## Under Pressure, the Critical Minerals Institute Summit II Speakers Address EV 2030 Demands with Innovation

written by Tracy Weslosky | June 23, 2023
Keynote Speakers Constantine Karayannopoulos, Pat Ryan, Mark
Chalmers and Dan Blondal on the Challenges Facing the Critical
Minerals Market

"A perfect business event, one of the best I have ever attended in many years. Your selected guests and presenters were first class business professionals and compelling executives to follow. Your speakers and hosts attracted attention. I was glued to listening to every one of your agenda segments. All your attendees at the Summit were among an unusual international group of most interesting intellectuals and committed humanitarians with practical business and investment objectives. All that is a very unusual combination, and you deserve superlative accolades for creating this group." — CMI Delegate

Identify demand, and then — respond.... with innovation. This was the entrepreneurial themed advice in a compelling speech titled Risk Mitigating for a North American Rare Earth Supply offered by Pat Ryan, Chairman & CEO of Ucore Rare Metals Inc. (TSXV: UCU, OTCQX: UURAF) at the CMI Summit II in Toronto. It was a perfect follow-up speech after the keynote presentation at lunch by Dan Blondal, CEO, Director & Founder, Nano One Materials Corp.'s (TSX: NANO) who presented Scaling for the

Terawatt Hour Future. Stressing innovation and collaboration, he offered the following wisdom: "If batteries are going to replace oil, then we better start thinking BIG like oil producers. Net-zero needs 300 TWh of batteries, loaded with 500 million tonnes of cathode materials, and we won't get there if we don't change our wasteful ways."

The Critical Minerals Institute (CMI) Summit II was titled Under Pressure: The CMI Addresses EV 2030 Demands and was held on Wednesday, June 14 and Thursday, June 15 in Toronto at the historic National Club. And under pressure was indeed the right theme as the Co-Founder and Co-Chairman of theCritical Minerals Institute and the Editor in Chief and Director for InvestorIntel Corp. Jack Lifton, hit the ground running with his Critical Minerals Crisis commentary. He then introduced an armchair interview I did with the CEO & Director for Neo Performance Materials Inc. (TSX: NEO) Constantine Karayannopoulos.

Constantine explained how we shouldn't be surprised by the EV-related critical minerals dominance of China. Recommending that to understand how we got here today that we review the last three 5-year industrial strategy plans issued by China, he recommended that we use this as an opportunity to learn from China. He also recommended that an industrial strategy would be useful for us to bring together demand-driven supply chains and orchestrate government investments and regulation in the critical minerals industry.

Jack's introduction was simple, powerful and to the point. He started with "We are now at an inflection point for our society. If we can secure the supplies and the processing capacity for the minerals critical for the technologies we now take for granted in our daily lives, then our nations will flourish and grow. If not, then our standard of living will

decline, and those who have the critical minerals and the industrial bases to refine and fabricate them surge ahead of us. Our politicians and policymakers are woefully ignorant of this reality. This is the greatest danger of all to our lifestyle and security."

This CMI sponsored event reinforced the need for education in the critical minerals sector and clearly identified the benefits of the Critical Minerals Institute. For instance, many refer to this industry as mining when in fact, it is a **mining**, **technology** and **chemistry** industry.

Yesterday I was challenged to bring in a younger audience. My response was to ask this individual to join our CMI Board and to direct this initiative towards ESG related technology like the Karbon-X which we had present at the CMI Summit. Jeff Todd from WEALTH (WCPD Inc.) agreed. So stay tuned, and welcome aboard Jeff.

In addition to the definition and criteria needed to establish what is a critical mineral or isn't, the message was clear: to qualify as a critical mineral, it must be a geopolitically driven material or possess a strategic mineral that without us having access to it, is as Jack explained best — offers the greatest danger to our lifestyle and security.

"Most provocative speaker: Mel Sanderson, but she is quite idealistic although she is very well entrenched in the right geopolitical camp: America and the Western Economies have no choice but to rely on China for many years if not decades when it comes to many critical minerals. No non-China solutions can magically appear out of nowhere. Western Governments and many corporations that trade with China and rely on them know this all too very well and are careful not to do any loud China-bashing on this matter. Also, watch what

Biden is trying to do these days, desperately trying to get closer to reconciliation and the China trade..." — CMI Delegate

Through a series of conflicting messages, and strong political undercurrents throughout this event, what sounded sensible to me, others found non-grata and oppositional recommendations were not short of supply. Some argued that governments should lead in the sustainability architecture and be more active in the solution process, and others insisted that the private sector must control the reins with the understanding that extraordinary initiatives and zero tax was going to be necessary to build even the basic of supply chain frameworks. In essence, everyone agreed that these lofty goals cannot be achieved without the government collaborating and being a supporting mechanism. One speaker said that they would be the oil in the wheel. All agreed the EV mandates for 2030 are unrealistic but disagreed on the wide range of elements surrounding why.

