Critical Minerals Institute (CMI) Summit 5: Critical Minerals and the New Industrial Order

written by Tracy Hughes | May 18, 2026

The ballroom at Toronto's historic National Club felt less like a conventional mining conference and more like a strategic policy forum operating at the intersection of industrial capacity, geopolitics, defense, finance, and technological competition.

For two days at the Critical Minerals Institute (CMI) Summit 5 – *The New Critical Minerals Economy* – executives, engineers, geologists, metallurgists, financiers, policymakers, industrial strategists, and government advisors gathered in Toronto to discuss a reality that is becoming increasingly difficult for Western governments and capital markets to ignore: critical minerals are no longer peripheral commodities within the global economy. They are foundational inputs underpinning industrial power itself.

And contrary to the way the sector is still sometimes discussed publicly, this was never merely a mining story. It has always been a geopolitical, industrial, and – a technology story. One of the more important themes that surfaced repeatedly throughout the CMI Summit was the growing divergence between institutional positioning and broader retail investor participation. Governments, sovereign entities, industrial groups, defense-adjacent capital, and large institutional investors are increasingly allocating capital, forming strategic partnerships, securing offtake arrangements, and positioning themselves around

long-term critical mineral supply chains. Yet much of the retail investment community still appears to view the sector through the narrow lens of mining, rather than as part of a much larger global industrial restructuring now underway.

It has always been a geopolitical story. Increasingly, it is also becoming an intelligence-directed industry – one shaped not only by control of mineral deposits and industrial infrastructure, but by control of information, technological expertise, strategic coordination, and industrial narrative itself. “The next critical minerals superpower may not simply be the nation with the largest deposits – but the one that best controls the information surrounding them.”

What has changed is the degree to which geopolitical instability is now accelerating the urgency surrounding it.

The CMI Summit unfolded against the backdrop of escalating tensions involving Iran, continued instability throughout the Middle East, increasing fragmentation of global trade relationships, and growing concerns surrounding defense preparedness, industrial resilience, energy security, and supply chain vulnerability. Throughout the event, military implications were not treated as abstract possibilities, but as operational realities increasingly shaping industrial policy and strategic planning. Discussions surrounding tungsten, antimony, rare earth elements, rhenium, gallium, scandium, flourspar, silica, phosphate. PGMs, and hafnium were consistently framed within the context of semiconductor manufacturing, aerospace systems, advanced defense technologies, and the broader restructuring of Western industrial supply chains.

The relationship between critical minerals, industrial resilience, and national security is now influencing real-world policy, capital allocation, and defense planning.

The CMI Summit opened with my remarks focused on strategic collaboration and the growing need for Western governments, industries, and capital markets to move beyond fragmented approaches toward industrial coordination. The challenge facing the sector is no longer simply identifying critical mineral deposits. It is aligning financing, permitting, engineering talent, processing capacity, downstream manufacturing, and long-term strategic planning quickly enough to compete within an increasingly polarized global industrial environment.

Melissa “Mel” Sanderson, Director of American Rare Earths Limited (ASX: ARR | OTCQX: ARRNF | ADR: AMRRY) and Co-Chair of the Critical Minerals Institute (CMI), immediately established the intellectual tone of the summit during her keynote presentation, *The Critical Minerals Supply Chain Contribution to Global Power Shifts*. Her remarks framed the central issue with clarity: control over critical mineral supply chains increasingly influences geopolitical leverage, industrial competitiveness, technological leadership, and national security positioning simultaneously.

That theme persisted throughout virtually every session. Repeatedly, experienced industry leaders returned to the same underlying conclusion: the critical minerals landscape has become extraordinarily complex, shaped by overlapping geopolitical interests, industrial dependencies, sovereign financing strategies, military considerations, and technological competition unfolding simultaneously across multiple jurisdictions.

That intellectual framework carried directly into the keynote presentation by Feisal Somji, Founder & CEO of Sio Silica Corporation, whose presentation examined silica’s increasingly strategic role within North America’s industrial future and the broader Fourth Industrial Revolution. Rather than approaching

silica as a conventional industrial mineral, Somji positioned high-purity silica and semiconductor-grade quartz within the context of AI infrastructure, semiconductors, advanced manufacturing, renewable energy systems, and defense-oriented supply chains.

One of the broader themes running throughout the CMI Summit was the recognition that Canada possesses an exceptional concentration of crititical minerals. Yet speaker after speaker emphasized that resource ownership alone is insufficient. Strategic advantage increasingly belongs to jurisdictions capable of integrating resources into larger industrial ecosystems encompassing processing, refining, engineering expertise, infrastructure, manufacturing capacity, and long-term industrial coordination.

That distinction surfaced repeatedly during Panel 1: *Financing the Critical Minerals War – Governments, Sovereign Capital, and the Race for Control*, featuring Ali Haji of American Tungsten Corp. (CSE: TUNG | OTCQB: TUNGF), Bo Møller Stensgaard of Greenland Mines Ltd. (NASDAQ: GRML), Robin Dow of Nevada Organic Phosphate Inc. (CSE: NOP | OTCQB: NOPFF), and Alex Moyes, Ph.D., of USA Rare Earth, Inc. (NASDAQ: USAR).

The title itself reflected where the sector has evolved intellectually. Critical minerals are no longer being discussed primarily through the lens of commodity cycles. Increasingly, they are being viewed through the lens of strategic control.

Throughout the CMI Summit, one of the most consistent observations involved the distinction between how Western economies and China approach industrial development.

China is not simply competing in mining.
China is competing in systems.

For decades, China systematically developed vertically integrated industrial ecosystems encompassing extraction, separation technology, refining, metallurgy, engineering education, infrastructure, manufacturing, and long-term industrial financing. Meanwhile, much of the West remained organized around fragmented capital markets, shorter political cycles, permitting complexity, and disconnected industrial planning frameworks.

Douglas Morrison, President & CEO of the Centre for Excellence in Mining Innovation (CEMI), framed the issue with unusual bluntness:

> *"China is run by engineers. The United States is run by lawyers. It sounds like a joke, but there's a lot of truth in it. Industrial development requires rational input from people who understand how things are actually built. China graduates roughly five million engineers a year. North America graduates maybe 250,000 to 300,000. That's what we are competing against."*

Morrison's remarks captured one of the summit's most persistent themes: the competition underway is not solely geological or financial. Increasingly, it is educational, industrial, and technological.

That contrast was articulated particularly effectively during my armchair interview with Constantine Karayannopoulos, retired former CEO and Chairman of Neo Performance Materials Inc. (TSX: NEO | OTCQX: NOPMF). Constantine emphasized that China's industrial position was not accidental. It was the product of decades of coordinated strategic development around industries considered nationally important.

The West still frequently discusses projects.

China developed ecosystems.
And ecosystems are extraordinarily difficult to replicate once established.

CMI Co-Chair Jack Lifton later expanded on the same problem from a generational perspective:

> *"The problem is that for the last 45 years, nobody wanted to enter these industries because there were no jobs," Lifton observed. "We cannot solve this problem quickly just by throwing money at it. We need a real plan."*

Lifton's remarks underscored the degree to which critical minerals shortages increasingly extend beyond geology and into workforce development, education, industrial policy, and institutional continuity.

One of the reasons I founded the Critical Minerals Institute (CMI) was because I believed the conversation around critical minerals had become dangerously oversimplified. Too often, investors and policymakers are presented with binary narratives — "energy transition," "battery demand," "rare earth shortages," or simplistic geopolitical framing detached from industrial realities. The CMI Summit repeatedly demonstrated that the actual landscape is considerably more sophisticated.

Tungsten emerged as one of the defining critical minerals discussed throughout the summit — and appropriately so. Despite the relatively small size of the global tungsten market, multiple speakers emphasized its strategic importance across aerospace, semiconductors, advanced manufacturing, machining systems, energy infrastructure, and defense applications. Yet supply and processing remain highly concentrated geographically, creating vulnerabilities increasingly recognized by governments, industrial consumers, and defense planners alike.

Particular attention was focused on Lewis Black, President, CEO & Chairman of Almonty Industries Inc. (NASDAQ: ALM | TSX: AII | ASX: AII), whose company is positioning itself as the leading non-Chinese tungsten producer at a time when Western governments are increasingly reassessing strategic supply chain exposure. As a keynote speaker, Black focused not only on tungsten supply chains, but on a growing workforce crisis confronting Western industrial economies.

> *"Mining engineering enrollments are down roughly 39% in the United States, and only about 5% of Canadian mine workers are under the age of 25," Black noted. "For decades we told students that success meant software, finance, consulting – success meant never getting dirty. China invested heavily in mining schools, metallurgy, and refining expertise. We largely abandoned those sectors."*

His comments reinforced a broader conclusion repeated throughout the CMI Summit: supply chains cannot be rebuilt through capital alone. They also require experienced engineers, metallurgists, tradespeople, operators, and institutional industrial knowledge – capacities that cannot be recreated overnight.

Discussions involving Ali Haji of American Tungsten Corp. (CSE: TUNG | OTCQB: TUNGF), Brett Marsh of Spartan Metals Corp. (TSXV: W | OTCQB: SPRMF), Stephen Gray of Fox Tungsten Ltd. (TSXV: FOXT), and Roy Bonnell of Allied Critical Metals Inc. (CSE: ACM | OTCQB: ACMIF | FSE: 0VJ0) further reinforced how rapidly tungsten is re-emerging as a strategic industrial and defense material.

Antimony was another dominant theme throughout the summit – arguably even more urgently discussed in certain policy and defense circles. As military tensions continue rising globally, antimony's strategic importance has increased substantially due

to its role in ammunition systems, flame retardants, energy storage technologies, semiconductors, and broader defense manufacturing applications.

Craig Lindsay of Resolution Minerals Ltd. (ASX: RML | OTC: RLMLF) presented what was fundamentally an antimony-focused story centered on the company's Horse Heaven Project in Idaho, including the fast-tracking of Antimony Ridge to support U.S. strategic antimony supply requirements. The presentation emphasized the United States' continued dependence on imported antimony, the strategic implications for national defense, and evolving U.S. permitting initiatives such as FAST-41 designed to accelerate domestic critical mineral development.

Presentations from Craig Lindsay and Jim Atkinson of Antimony Resources Corp. (CSE: ATMY | OTCQB: ATMYF) reinforced how concentrated global antimony supply remains — and how urgently Western governments are now reassessing domestic and allied-source production capacity.

Rare earth elements remained central throughout the CMI Summit as well, particularly in discussions involving magnet manufacturing, heavy rare earth separation, defense systems, robotics, semiconductors, wind energy, electrification, and advanced military technologies.

Mark Tory of Defense Metals Corp. (TSXV: DEFN | OTCQB: DFMTF), Alex Moyes of USA Rare Earth, Inc. (NASDAQ: USAR), Mark Wall of American Rare Earths Limited (ASX: ARR | OTCQX: ARRNF | ADR: AMRRY), and multiple panelists throughout the summit explored the growing urgency surrounding rare earth supply chain diversification, heavy rare earth separation, magnet manufacturing, and downstream processing capability.

Fluorspar, silica, gallium, scandium, hafnium, niobium, cesium, phosphate systems, and advanced metallurgical materials were

also integrated throughout the summit's broader discussions surrounding industrial resilience and strategic supply chains.

Perhaps nowhere was the CMI Summit's intellectual depth more visible than during Panel 6: *Information Warfare, Market Intelligence & Strategic Advantage in Critical Minerals*, moderated by Stephen Lautens and featuring Ellie Saklatvala of Argus Media Limited, Nick Parry, Peter Clausi, and myself. The discussion examined how narratives themselves increasingly shape industrial policy, capital flows, geopolitical positioning, and public understanding.

The critical minerals sector today exists within an information environment saturated with oversimplification, shallow analysis, promotional excess, geopolitical messaging, and increasingly polarized narratives. Serious investors and policymakers are often forced to navigate an environment where technical complexity is routinely compressed into simplistic slogans. That is precisely why long-form discussions, technical analysis, and direct industry dialogue remain so important. Because the stakes involved are no longer limited to mining finance. They involve industrial competitiveness itself.

One of the most compelling presentations of the summit came from Douglas Morrison, whose remarks focused extensively on productivity, innovation, engineering capacity, and the long-term implications of declining technical talent pipelines across North America. His remarks reinforced one of the summit's most important underlying themes: the West does not simply need mines. It needs engineers, metallurgists, processing expertise, industrial capability, advanced manufacturing capacity, and long-term technical workforce development. Those capacities cannot be rebuilt quickly once neglected.

The CMI Summit concluded with Panel 8: *The Endgame – Who Will*

Control the Critical Minerals Economy?, featuring Lewis Black, David Argyle, Mel Sanderson, Jack Lifton, and moderated by myself.

David Argyle of Arlington Magnesium brought similar concerns into focus through the lens of magnesium supply chains, warning that seemingly niche materials can carry disproportionate industrial consequences.

> *"USGS has already warned there is effectively a 100% probability of a future magnesium supply disruption," Argyle stated. "China controls over 90% of magnesium production. If China simply reduces exports – as it did in 2021 – the effects could be massive."*

His remarks reinforced a broader reality that surfaced repeatedly throughout the summit: relatively small critical mineral markets can exert enormous influence across aerospace, automotive manufacturing, semiconductors, defense systems, and global industrial production.

By the conclusion of the event, one uncomfortable reality had become increasingly difficult to avoid.

The West is late.
Not irreversibly late.
But late.

China spent decades building integrated industrial systems while much of the West outsourced manufacturing, underinvested in industrial strategy, neglected technical education, and assumed globalized supply chains would remain permanently stable. Now governments and industries are attempting to rebuild capabilities that took decades to establish. That process will not be linear. It will not be inexpensive. And it will not be

politically simple.

But despite the scale of the challenge, I left the CMI Summit cautiously optimistic. Because for perhaps the first time in many years, serious participants across industry, government, finance, engineering, media, and industrial policy are beginning to ask serious questions together.

How do democracies rebuild industrial resilience?
How do we finance critical minerals?
How do we train the next generation of engineers and metallurgists?
How do we secure supply chains without retreating into unrealistic isolationism?
How do we balance economic efficiency, industrial competitiveness, and national security?
How do we avoid repeating the strategic mistakes of the past?

Those discussions are now beginning to take shape in a far more substantive way.

And that may ultimately become the real significance of the Critical Minerals Institute (CMI) Summit 5.

Not that it solved the problem.
But that it acknowledged the true scale of it.

On behalf of the Critical Minerals Institute (CMI), I would like to personally thank all of the speakers, panelists, sponsors, delegates, and industry participants who contributed to the depth and quality of the discussions throughout the summit.

For additional information about the Critical Minerals Institute (CMI), membership opportunities, upcoming events, and ongoing industry initiatives, please visit Critical Minerals Institute.