A New Addition to the CMI Critical Minerals List: New Zealand’s Critical Minerals List

written by Alastair Neill | September 27, 2024

The recent release of New Zealand’s draft **Critical Minerals List** signals a strategic move by the nation to align its priorities with global efforts in securing essential resources. This list, however, brings some unique perspectives compared to its international counterparts. One of the most notable additions to New Zealand’s list is sand and aggregate, materials that are not found on other nations’ critical minerals lists. Their inclusion highlights New Zealand’s infrastructure demands, and the challenges posed by limited domestic supply. Although unconventional, the decision underscores the broader infrastructure-centric focus of New Zealand’s critical minerals strategy.

Another significant inclusion is phosphate and potash—both crucial for agriculture and essential for maintaining New Zealand’s food security and export markets.

Another significant inclusion is copper, a mineral that has gained increasing recognition as critical to global energy transition efforts. While copper does not appear on Australia’s Critical Minerals List, it is present on their Strategic Minerals List, reflecting its growing importance worldwide, especially in renewable energy infrastructure and electric vehicle manufacturing.

In comparing New Zealand’s list with others—such as

Australia's—there are both overlaps and notable differences. The addition of boron is intriguing, given its use in rare earth magnets. However, New Zealand currently lacks production capabilities for rare earth magnets which is needed in Neodymium Iron Boron magnets, raising questions about whether this is a future-oriented inclusion or one driven by supply chain considerations. Cesium, another interesting addition, highlights the nation's focus on ensuring access to minerals with high technological applications, despite limited local production capacity.

What is equally surprising is the absence of lithium, a mineral central to many countries' critical minerals lists, particularly given its key role in the global transition to electric vehicles and energy storage. With lithium so prominent in other regions' strategies, its exclusion from New Zealand's draft list leaves room for speculation on how the country plans to address the rapidly growing demand for this resource.

Globally, 11 critical minerals lists now exist that the Critical Minerals Institute tracks, with New Zealand joining the ranks of the United States (DOE and USGS), Canada, Australia, the UK, Europe, Japan, South Korea, and India. There is broad consensus among these lists on several key minerals. Five elements—cobalt, gallium, graphite, platinum group metals (PGMs), and rare earth elements (REEs)—appear on 10 out of these 11 lists, underlining their strategic importance.

Cobalt remains essential for battery technologies, particularly in the automotive sector, though there is a shift towards lithium iron phosphate batteries. Gallium plays an indispensable role in solar power cells, and graphite remains critical for batteries and other technological applications. PGMs are vital for catalytic converters, with limited supply outside of Russia and South Africa. Rare earth elements continue to be dominated

by China, reinforcing their importance as global economies strive to reduce dependence on Chinese supply chains.

As the global critical minerals landscape evolves, New Zealand's approach reflects its unique infrastructure needs and ambitions for technological advancement. Whether New Zealand seeks to develop domestic capacity for these minerals or focus on building strategic international partnerships remains to be seen. In either case, the inclusion of copper, boron, and phosphate highlights the nation's desire to secure resources vital to both its economic and technological future.

The Critical Minerals Institute will continue to closely monitor these developments and provide in-depth analysis for stakeholders across the industry and government sectors.

To access the 11 lists that the CMI tracks, click here