



Te Kāwanatanga o Aotearoa
New Zealand Government

A Critical Minerals List for New Zealand

January 2025

More information

Information about the topics covered here can be found on the website:

<https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources>

Disclaimer

This document is a guide only. It should not be used as a substitute for legislation or legal advice. The Ministry of Business, Innovation and Employment is not responsible for the results of any actions taken on the basis of information in this document, or for any errors or omissions.

Online: ISBN 978-1-991316-55-4

Print: ISBN 978-1-991316-73-8

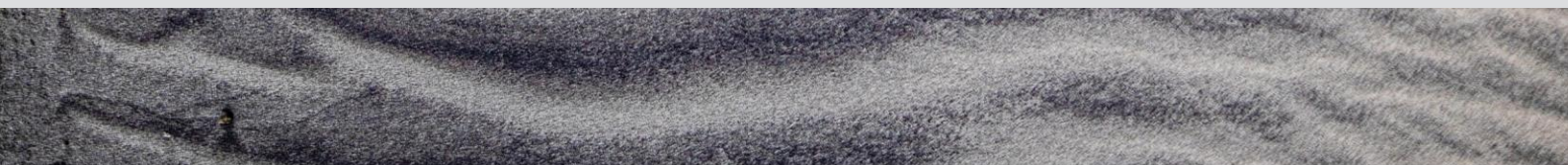
January 2025

Image credit:

Front cover: Heavy mineral sand concentrate containing critical minerals titanium and rare earth elements, Westland Mineral Sands Co.

©Crown Copyright

The material contained in this report is subject to Crown copyright protection unless otherwise indicated. The Crown copyright protected material may be reproduced free of charge in any format or media without requiring specific permission. This is subject to the material being reproduced accurately and not being used in a derogatory manner or in a misleading context. Where the material is being published or issued to others, the source and copyright status should be acknowledged. The permission to reproduce Crown copyright protected material does not extend to any material in this report that is identified as being the copyright of a third party. Authorisation to reproduce such material should be obtained from the copyright holders.



A Critical Minerals List for New Zealand

The Government has finalised a Critical Minerals List to identify minerals essential to New Zealand's economy and technological needs, including clean energy and international trade.

The Critical Minerals List

New Zealand's first Critical Minerals List includes 37 minerals, which are listed below in alphabetical order.

- | | | |
|---------------------|---------------------------|-------------------------|
| 1. Aggregate & Sand | 14. Germanium | 26. Potassium (Potash) |
| 2. Aluminium | 15. Gold | 27. Rare Earth Elements |
| 3. Antimony | 16. Graphite | 28. Rubidium |
| 4. Arsenic | 17. Indium | 29. Selenium |
| 5. Beryllium | 18. Magnesium | 30. Silicon |
| 6. Bismuth | 19. Manganese | 31. Strontium |
| 7. Boron | 20. Metallurgical coal | 32. Tellurium |
| 8. Cesium | 21. Molybdenum | 33. Titanium |
| 9. Chromium | 22. Nickel | 34. Tungsten |
| 10. Cobalt | 23. Niobium | 35. Vanadium |
| 11. Copper | 24. Phosphate | 36. Zinc |
| 12. Fluorspar | 25. Platinum Group Metals | 37. Zirconium |
| 13. Gallium | | |

The need for a list

Minerals are essential to modern economies; their use in key industries and products supports economic growth and stability, national security, and technological advancement. In New Zealand, we produce many of the minerals we need, such as aggregate for roading and construction. We also import minerals, either as raw materials or within products, such as those used for clean technology, electronics, aviation, and medical equipment.

Developing a list of critical minerals is an important first step to ensure a secure supply of the minerals we need for our economic growth and resilience. The list developed identifies the minerals that are economically important and are vulnerable to supply risk or essential to unlocking other critical minerals.

The list provides a basis for strategic actions to support secure mineral supply chains here and overseas, strengthen our relationships with international partners, and help ensure we achieve the Minerals Strategy for New Zealand to 2040 goal of doubling minerals exports to \$3 billion by 2035.

How the list will be used

The Government will explore strategic pathways and wider system settings to support the development and supply of the minerals on the list that are, or can be, produced in New Zealand. For the minerals on the list that we don't produce, we will engage with our international partners to support supply chain resilience.

