

# 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: Nicholas Powell

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:

Forensic & Industrial Science Ltd

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

- |  |   |
|--|---|
| <input type="checkbox"/> Academic/researcher/research institute      | <input checked="" type="checkbox"/> Independent expert (please specify below) |
| <input type="checkbox"/> Community group (please specify below)      | <input type="checkbox"/> Business owner (please specify below)                |
| <input type="checkbox"/> Consultant (please specify below)           | <input type="checkbox"/> Environmental NGO (please specify below)             |
| <input type="checkbox"/> Tradesperson (please specify below)         | <input type="checkbox"/> Student (please specify below)                       |
| <input type="checkbox"/> Industry group (please specify below)       | <input type="checkbox"/> Other (please specify below)                         |
| <input type="checkbox"/> Industry participant (please specify below) | <input type="checkbox"/> Prefer not to say                                    |

Please specify here:

I am a qualified geologist and analytical chemist with long-term interests in industrial chemistry, minerals exploration, and development of New Zealand's mineral resources. I have a special research interest in Southland silica which is a potential raw material for a photovoltaic silicon manufacturing industry, perhaps centred in Southland (pending availability of electricity required for operation of a smelter) or in Australia (as signalled recently by the Albanese government).

**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](http://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 Draft Critical Minerals List for New Zealand

MBIE is developing a critical minerals list for New Zealand to identify the minerals that are:

- essential to New Zealand’s economy, national security, and technology needs, including renewable energy technologies and components to support our transition to a low emissions future; and/or
- in demand by New Zealand’s international partners to enable us to benefit from international economic opportunities, contribute to the diversification of global mineral supply chains and improve the pipeline of the end-use products for which these minerals are essential; and
- susceptible to supply disruptions domestically and internationally. In some instances, we rely on domestic sources of minerals, but the supply of these minerals can be constrained, for example by regulatory factors and social licence. Internationally, supply chain disruptions could arise due to geopolitical risks and external market forces.

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 are also essential to modern economies as they are needed to manufacture advanced technologies such as semi-conductors, defence applications and medical equipment. Minerals are also critical for a clean energy transition as low emission technologies requires more mineral inputs than those fuelled by fossil fuels.

The extraction and processing of the minerals essential to New Zealand and our international partners are concentrated in a few countries. Any disruption that interrupts operations at a large facility or group of facilities can have a major impact on supply availability, and therefore on prices. The greater the concentration of production the larger the affect a disruption can have.

In addition, New Zealand does not manufacture a wide range of technologies, we are generally an end consumer of many products produced internationally and rely on the functioning of international supply chains and their access to resilient supplies of minerals.

The development of a critical minerals list is one of the key actions identified in the draft Minerals Strategy that was publicly consulted on from 23 May – 31 July 2024. Due to the technical nature of the list, MBIE engaged a consultancy with specialist expertise, Wood Mackenzie, to support the development of the list.

We are seeking feedback on the content of the draft list that has been developed by Wood Mackenzie for New Zealand. It identifies the minerals that are critical to New Zealand and summarises the reason for their inclusion in the list. Once the list is finalised, actions could be identified to help us reduce the ‘criticality’ of those minerals, i.e., secure better access to them.

Please see the draft Critical Minerals List attached below for more information.

## Questions for the consultation

1. Have we missed the inclusion of any mineral(s) on the draft Critical Minerals List?

Yes, (please provide more details below)  No, the list is okay.  Not sure/no preference  
Is there anything you would like to tell us about the reason(s) for your choice?

While silicon (an element) is listed, its ore (lump silica) is missing. Industrial commodities such as fireclay, brickearth, insulator clay, glass sand, marl, and limestone, all of which are (or have recently been) of economic significance, could have been included.

2. Have we included any mineral(s) that you think should not be on the list?

Yes, (please provide more details below)  No, the list is okay.  Not sure/no preference  
Is there anything you would like to tell us about the reason(s) for your choice?

The list is a jumble of elements, minerals and commodities. The Crown Minerals Act definition of mineral could perhaps have been augmented for the purposes of the Critical Minerals List. You are welcome to phone me to discuss any aspect of this submission/feedback – I would be happy to assist. Dr Nicholas Powell, 0800 289999, 027 2893299

3. Do you have any further feedback on the list, or the methodology under which it was developed?

Yes, (please provide more details below)  No, the list is okay.  Not sure/no preference  
Is there anything you would like to tell us about the reason(s) for your choice?

The list is a useful guide. It could have been integrated with existing mineral and geological databases held by Institute of Geological and Nuclear Sciences and NZPAM/MBIE to provide an idea of which regions are prospective for each element, mineral or commodity of interest.

## Thank you

Thanks for your feedback, we really appreciate your insight on the development of New Zealand's Critical Minerals List.