



The CMI Critical Minerals List 2025: A Strategic Battle Plan for the Technological Backbone of Our Future

The Critical Minerals Institute (CMI) has unveiled its “CMI Critical Minerals List 2025,” a strategic roadmap highlighting 23 minerals crucial for global technological innovation, defense capabilities, economic stability, and environmental sustainability. Derived from a rigorous evaluation of 12 global critical minerals lists—including those from the United States, Canada, Australia, New Zealand, the United Kingdom, Europe, India, Japan, South Korea, and NATO—CMI’s selection criteria identified the most frequently cited minerals across multiple jurisdictions, refining an extensive list of 55 minerals down to 23 critical minerals.

“Creating the CMI Critical Minerals List 2025 was akin to drafting a strategic battle plan for the technological backbone of our future,” stated Alastair Neill, President of Trinity Management Ltd. and Director of CMI. “We prioritized minerals whose supply disruption could incapacitate critical sectors overnight due to geographic bottlenecks, lack of alternatives, or exponential demand pressures. Minerals such as copper, beryllium, and uranium are not just resources—they constitute the bedrock of global competitiveness and security.”

CMI Critical Minerals List 2025

1. Aluminum (Al) — includes bauxite & high-purity alumina (HPA)
2. Antimony (Sb)
3. Beryllium (Be)
4. Bismuth (Bi)
5. **Cobalt (Co)** (*Top 5*)
6. **Copper (Cu)** (*Top 5*)
7. **Gallium (Ga)** (*Top 5*)
8. Germanium (Ge)
9. Graphite / Carbon (C)
10. Indium (In)
11. Lithium (Li)
12. Magnesium (Mg)
13. Manganese (Mn)
14. Nickel (Ni)
15. Niobium (Nb)
16. Platinum-Group Metals (PGMs) — Pt, Pd, Rh, Ru, Ir, Os
17. **Rare-Earth Elements (REEs)** — La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, plus Y and Sc (Magnetic Metals: Nd, Pr, Dy, Tb, Y) (*Top 5*)
18. Silicon / Silicon Metal (Si)
19. Tantalum (Ta)
20. Titanium (Ti) — includes titanium metal
21. Tungsten (W)
22. **Uranium (U)** (*Top 5*)
23. Vanadium (V)



The Top 5 Critical Minerals:

1. **Copper:** Crucial for global electrification, renewable energy, and digital infrastructure.
2. **Uranium:** Vital for nuclear energy and emerging small modular reactors, central to low-carbon power.
3. **Gallium:** Indispensable for semiconductors and advanced electronics, facing concentrated supply risks.
4. **Rare Earth Elements (REEs):** Key in defense, green technology, and electronics, heavily dominated by Chinese production.
5. **Cobalt:** Essential for lithium-ion batteries and electric mobility, challenged by ethical sourcing concerns.

About the Critical Minerals Institute (CMI):

The Critical Minerals Institute (CMI) is a trusted global leader in connecting companies, capital markets, and experts in the critical minerals industry. By combining in-depth research, thought leadership, and extensive industry expertise, CMI provides exclusive insights, invaluable resources, and robust networking opportunities that empower its members to thrive in a rapidly evolving global marketplace. Through collaboration with businesses, governments, and other stakeholders, CMI addresses both the challenges and opportunities within the critical minerals sector, highlighting the value, sustainability, and strategic importance of these essential materials. As a result, CMI ensures its members are equipped to drive innovation, lead in cutting-edge technology, and fuel industrial advancement worldwide.

CMI Directors 2025:

- | | |
|--|-------------------------------------|
| - Tracy Hughes , Executive Director | - Kevin Ernst , Director |
| - Jack Lifton , Co-Chair | - Kiana Kianara , Director |
| - Melissa Sanderson , Co-Chair | - Peter Cashin , Director |
| - Alastair Neill , Director | - Peter Clausi , Director |
| - Christopher Berlet , Director | - Russell Fryer , Director |
| - Christopher Ecclestone , Director | - Stephen Burega , Director |
| - Christopher Gibbs , Director | - Stephen Lautens , Director |
| - Geoff Atkins , Director | - Tuan Tran , Director |

For more information, please contact Raj Shah, Assistant Editor & Publisher of the **Critical Minerals Institute's** weekly **Technology Metals Report (TMR)**, at +1 (416) 792-8228, via email at info@criticalmineralsinstitute.com, or visit us online at CriticalMineralsInstitute.com.

To secure a **CMI Membership**, [click here](#)