All agreed that human capital needed to be trained and cultivated, and Ucore's Pat Ryan summed it up best with his opening: "Make no mistake, the battle lines are being drawn as global energy transition is upon us. Massive Chinese investments, especially in the rare earth supply chain, have created a steadfast monopoly. Nationalistic goals that have cornered resources and technology, seriously challenge the innovative and free market solutions of the US and Allied countries. What risk mitigating strategies can the West unilaterally execute for its own needs, allowing entrepreneurial ideas that have led global growth decade after decade to be refocused?"

As for winning the award for get right out of the box approaches and grab our audience? No one will argue that

Charlie Angus, Member of Parliament (MP) for the riding of Timmins-James Bay (2004-Present) and the author of Cobalt: Cradle of the Demon Metals, Birth of a Mining Superpower when he presented Mining on a Planet that is on Fire: The Demon Metals, Indigenous Rights and What Needs to be Done to Get it Right — was a hands down winner with his compelling "future of mining is in the indigenous community" themed messaging.

"I found the conference to be very informative and the quality of some of the presenters to be very impressive....the presentation I enjoyed the most was Building a Nickel and Cobalt Processing Facility in Oklahoma — Kaleigh Long. Very inspiring!" — CMI Delegate

Dr Jon Hykawy was a personal favorite of mine for his slide series on the commitment to carbon reductions requiring agreed upon baseline commitments. The 3-simple rules he advocated to achieve these goals included:

- 1. Make changes where changes can be made most efficiently.
- 2. Do it inexpensively compared to status quo... (nuclear energy)
- 3. Don't expect more of what you don't have to arrive quickly.

And speaking of Dr Hykawy's rules, many commented on how much they enjoyed The Roll Out of Phosphate in the Mass Adoption of EVs as presented by John Passalacqua, CEO and Director, First Phosphate Corp. (CSE: PHOS | FSE: KDO) for drawing their attention to the LFP (Lithium Iron Phosphate) battery market. Another email identified Melissa "Mel" Sanderson, President, and Executive Director, American Rare Earths Limited (ASX: ARR | OTCQB: ARRNF) & Director, Critical Minerals Institute and her panel on ESG and presentation titled Transforming To Win: How A

**Greener Economy Can Beat China** — as a standout presenter.

Now I could share my notes from Mark Chalmers, President, CEO & Director, Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR) compelling keynote presentation titled Breaking the bonds of China Reliance, Sustainability, and the Rare Earths Supply Chain: Are we there yet, or have we just begun? but I plan on writing a full column on Energy Fuels next. Citing their leadership and technologies as unparalleled in the industry.

"The word 'Critical' must not be underestimated, and there many aspects of the current state of play which are critical now and more on the horizon, and bodies such as CMI are needed to lobby governments, industry, and capital resources, to ensure the issues are recognized and dealt with globally." — CMI Delegate

In addition to the column, I plan on writing surrounding Energy Fuels, next week, I will share with you who won the top speaker award at the event as I am still securing feedback from the attendees. Also, I would like to extend special thanks to Dr. Edward R. Buiel, President, CEO, Coulometrics, LLC to whom left me well equipped to use the term 'firebomb' confidently in conversations moving forward and avoid leaving my hybrid in the garage. This and a special nod to Kaleigh Long, Founder, CEO, Westwin Elements Inc.on her Building a Nickel and Cobalt Processing Facility in Oklahoma deal as many people commented to me on both her outstanding and compelling business strategy. I personally enjoyed her speech.

And last but not least, I would like to thank Geoff Atkins, Director, Critical Minerals Institute & Director, Strategic Minerals Group Pty Ltd. & Vice President Business, Ucore Rare

Metals Inc. (TSXV: UCU | OTCQX: UURAF) for coming across the pond (from Australia) and challenged our audience with: — "if you want to play in this game, you better be ready to produce."

On behalf of the CMI, thank you for being a supporter and attending our event. For more information, go to CriticalMineralsInstitute.com