Further information about the list of critical minerals

		Whether these minerals appear on other countries’ critical minerals lists				
Mineral	Key identified uses	USA	UK	EU	AUS	CAN
MINERALS CURRENTLY PRODUCED IN NEW ZEALAND						
Aggregate and Sand	Roading, construction	N	N	N	N	N
Aluminium	Packaging, automotive, aerospace, defence	Y	N	Y	N	Y
Arsenic	Treatment of wood, electronics (including semiconductors)	Y	N	Y	Y	N
Gold	Jewellery, electronics, dentistry, aerospace	N	N	N	N	N
Metallurgical coal	Steelmaking, industrial processes	N	N	Y*	N	N
Rare Earth Elements	Permanent magnets, glass polishing, ceramics, metal alloys, LEDs, lasers	Y	Y	Y	Y	Y
Silicon	Glass, casting sand, nanomaterials, electronics	N	Y	Y	Y	Y
Titanium	Aerospace, medical	Y	N	Y	Y	N
Vanadium	Steel and titanium alloys, catalysts, magnets, coatings, battery and energy storage applications	Y	Y	Y	Y	Y
Zirconium	Fuel cells, auto catalysts, bearings	Y	Y	Y	Y	N
MINERALS WITH THE POTENTIAL TO BE PRODUCED IN NEW ZEALAND						
Antimony	Defence, electric vehicles (EVs), medical	Y	Y	Y	Y	Y
Bismuth	Electronics (data storage)	Y	Y	Y	Y	Y
Cesium	Cancer treatments, electronics, optics, aerospace, photovoltaic (PV) cells (also called solar cells)	Y	N	N	N	Y
Chromium	Stainless steel and other steel alloys	Y	N	N	Y	Y
Cobalt	Battery and energy storage applications, steel alloys, fertiliser and livestock health	Y	Y	Y	Y	Y
Copper	Power transmission, electronics, EVs, fertiliser and livestock health	N	N	N	N	Y
Magnesium	Lightweight alloys, fertiliser and livestock health	Y	Y	Y	Y	Y
Phosphate	Fertiliser, battery and energy storage applications	N	N	Y	N	N
Platinum Group Metals	Catalysts, hydrogen fuel cells, EVs, electronics, communications	Y	N	Y	Y	Y
Rubidium	Medical, electronics	Y	N	N	N	N
Tungsten	Tools for drilling, mining and cutting	Y	Y	Y	Y	Y
MINERALS THAT NEW ZEALAND RELIES ON BUT DOES NOT PRODUCE AND HAS LOW/NO KNOWN POTENTIAL TO PRODUCE						
Beryllium	Aerospace, electronics (including semiconductors)	Y	N	Y	Y	N
Boron	Permanent magnets, electronics, PV cells, fertiliser	N	N	Y	N	N
Fluorspar	Aluminium production, insulating foams, refrigerants, steelmaking	Y	N	Y	N	Y
Gallium	PV cells, electronics (including semiconductors)	Y	Y	Y	Y	Y
Germanium	Electronics (including semiconductors)	Y	N	Y	Y	Y
Graphite	Battery and energy storage applications	Y	Y	Y	Y	Y
Indium	Electronics, solders, batteries, PV cells, bearings	Y	Y	N	Y	Y
Manganese	Steel and aluminium alloys, batteries, catalysts, glass, electronics, fertiliser and livestock health	Y	N	Y	Y	Y
Molybdenum	Steel alloys and high temperature alloys, fertiliser and livestock health	N	N	N	Y	Y
Nickel	Stainless steel and other steel alloys, battery and energy storage applications	Y	N	N	Y	Y
Niobium	High-temperature superalloys	Y	Y	Y	Y	Y
Potassium (Potash)	Fertiliser	N	N	N	N	Y
Selenium	PV cells, electronics, fertiliser and livestock health	N	N	N	Y	N
Strontium	Magnets, alloys, paints	N	N	Y	N	N
Tellurium	PV cells, electronics	Y	Y	N	Y	Y
Zinc	Anodising, corrosion protection, fertiliser and livestock health	Y	N	N	N	Y

* Appears as coking coal on the EU list.

Disclaimer: As the critical minerals lists of different jurisdictions are reviewed and revised periodically, the information regarding the critical minerals lists of other jurisdictions is subject to change.

How the list was developed

The list was informed by analysis undertaken by Wood Mackenzie (a global research and consultancy firm) in consultation with stakeholders. The analysis considered minerals that are economically important to New Zealand and/or in demand by our international partners and are vulnerable to international or domestic supply disruptions.

Through public consultation, submitters provided constructive feedback and insights which included advocating for gold, coal, lithium, garnet, alumina, sulphur, silver, and several other minerals to be included on the list. Most of these minerals were not included as they did not meet the supply risk threshold for being added to the list.

In addition to the list recommended by Wood Mackenzie, Cabinet also decided to include gold and metallurgical coal because of their importance to New Zealand's economy and to achieving our goal of doubling mineral exports by 2035. Both are vital to New Zealand's mining sector and enable exploration and development of other critical minerals.

A summary of submissions is available online at:

<https://www.mbie.govt.nz/have-your-say/consultation-on-a-draft-critical-minerals-list-for-new-zealand>

The final Wood Mackenzie report is available online at:

<https://www.mbie.govt.nz/dmsdocument/29970-final-wood-mackenzie-report-on-the-development-of-a-critical-minerals-list-for-new-zealand-pdf>

Updating the list

The criticality of minerals can change over time as supply and demand shift, reliance on imports varies, and new technologies emerge. New Zealand's Critical Minerals List will be reviewed periodically by the Ministry of Business, Innovation and Employment to ensure it is fit for purpose, and some minerals may be added or removed based on their criticality during each review cycle.



Te Kāwanatanga o Aotearoa
New Zealand Government