The Critical Minerals Institute Elevates Steel to Critical Status as CMI's 2025 Watchlist Expands to 24

written by Tracy Hughes | August 7, 2025

Toronto, Canada – August 7, 2025 – The Critical Minerals Institute (CMI) today released an expanded "CMI Critical Minerals Watchlist 2025," elevating the roster from 23 to 24 indispensable materials by adding **Steel** and **Molybdenum** and removing Bismuth. Derived from a rigorous evaluation of 12 national and multilateral critical minerals lists, the Watchlist represents a strategic, data-driven blueprint for policymakers and capital markets seeking resilient supply chains in an era of geopolitical volatility, surging technological demand, and clean-energy buildouts.

"Steel is a building block for everything—construction, defense, automobiles, ships. Without a sustainable, reliable supply of steel, the entire industrial ecosystem faces a structural challenge," emphasized Alastair Neill, CMI Director and architect of the Watchlist. "If a dominant producer introduces a step-function change in pricing or export policy, supply shocks could cascade through infrastructure projects worldwide."

CMI Co-Chair Jack Lifton underscored the historical gravity of today's announcement: "*The Iron Age ended in 1867 when Bessemer invented the converter; since then, we have lived in the Steel Age—and we still are.*"

Why Steel—and Why Now?

Global decarbonization mandates and post-pandemic infrastructure stimulus have driven an unprecedented spike in steel consumption—particularly advanced grades required for offshore wind monopiles, EV chassis, and fortified grid expansion. Meanwhile, capacity consolidation among a handful of Asian producers has heightened concentration risk. By formally naming steel a critical mineral, CMI signals to Western governments and investors that domestic primary and recycled steel supply chains are now a strategic imperative on par with battery metals.

Molybdenum: The Strength Behind High-Performance Steel and Next-Gen Chips

“Molybdenum is the secret sauce—added to steel for skyscraper super-structures and nuclear containment vessels, leveraged as a transmission accelerator in power applications, and increasingly specified in cutting-edge semiconductors,” said Lifton. “Its inclusion reflects both construction demand and the silicon-to-compound-semiconductor transition underway in data centers.”

The 2025 CMI Critical Minerals Watchlist (Alphabetical)

1. Aluminum (Al) – includes bauxite & high-purity alumina (HPA)
2. Antimony (Sb)
3. Beryllium (Be)
4. **Cobalt (Co)** ***(Top 5)***
5. **Copper (Cu)** ***(Top 5)***
6. **Gallium (Ga)** ***(Top 5)***

7. Germanium (Ge)
8. Graphite / Carbon (C)
9. Indium (In)
10. Lithium (Li)
11. Magnesium (Mg)
12. Manganese (Mn)
13. **Molybdenum (Mo) – NEW**
14. Nickel (Ni)
15. Niobium (Nb)
16. Platinum-Group Metals (PGMs) – Pt, Pd, Rh, Ru, Ir, Os
17. **Rare Earth Elements (REEs) – La to Lu + Y, Sc *(Top 5)***
18. Silicon (Si)
19. **Steel (Fe) – NEW, HEADLINE ADDITION**
20. Tantalum (Ta)
21. Titanium (Ti)
22. Tungsten (W)
23. **Uranium (U) *(Top 5)***
24. Vanadium (V)

“CMI deliberately synthesizes supply-risk signals from the United States, Europe, NATO, and Indo-Pacific allies, and layers quantitative trade-flow analysis over geopolitical context,” said Tracy Hughes, Executive Director of the Critical Minerals Institute (CMI). “Our Watchlist is intended as a practical, globally informed reference point for investors, policymakers, and industry participants assessing supply-chain resilience.”

The Persisting Top Five

CMI reaffirmed its Top 5 Critical Minerals—Copper, Uranium, Gallium, Rare Earth Elements, and Cobalt—citing enduring supply fragility and soaring demand curves:

- **Copper** – “It is in everything, and future demand is set to

outstrip supply unless mining jurisdictions radically accelerate permitting," noted CMI Director Melissa Sanderson.

- **Uranium** – "Small modular reactors for data centers and island grids guarantee uranium's rising criticality," stated Grunewald.
- **Gallium** – "Expect gallium nitride to displace silicon in high-end semiconductors for AI, space, and radar," added Grunewald.
- **Rare Earth Elements** – "Permanent-magnet demand keeps rare earths—particularly the Core 4—front and center," said Sanderson.
- **Cobalt** – Essential for high-energy-density batteries, though ethical sourcing challenges persist.

CMI Co-Chair Lifton cautioned, "Every six months we re-examine the Top 5 because demand, substitution, and recycling technologies evolve rapidly—*critical today does not guarantee critical tomorrow*."

The Critical Minerals Institute (CMI): *The Brain Trust of the Critical Minerals Economy.*

The Critical Minerals Institute (CMI) is a global organization dedicated to addressing the challenges and opportunities in the critical minerals sector. CMI's mission is to equip businesses, governments, and stakeholders with comprehensive resources and insights into the value, sustainability, and strategic importance of critical minerals essential for technological and industrial advancement. Serving as an international hub, the Institute links companies, capital markets, and experts through exclusive **CMI Masterclasses**, a weekly **Critical Minerals Report**

(CMR), in-depth research publications, and board-level advisory services.

CMI's reach is amplified by its parent, InvestorNews Inc.—an independent newsroom that produces more than 120 million impressions annually via articles, C-suite videos, podcasts, and InvestorTalk events. This media engine syndicates CMI content to Google News, Bloomberg, Reuters, and major AI platforms, giving members immediate global visibility. Complementing that exposure is CMI's elite Brain Trust, a multidisciplinary think tank of engineers, analysts, financiers, and policymakers who deliver rapid-response analysis and bespoke strategic guidance. Mark your calendar for *CMI Summit V—"Command Capital in Critical Minerals: Aligning Government Priorities with Private Equity"*—in Toronto on May 13-14, 2026, where the Institute's global network meets to shape the future of the sector. By uniting unrivaled media reach with deep technical expertise and high-impact events, CMI positions its members to lead the emerging critical minerals economy.

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To discuss the **CMI Critical Minerals 2025 List**, please contact CMI Director Alastair Neill at asneill@rogers.com +1 (416) 670 2868.

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