### **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.

Α.	About you			
	Name:	Privacy of natural persons		
	Email address:			
В.	Are you happy for MBIE to contact you if we have questions about your submissi			
	⊠ Yes			
C.	Are vou making t	are you making this submission on behalf of a business or organisation?		
X Yes			ΠNo	
	If yes, please tell us the title of your company/organisation:			
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υ.		ber	Independent expert (places energify helew)	
			Business owner (please specify below)	
	Iradesperson (please specify below)		Student (please specify below)	

Other (please specify below)

Prefer not to say

Please specify here:

⊠ Industry participant (please specify below)

 $\boxtimes$  Industry group

Greenfield mineral exploration company – Privacy of natural persons

(please specify below)

- 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 <u>www.mbie.govt.nz</u>. 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**

 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?

oxtimes Yes, they are suitable oxtimes No, they are not suitable oxtimes 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?

- As part of the "Demonstrating the sectors value" pillar- We believe it is important to make the public aware of the relative footprint size of mining sector relative to other primary sectors its often compared with i.e. agriculture or forestry. The export/productivity value of a mine per Ha is considerably larger than other primary sectors. This high return enables benefits to the wider region such as enhanced conservation efforts and to local communities.
- Public education about the origins of minerals and products in daily life is important. The adage "If it doesn't grow, it comes from mining (or Petroleum)" underscores this necessity and not widely understood. This education should encompass not only critical minerals and metals but also non-critical ones like industrial minerals and aggregates. Furthermore, it's essential to inform the public about New Zealand's environmental regulations

governing the mineral sector, as well as contrasting this with global sourcing practices if not produced in NZ.

• The average salaries of those working in the mining sector relative to other primary sectors is considerably greater. The mining sector provides high paying jobs that allow people to get ahead in New Zealand, unlike other low wage sectors such as tourism.

### **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?

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

 $\boxtimes$  Yes, there are  $\square$  No, there are none  $\square$  Not sure/no preference

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

The opportunity for New Zealand minerals to store permanently store CO2 as part of New Zealand commitments around mitigating the effects of climate change. This opportunity not only will aid with emissions reduction of hard to abate emissions such as smelting, steelmaking and cement but also help store excess emissions through carbon removal technologies.

Large-scale Carbon Dioxide Removal (CDR) from Earth's atmosphere will play a critical role in limiting climate change, with IPCC assessments estimating between 5 and 16 billion tonnes of CO<sub>2</sub>-equivilant in global removals being necessary annually by 2050 to achieve net-zero emissions.

While cost-effective emissions reduction remains a priority for effective climate change mitigation, hard-to-abate and high-value emissions require safe and permanent offsetting through CDR technologies. Additionally, drawdown of historical emissions in the event of climate overshoot will only be with viable with massive CDR deployment.

Currently, New Zealand's only significant emissions removal mechanism occurs via plantation forestry – predominantly radiata pine. However, carbon forestry is rapidly being seen as an ineffective and undesirable method for widespread emissions offsetting due to the tenuous nature of the sequestered carbon (with omnipresent risks from fire, disease, and weather). Additional externalities from exotic monoculture carbon forestry include perpetual forest management burdens, ecological homogenisation, loss of productive land, and social disruption to rural populations.

Fortunately, new CDR technologies that capture and permanently remove GHGs from the atmospheric system are now available for implementation. Carbon mineralisation, enhanced weathering, ocean alkalinity enhancement, direct-air-capture, and carbon burial, are safe and durable CDR processes without downstream negative consequences like those from carbon forests.

New Zealand's unique geology includes significant ultramafic rock formations that are ideal resources for applying CDR methods of carbon mineralisation, enhanced weathering, and ocean

alkalinity enhancement. In these schemes,  $CO_2$  from the ambient atmospheric-ocean system or point sources is captured and stored for millions of years through geological, physical, or chemical mechanisms.

New Zealand can sequester all its hard to abate emissions and all historical emissions with the ultramafic resources it contains through engineering systems to enhance carbon mineralization. We think this should be considered as part of the mineral strategy.

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

oxed Yes, there are other challenges not considered

- $\square$  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?

- The sovereign risk associated with the short political cycles and associated radical changes to minerals policy. This perceived sovereign risk is hindering investment in exploration in New Zealand
- Over the past decade, tertiary education institutions and Crown Research Institutes (particularly GNS) have faced inadequate funding for minerals research. This has resulted in diminished capability, knowledge, and education regarding the minerals sector within these institutions. Historically, academia and the mineral sector collaborated effectively to enhance the understanding of New Zealand's mineral resources. This funding shortfall is a common trend in Western countries and has created a significant deficit of well-educated mining professionals, such as mine engineers, metallurgists, and geologists, posing a real challenge for the sector's future.

## 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 believe the govt should introduce Incentives to credible mineral explorers to simulate exploration and fast track discoveries. Similar schemes operate in various Aus states such as - permit fee holidays for explorers of critical minerals.
- Collection of new regional publicly available data sets to such as EM, Gravity and seismic would aid in early exploration targeting efforts. Such datasets have been collected by MBIE in the past and have been pivotal to many discoveries in other jurisdictions such as Australia.
- We believe in the "Mine Once, Mine All" philosophy. The overlapping of permits and mineral groupings sought can effectively sterilize ground for critical minerals. This is especially the case for "gold" only permits.
- The land mineral status reporting requirements adds complexity and cost for explorers. The crown should undertake its own assessment of mineral ownership and build a database. As a minimum NZPAM should compile all LMS reports it has into a parcel database which would become available and slowly grow over time. Land parcels that

are explored by successive companies should not have been required to assess the mineral ownership as LMS reports have already been completed.

# 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: