



September 6<sup>th</sup>, 2023

## **C2M2A — Progress Report #7**

Thank you to all for your continued and enthusiastic interest in the Canadian Critical Minerals & Materials Alliance. I am pleased to report on the significant initiatives undertaken since our last Report #6 dated May 24<sup>th</sup>, 2023.

### **Welcome New Members!**

[North American Helium \(NAH\)](#) - NAH is focused on exploration and production of helium from underground fields of inert nitrogen. NAH currently produces approximately 5% of helium supply in North America and is actively advancing new projects during the current global helium shortage. NAH currently has 6 producing facilities in Saskatchewan selling gaseous and liquid helium on long-term contracts. Helium's unique physical properties make it vital for several high technology applications including semiconductor manufacturing, MRI machines, certain welding applications and the pressurization and purging of liquid fuels for space exploration and satellite infrastructure.

[Imperial Mining Group](#) - Imperial is focused on the advancement of its Crater Lake Scandium-REE project in Northeastern Québec. Imperial also holds immediate, high-impact, drill-ready gold properties in the Abitibi greenstone belt. Scandium has significant attributes with its almost as low a density as aluminum and a much higher melting point, hence applications in lightweighting alloys for automotive & aerospace and other structural applications.

[Volta Metals](#)— Volta Metals Inc. is a lithium, tantalum, cesium focused Canadian exploration company with large land package in spodumene bearing hard rock lithium belts in Ontario.

### **C2M2A Strategic Review**

Actions resulting from the “Where to from here?” strategic review for 2023/2024 were presented during a member webinar on June 27<sup>th</sup>. The key actions derived from the review fell in three broad areas and will be guided by member input:

- facilitation of more B2B opportunities for members,
- continued advocacy for the industry, and
- enhanced communications to members.

'Enhanced communications' include a more curated articles & newsletters and, in response to a specific request, the publication of a “consolidated industry event calendar”, the first cut of which is the PDF Calendar attached with this Progress Report. As members become aware of events, especially those at which they will be speaking and/or attending, please make [Marilyn Spink](#) aware for inclusion in the calendar.

### **[Energy & Mines \(November 28<sup>th</sup>, Toronto\)](#)**

Keynote Panel: Realizing Canada's Critical Minerals Opportunities -- Will Canada become a leader in critical minerals mining and build a value chain to support global demand for clean energy technologies and electric vehicles? The panel will address:

- the biggest gaps in Canada's critical minerals supply chain and how Canada can leverage its strengths in sustainable mining and mineral processing to build a competitive advantage in supplying ESG-friendly critical minerals.

- the impact of Volkswagen, Stellantis and LG battery plants in Ontario & Quebec on the battery metals supply chain, and
- the real potential of Canadian companies being able to capitalize on the US Inflation Reduction Act, especially – will Canadian mines be able to ramp up production in time to meet US demand?

### Accelerate ZEV

C2M2A, a founding partner of Accelerate, will be participating in a two-day Canadian ZEV Supply Chain Exhibition in Ottawa September 27<sup>th</sup> & 28<sup>th</sup>. The poster below outlines the planned Show-and-Tell Exhibit and Reception on Day 1 with a series on meetings with senior government officials on Day 2. C2M2A is hosting a banner tent under which seven mid- & downstream members have volunteered single pop-up displays. As more definitive arrangements become clearer, C2M2A members will receive invitations.



### Road mapping Critical Material Supply Chains

A Critical Minerals and Materials Task Force, convened under the auspices of Accelerate, has been established and is examining how to catalyse mid-to upstream activity within Canada's ZEV supply chain. The taskforce will meet throughout 2023 to:

- Frame targets around critical mineral development consistent with the priorities to advance Canada's EV sector.
- Identify the policies/actions/tools needed to achieve these targets.
- Identify and influence assigned accountabilities (industry, government, other stakeholders) for achieving these targets.

Priority areas have been identified through previous Taskforce meetings:

- Establish material manufacturing.
- Building enabling infrastructure at pace
- Significantly increasing private investment
- Cutting permitting times in half
- Developing Indigenous equity partnership standards
- Accelerating priority critical mineral deposit directory



C2M2A has facilitated interviews with key members working further downstream to get their feedback and it was collated and brought back to the Task Force.

### **Next Generation Manufacturing (NGEN) - Critical Materials**

[NGen Canada](#) is looking to co-invest up to \$95 million, together with industry, in collaborative, transformative, business-led projects through the [Electric Vehicle Manufacturing Value Chain Program \(EVMP\)](#). The call-for-projects targets the scale-up and commercialization of transformative, made-in-Canada manufacturing technologies and capabilities across Canada's EV value chains - from the processing and refining of critical minerals, to the manufacturing of battery materials and components, and to the assembly of vehicles.

[NGen Canada](#), [C2M2A](#), [\(BMAC\)](#), and [Accelerate ZEV](#) co-hosted a webinar on August 22nd for critical minerals and materials companies to learn more about NGen's EVMP program, and how companies can take advantage of the funding opportunity. Click on the link to view a recording of the webinar [webinar here](#).



