrogen. Is it talking about 'white' hydrogen – natural deposits? 'Brown' hydrogen from coal, 'gray' hydrogen from methane by steam reforming, 'blue' hydrogen from methane by pyrolysis? The environmental implications vary hugely depending on which route is proposed, and I think it is highly misleading not to be specific.

Similarly there is a great difference between alluvial gold extraction, which uses no chemicals and discharges no contaminants, and mesothermal / epithermal gold extraction, which

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, nothing in the minerals strategy bans thermal coal, oil and gas extraction outright by any date. Without such an undertaking the minerals sector will remain irretrievably tarnished as irresponsible and environmentally unsustainable.

By the same token there is nothing specific in the minerals strategy to support coal, oil and gas producers to transition to beneficial activities within the minerals sector, such as other forms of mining or natural hydrogen extraction. We need to do well by the people we have, and their skill sets.

We could “keep the lights on” perfectly well without coal, simply by expanding our renewables, and/or retrofitting Huntly as a thermal energy storage facility using molten salt, graphite, etc. Natural gas is a lot harder to do without, but it could be replaced by hydrogen if we had some.

As a minor item it would be good to see some mention of cleanup within the mining sector, including historic contaminated mine sites.

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?

Previous minerals strategies included tin and other metals in Stewart Island, platinum group metals in Northwest Nelson and Southland, silicon in Southland and seafloor minerals around the Kermadecs. It’s not at all clear why those aren’t considered in this strategy. Also, what about tungsten? Once New Zealand was one of the Western world’s two main sources of military tungsten, and it is mined at low yield (but not recovered) at Macraes Mine.

You mention recycling, but I see no substance as to how the strategy would bring that about or interface with the waste sector. I’d add aluminum in that context too, since it’s an extremely recyclable metal, and possibly steel. What about landfill mining to recover historic waste metal? What about extracting copper from waste treated timber? All it takes is a small smelter.

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?

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.

There is a factual error regarding steelmaking on page 7. Our steelmaking process is not unique because of the chemical properties of the Waikato thermal coal, but of the chemical properties of the ironsand raw material. If it was just a coal problem we would have used a different coal. You don't talk about decarbonizing our steelmaking, which ought to be an option on the table.

You don't mention aluminum – not something we can mine, but certainly something we smelt.

You don't mention decorative stone such as greenstone or soapstone.

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:

Minerals aren't all bad, and certainly they are not all good.

You won't develop a credible minerals strategy unless and until you can bring yourselves to recognize that we can't exploit some minerals and still claim to have any thought for the environment. Chief among these are thermal coal and lignite, but there may be others.

Similarly, as the Parliamentary Commissioner for the Environment has recently said, environmental advocates need to recognize that some minerals are absolutely necessary.