### **CanmetMATERIALS (CMAT)**

C2M2A, in collaboration with CMAT (based in Hamilton, Ontario and with a facility in Mississauga), is exploring approaches to collect direct industry perspectives on known gaps in the materials value chain to be closed. This initiative is also intended to build an understanding of specific challenges of materials & component production associated with a suite of critical materials. CMAT's aim as an R&D Service provider and potential co-funder of specific projects is to advance production of energy transition materials and metals.

### **Natural Sciences & Engineering Research Council of Canada (NSERC)**

NSERC is about to launch its Alliance Mission: Critical Materials -- a funding program that targets research projects that will support the growth of Canadian expertise at every point along the value chain of those fifteen prioritized critical minerals – from exploration to recycling. These Alliance Mission grants are intended to provide support for University research activities, in conjunction with industry partners, that will:

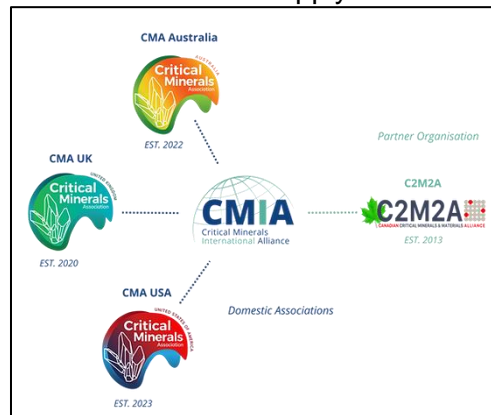
- advance Canadian knowledge, models, processes, tools and technologies to optimize efficiency, minimize environmental impacts, and/or support data-driven decisions along domestic critical mineral value chains, from exploration to recycling,
- develop efficient options to advance a domestic circular economy with less reliance on primary mineral resources (e.g., mine reclamation, critical mineral recycling or reprocessing,



- support the development of best practices in technology, innovation and collaborative ventures that advance vertical integration across the sector.

### **Critical Minerals International Alliance (CMIA)**

Critical Minerals Association (UK) has been broadening its global engagement by championing the launch of the [CMIA](#), a platform intended to bring together its sister associations, [CMA Australia](#) and [CMA USA](#). C2M2A, which has a partnering with CMIA's effort in a collaboration capacity. The CMIA aims to bridge the gap between Western nations and industry attempting to navigate complex and monopolised supply chains. The CMIA focuses on cross-cutting issues that affect supply chains and are too complex for one nation to tackle alone with a mission to create secure, low-carbon, responsible critical minerals supply chains.



### **Council of Ontario Universities (COU)**

COU proactively reached out to C2M2A to request industry feedback on a “Critical Minerals Issue Note” prior to publication. Engagement with C2M2A was valued and resulted in revisions to COU’s approach after several face-to-face meetings, including plans to collaborate with C2M2A on a future “Critical Materials Issue Note”. Meetings are also being requested with their member Universities to advocate for building the talent pool needed to build a materials production industry in Canada.

### **ISO Standards – Critical Minerals & Materials, REEs and Lithium**

The work of the ISO’s Technical Committee TC298 Rare Earths continues to advance with four working groups actively working on the development of a dozen or so individual standards. These include work in the areas of sustainability, testing & analysis, traceability and recycling. Canada will be represented at the next TC298 Plenary meeting in Korea in mid-October by Jeff Koyanagi (SGS Canada) and Devid Sanscartier (SRC).

The Canadian Mirror Committee for the ISO’s TC 333 Lithium continues to recruit experts. Its work is at an earlier stage that of rare earths, however it is important to for Canada to be at the table as more detailed discussions evolve. The Canadian Committee is be managed by Paul Steenhof of the CSA Group.

### **Rare Earth International Association (REIA)**

During the June 21<sup>st</sup> -23<sup>rd</sup> Annual General Meeting and Rare Earth Conference, which was attended by some 246 delegates in Barcelona, C2M2A hosted a panel discussion “Can Canada bring the REE Supply chain links together?”. The discussion revolved around advances along the up-, mid- and downstream processing of REE minerals & materials and the extent to which



they are or can be interlinked. The panel was moderated by Ryan Castelloux, Adamas Intelligence with C2M2A panelists Tom Drivas, CEO, Appia Rare Earths & Uranium, Mohammad Imran, VP, Saskatchewan Research Council, Vasileios Tsianos, Director, Neo Performance Materials & Ahmad Ghahreman, CEO, Cyclic Materials. Congratulations are also extended to Vasileios & Muhammad for their election to the REIA Board.

**COM 2024 – Joe Ferron Memorial Symposium ‘Processing of Critical Materials’**

First launched by several current members of C2M2A in September 2012 as the Rare Earth Symposium, the symposium has grown to address a broader range of critical materials. The next session of this world respected, bi-annual Symposium is set for August 19<sup>th</sup> – 22<sup>nd</sup>, 2024 in Halifax, Canada and is dedicated in the memory of our much-valued colleague Joe Ferron. The call for Abstracts will be released in the next several weeks.

**Thank you!**

In closing, our efforts in advocacy and championing Canada’s interest in critical mineral & material supply chains could not be achieved without the commitment and active engagement of its members and partners. For that... we thank you.

Be well, Be safe, Be kind and Until soon.

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