

Russell Fryer of Critical Metals Plc Discusses Production from its Critical Minerals Mine in the DRC

written by InvestorNews | March 28, 2023

In this InvestorIntel interview during PDAC 2023, Peter Clausi talks with Russell Fryer, Executive Director of [Critical Metals Plc](#) (LSE: CRTM) about some recent transactions which allowed the Company to now own 70% of the Molulu Project in the Democratic Republic of Congo (“DRC”).

Russel mentions that the copper and cobalt mine is cash flow generating as it went into production in January of this year, which is an “achievement for a small-cap company” listed on the London Stock Exchange.

He also discusses the potential for further acquisitions and he works through a pipeline of potential target projects.

To access the full InvestorIntel interview, [click here](#).

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About Critical Metals PLC

Critical Metals Plc has acquired a controlling 100% stake in Madini Occidental Limited, which holds an indirect 70% interest in the Molulu copper/cobalt project, an ex-producing, medium-scale asset in the Katangan Copperbelt in the Democratic Republic of Congo. In line with its investment strategy of focusing primarily on known deposits, targeting projects with low entry costs and the potential to generate

short-term cash flow; the Company brought the Molulu Project into production in January.

The Company will continue to identify future assets that are in line with its stated acquisition objective of low CAPEX and OPEX projects with near-term production, concentrating on minerals that are perceived to have strategic importance to future economic growth and generate significant value for shareholders.

To know more about Critical Metals Plc, [click here](#).

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How Does ESG Fit into the Critical Minerals Development Industry for Rare Earths Companies

written by Steve Mackowski | March 28, 2023

As I mentioned in a [previous article](#), I am contacting key Australian Stock Exchange-listed Critical Minerals companies to get their views on Environmental, Social, and (corporate) Governance ("ESG"). I am looking to assuage the concerns of some of our stakeholders as to the ESG credentials of those Australia-based organizations that are in a position to supply and value add to the Critical Minerals shortage the world is now facing.

The questions are not designed as a platform for investment

decisions, but as an important step toward letting investors know what their values are, what their achievements have been, and where do they see our industry heading.

The reference table will include the company name, the ASX Ticker code, their website reference, their current Market Capitalization, and their response to the ESG questionnaire.

The reference table will include all of the Australia-based companies that qualify as part of the Australian Critical Minerals Strategy referenced below.

[2022 Critical Minerals Strategy](#)

The survey questions were:

1. A brief description of your activities
2. How do you define ESG?
3. What should stakeholders be aware of in your approach to ESG?
4. How do you see ESG becoming an important function in the future?
5. Do you have any ESG lessons learned that you may wish to share?

I will update the reference tables regularly and highlight any new responses received. As this is the first time, here is the Rare Earths table. The next issue will be the Lithium table, followed by the Vanadium and Cobalt tables. Each issue will allow access to the tables via links and similarly with the ESG responses from the queried companies.

Rare Earths Company	Web Site	Mkt Cap AUS\$ (18 Feb 2023)	ESG Response
Alpha Hpa Limited (ASX: A4N)	www.Alphahpa.com.au	\$578.97M	Queried Feb 15
ABX Group Limited (ASX: ABX)	www.abxgroup.com.au	\$31.30M	
Alkane Resources Limited (ASX: ALK)	www.alkane.com.au	\$365.38M	Queried Feb 15
Alchemy Resources Limited (ASX: ALY)	www.alchemyresources.com.au	\$16.02M	
American Rare Earths Limited (ASX: ARR)	www.americanrareearths.com.au	\$111.55M	Queried Feb 15
Arafura Rare Earths Limited (ASX: ARU)	www.arultd.com	\$1.26B	Queried Feb 15
Austin Metals Limited (ASX: AYT)	www.austinmentals.com.au	\$6.35M	

Australian Mines Limited (ASX: AUZ)	www.australianmines.com.au	\$28.79M	
Australian United Mining Limited (ASX: AYM)	www.australianunitedmining.com.au	\$2.76M	
Australian Strategic Materials Limited (ASX: ASM)	www.asm-au.com	\$323.41M	Queried Feb 15
Encounter Resources Limited (ASX: ENR)	www.encounterresorces.com.au	\$49.77M	
Enova Mining Limited (ASX: ENV)	www.enovamining.com	\$4.69M	
Hastings Technology Metals Limited (ASX: HAS)	www.hastingstechmetals.com	\$387.54M	Queried Feb 15
Iluka Resources Limited (ASX: ILU)	www.iluka.com	\$4.55B	Queried Feb 15

Ionic Rare Earths Limited (ASX: IXR)	www.ionicre.com.au	\$127.74M	Queried Feb 15
Krakatoa Resources Limited (ASX: KTA)	www.ktaresources.com	\$13.96M	
Legacy Iron Ore Limited (ASX: LCY)	www.legacyiron.com.au	\$72.08M	Queried Feb 15
Lindian Resources Limited (ASX: LIN)	www.lindianresources.com.au	\$210.22M	Queried Feb 15
Lanthanein Resources Limited (ASX: LNR)	www.lanthanein.com	\$22.43M	
Lynas Rare Earths Limited (ASX: LYC)	www.lynasrareearths.com	\$7.50B	Queried Feb 15
Minbos Resources Limited (ASX: MNB)	www.minbos.com	\$81.46M	Queried Feb 15
Mount Ridley Mines Limited (ASX: MRD)	www.mtridleymines.com.au	\$15.57M	

Northern Minerals Limited (ASX: NTU)	www.northernminerals.com.au	\$223.92M	Queried Feb 15
Nova Minerals Limited (ASX: NVA)	www.novaminerals.com.au	\$129.18M	Queried Feb 15
Orion Metals Limited (ASX: ORM)	www.orionmetals.com.au	\$16.35M	
Peak Rare Earths Limited (ASX: PEK)	www.peakrareearths.com	\$124.82M	Queried Feb 15
Platina Resources Limited (ASX: PGM)	www.platinareources.com.au	\$12.46M	
Prospect Resources Limited (ASX: PSC)	www.prospectresources.com.au	\$81.02M	
Petratherm Limited (ASX: PTR)	www.petratherm.com.au	\$13.77M	
RareX Limited (ASX: REE)	www.rarex.com.au	\$34.42M	

Sunshine Gold Limited (ASX: SHN)	www.shngold.com.au	\$14.62M	
Stavely Minerals Limited (ASX: SVY)	www.stavely.com.au	\$78.37M	
Tempus Resources Ltd. (ASX: TMR)	www.tempusresources.com.au	\$13.03M	
Todd River Resources Limited (ASX: TRT)	www.trrltd.com.au	\$9.46M	
Venus Metals Corporation Limited (ASX: VMC)	www.venusmetals.com.au	\$28.59M	
Vital Metals Limited (ASX: VML)	www.vitalmetals.com.au	\$114.97M	Queried Feb 15

Note: At the time of publication, there have been no ESG responses to those Rare Earth companies queried.

As an aside, if I was responsible for responding to the above query, I would also publish that response to the ASX and include it on the company's website for ongoing reference.

Critical Metals PLC joins the exclusive club of copper producers with its Molulu Project in the DRC

written by InvestorNews | March 28, 2023

Copper is often said to be the ultimate green energy transition metal, essential for transmitting electricity for use in almost all modern day devices. Solar systems, wind turbines and electric vehicles all rely heavily on copper components.

The [International Energy Agency \(“IEA”\) forecasts](#) copper demand to increase 2-3x from 2020 to 2040, similar to [Trend Investing’s forecast](#) of 2.3x from 2020 to 2037. As we move towards a world of lower emissions, copper’s importance grows significantly.

The [top 4 copper producing countries](#) in order are Chile, Peru, China, and the Democratic Republic of the Congo (“DRC”).

While the DRC has its risks, the country is known for its exceptionally high grades of both copper and cobalt. Today’s company has invested into the DRC copper/cobalt mining sector and has a new producing mine.

[Critical Metals PLC](#) (LSE: CRTM) is now a new copper producer

As [announced](#) by Critical Metals on January 26, 2023: “Copper oxide production commenced at the Molulu Project, an ex-producing copper-cobalt mine in the Democratic Republic of the Congo.” Critical Metals owns [100%](#) of Madini Occidental Limited,

which holds an indirect 70% interest in the Molulu copper-cobalt project in the DRC. The project is forecast to produce an initial 120,000 tonnes pa of copper oxide ore. Critical Metals [states](#): “The copper ore produced in January 2023 will be stockpiled for sale into the market in February 2023. All copper material extracted from the mine will be sent to local processing plants, of which there are four in the Likasi and Lubumbashi areas expressing interest in purchasing Molulu copper ore.”

The Molulu Project is an ex-producing, medium scale copper-cobalt project in the Katangan Copperbelt, adjacent to producing mines previously mined by artisanal miners. Molulu has very high grades. According to the [company](#): “Molulu’s copper grades range between 15% & 40% (sulphides) and 2% and 15% (oxides). Cobalt areas have been identified and will be drilled for confirmation”, and [comments](#): “The Project’s fundamentals provide the potential for a long lived, low capital cost and high operating margin copper and cobalt mine in the DRC.”

Critical Metals development plan

Critical Metals plans to carry out additional exploration work at the Molulu Project. A \$200,000 drill program will be designed and initiated to further delineate the copper strike length and depth and to create a JORC compliant resource. There are numerous anomalies that have been discovered and are considered worthy of further investigation in order to potentially grow the resource and ultimately production (see image below).

Heat Map of Minière Molulu Copper/Cobalt showing numerous copper and cobalt anomalies yet to be investigated further

Figure 3-2: Soil Geochemistry **Copper (Cu)** Anomalies

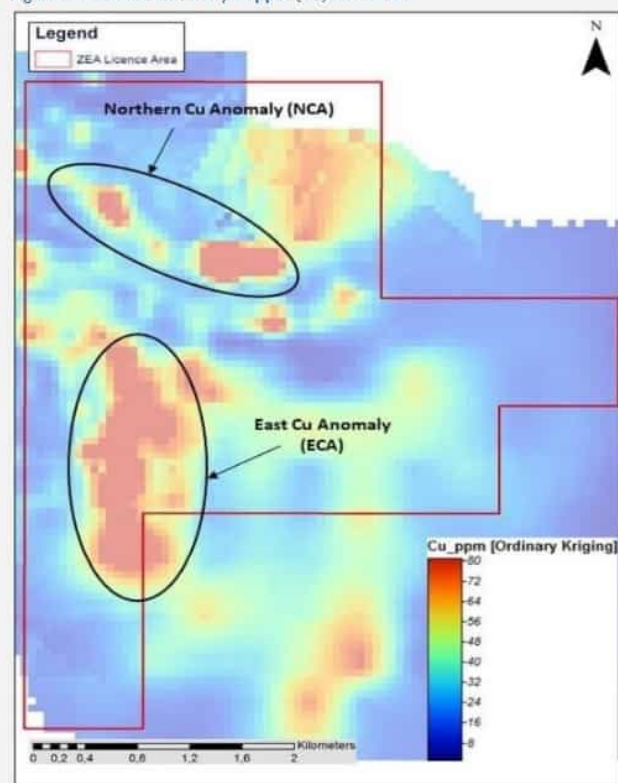
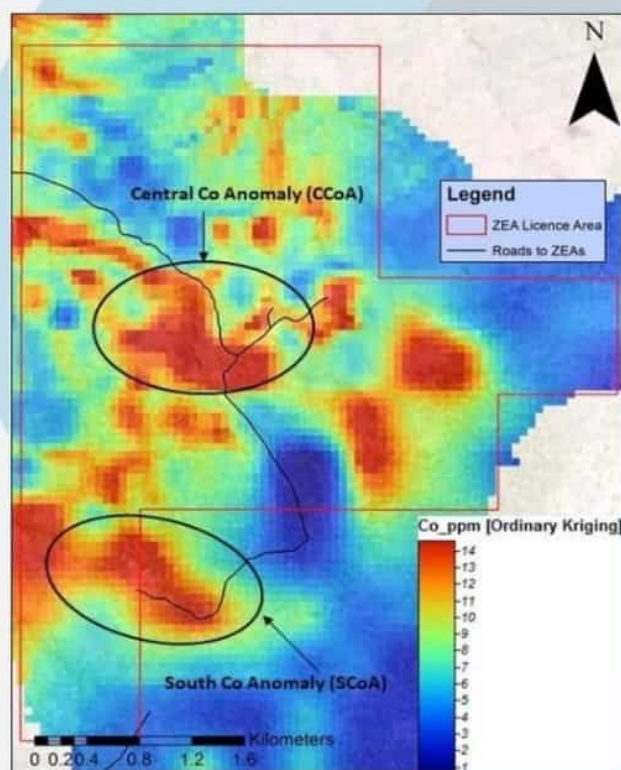


Figure 3-3: Soil Geochemistry of **Cobalt (Co)** Anomalies



Source: [Company presentation](#)

The Company also intends to seek further potential investment opportunities in the DRC.

Closing remarks

High grade copper and cobalt producing mines are rare but are commonly found in Katangan copper belt of the DRC. The country is not without significant sovereign risks, but if these can be managed the rewards can flow from the high grade copper and cobalt mining in the region.

Critical Metals PLC trades on a market cap of only [~C\\$15 million](#).

Critical Metals Russell Fryer on getting the Molulu Cobalt and Copper Mine Back into Production

written by InvestorNews | March 28, 2023

In this InvestorIntel interview, Tracy Weslosky interviews [Critical Metals PLC](#)'s (LSE: CRTM) CEO and Chairman Russell Fryer to discuss an update on Critical Metals' Molulu Mine, an ex-producing copper cobalt mine in the Democratic Republic of Congo ("DRC").

Providing a timeline for production on the Molulu Mine, Russell shares an update on when Critical Metals may begin to generate revenue from the mine. He goes on to talk about the 'King of Mining' Ian Hannam becoming a significant shareholder in Critical Metals. Discussing the strength of their team that he has put in place at Molulu already, Russell references the recent appointment of John Greeff as the Mine Manager.

To access the full InvestorIntel interview, [click here](#)

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About Critical Metals PLC

Critical Metals PLC has acquired a controlling 57% stake in Madini Occidental Limited, which holds an indirect 70% interest in the Molulu copper/cobalt project, an ex-producing medium-scale asset in the Katangan Copperbelt in the Democratic Republic of Congo. In line with its investment strategy of focusing primarily on known deposits, targeting

projects with low entry costs and potential to generate short-term cash flow; the Company intends on bringing the Molulu Project into near term production at the earliest opportunity.

The Company will continue to identify future assets that are line with its stated acquisition objective of low CAPEX and OPEX projects with near term production, concentrating on minerals that are perceived to have strategic importance to future economic growth and generate significant value for shareholders.

To know more about Critical Metals PLC, [click here](#)

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Russell Fryer on the role of critical minerals in an Economic World War III

written by InvestorNews | March 28, 2023

In this InvestorIntel interview, host Tracy Weslosky interviews [Critical Metals PLC](#)'s (LSE: CRTM) CEO and Chairman Russell Fryer about existing market conditions and why some experts forecast that World War III will be driven by economics and a shortage of natural resources. Citing increasing demand for critical minerals and their role in achieving a decarbonized economy, Russell explains how we are arguably already on the precipice of an Economic World War III.

Russell says that an Economic World War III will not be about

missiles, tanks, and boots on the ground; but will be a war where leading countries want to control the flow of minerals that other countries require to run their economies. He goes on to talk about the criticality of copper and cobalt as the world transitions towards green energy. Adding that while copper is an important metal to conduct electricity that cobalt is a key component for building nuclear power plants – without which, we are “never going to have a Nuclear Renaissance”.

To access the full InvestorIntel interview, [click here](#)

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With sunny skies ahead, Critical Metals prepares for Copper ore production by Year-End

written by InvestorNews | March 28, 2023

With the focus of late on critical minerals, or metals or materials or however you want to describe them, it should come as no surprise that corporate names and entities are jumping on board with the trend. Most, if not all, G7 nations now have a critical minerals strategy, and in Canada several provinces also have their own frameworks to best take address the situation, which was the main driver behind the [Dean's List](#) we did at InvestorIntel in July and August. Along those lines, InvestorIntel has also established the [Critical Minerals Institute](#), an international organization for companies and professionals focused on battery materials, technology metals, defense metals, ESG technologies and practices, the general EV market, and the use of critical minerals for energy and alternative energy production.

With that kind of introduction, how could we not have a look at one of the companies out there that is part of the club, with the right name for the times – [Critical Metals PLC](#) (LSE: CRTM). Critical Metals has acquired a controlling 57% stake in Madini Occidental Limited, which holds an indirect 70% interest in the Molulu copper and cobalt Project, an ex-producing medium-scale asset in the Katangan Copperbelt in the Democratic Republic of Congo (DRC). In line with its investment strategy of focusing

primarily on known deposits, targeting projects with low entry costs and potential to generate short-term cash flow; the Company intends on bringing the Molulu Project into near-term production. Additionally, the Company will continue to identify future assets that are in line with its stated acquisition objective of low CAPEX and OPEX projects with near-term production, concentrating on minerals that are perceived to have strategic importance to future economic growth and generate significant value for shareholders.

There are several appealing features of Critical Metals' flagship Molulu Project. For starters, it is a brownfield, ex-producing copper/cobalt project, having previously been mined by artisanal miners from 4 pits. Copper mining operations at Molulu are planned to begin by the end of 2022 to provide near-term free cashflow. The Company [announced last week](#) the appointment of a Mine Manager and the camp is now operational and onsite developments continue. Critical Metals has contract arrangements for the required earth moving and mining equipment that will be used in copper oxide ore production, as well as a contract arrangement for a 20,000-litre diesel fuel tank to support mining operations.

The grades at Molulu are also appealing with copper grades ranging between 15% and 40% sulphides and 2% and 15% oxides. In tandem with preparing the Molulu mining restart, a \$200,000 drill program will be designed and initiated to further delineate the 3 km copper strike length and depth. Cobalt areas have also been identified and will be drilled for confirmation. Lastly, proximity to copper smelters in Lubumbashi and Likasi provide selling channels for copper and cobalt production. All this adds up to make Critical Metals not your typical junior mining company as first year cash flow minimizes future shareholder dilution and early cash flow allows for a potential market re-rating. Not bad for a Company that started trading

September 12th (granted it was incorporated in May, 2018).

With that said, it's not all sunshine and lollipops for Critical Minerals moving forward. For starters, the Molulu mine is ramping up activities as the region heads into seasonal heavy rains that normally arrive at the end of the year. Despite designing a brick making process to increase and fortify the camp's infrastructure to ensure adequate protection from the seasonal heavy rains, the question remains if enough will be completed on time for this season. As well, the last 38 kilometers to the mine site (from Lubumbashi City) is on a dirt road. Although the Company plans to fund the upgrading of about 12km of this road, until this takes place, there is a risk of difficulties getting to the Project and/or trucking minerals produced from the Project for processing in the rainy season when the dirt roads can become treacherous. Then there's the political risk, with presidential elections scheduled for December 2023 that could disrupt the relative calm seen in the DRC over recent years, plus the question of whether key markets are even willing to buy products from the DRC.

Despite some known risks, it's hard to find a mining company this close to generating revenue this quickly. Another promising fact is that Critical Metals stock price remains above the issuance price of 20 pence per share that was done in conjunction with the Molulu acquisition, where the Company successfully raised £1,800,000. With a market cap of £12.3 million (US\$14.6 million, C\$19.6 million) and ample capital to fund the Company for the foreseeable future there could be plenty of sunny days ahead. At least once the heavy rains have come and gone.

Christopher Ecclestone on the “eye-popping collection of metals” in Auxico Resources’ portfolio of monazite rich deposits

written by InvestorNews | March 28, 2023

In this InvestorIntel interview, host Tracy Weslosky interviews [Hallgarten & Company](#)’s Principal and Mining Strategist Christopher Ecclestone about his recent [Initiation Research Report](#) on [Auxico Resources Canada Inc.](#) (CSE: AUAG) that he published on November 9, 2022. Titled **Amassing Critical Mass in Strategic Metals** Christopher stresses how Auxico has emerged as “a real player in the monazite market”.

Over the course of this interview, Christopher comments on some of the positive highlights contained in this research report, which includes the following examples:

- + Auxico Resources is morphing from a rank-and-file explorer into a specialty metals trader and developer diversified across metals and continents
- + Through an accord with an unlisted sister corporation (Central America Nickel), the company has access to Rare Earth Elements (REE) and other critical metals for sale into global markets
- + Rare Earth prices have held firm at levels substantially above the average levels of the last ten years

He then goes on to provide an update on Auxico’s portfolio of

monazite rich deposits that include an “eye-popping collection of metals” such as rare earths, titanium, hafnium and zircon.

To access the full InvestorIntel interview, [click here](#)

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About Auxico Resources Canada Inc.

Auxico Resources Canada Inc. (“Auxico”) is a Canadian company that was founded in 2014 and based in Montreal, trading on the Canadian Stock Exchange (CSE) under symbol AUAG. Auxico is engaged in the acquisition, exploration and development of mineral properties in Colombia, Brazil, Mexico, Bolivia and the Democratic Republic of the Congo.

To learn more about Auxico Resources Canada Inc., [click here](#)

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Defining Criticality

written by InvestorNews | March 28, 2023

Everybody is claiming to have "Critical Metals/Minerals" these days. Desperados in the copper space are the most shameless at touting this claim, while the most ludicrous are those in the gold space (though that goes without saying).

But how to measure what is and what isn't critical?

Rankings

Criticality and Chinese dominance have become popular themes

over the last decade with the British Geological Survey's (BGS) first Criticality ranking in 2011 (in the midst of the Rare Earth boom) firing the starting gun on a race between countries to define what is critical to their own circumstances.

All attempts at ranking criticality are bound to run into criticism with different pundits and different economies perceiving different needs. Moreover, circumstances change, as Cesium showed when it went from being dominated by the US to being dominated by China when the US, fecklessly, let Sinomines acquire Cabot's specialty fluids division. In our perception, Tungsten is not as critical as it was due to numerous non-Chinese developments in the pipeline.

Of all the Criticality lists the BGS one was the only one giving scoring to the metals and then producing degrees of risk to supply. Moreover, it gives the impression of being focused upon which metals are at risk (largely from China-dominance, though unstated) rather than saying (as the JOGMEC list does) that certain metals are critical for a specific (i.e. Japan's) economy.

Criticality as Semantics

Metals rankings have now become like radio stations' Top 40 lists of days gone by. However, it may just be a matter of international semantics as to what the word "critical" actually implies.

Some are saying that this means a metal is vital to an economy (which of course iron ore is to every economy) but others are interpreting it as being that the supply is in some way threatened or vulnerable. And the latter is where the China Factor is invoked. Europe meanwhile wants to fence-sit and pretends that it is not accusing the Chinese of wielding a big stick threatening EU industries (when really the Chinese are

being threatening indeed).

The BGS by using the word “Risk” did not mince its words. Everyone knew what it meant. Chinese dominance meant supply could be turned off.

Rising Tide of Concern?

The financial media chattering about Chinese dominance of particular metals is one thing, but it is when the average householder gets concerned that the issue really becomes popular. Giving a speech several years ago on Erbium and 5G we noted that few, if any, of the public even knew that the jump from black & white TVs to colour TVs was made possible by Europium and behind that lay the Mountain Pass mine.

For the public, the new 5G technology seems to come out of the ether, literally, and thus it is not a good idea to ask too many questions about what metals make it happen because one would find out that (notwithstanding Huawei’s involvement) the REE component (Erbium) in 5G largely is China-sourced or China-processed. Who amongst the Great Unwashed (or experts) can tell us where other 5G inputs, like Scandium, Cesium and Tantalum, come from?

Alarm bells though have been ringing in the C-Suites (of Germany and South Korea, more than Detroit) about the vulnerability of the EV “revolution” to Chinese machinations and that has set off a furious hunt for non-Chinese supply chains.

Curiously though, the European list does not include Lithium amongst the critical metals, though this is probably predicated upon its upstream supplies being mainly from “friendly” sources such as Australia, Argentina and Chile. But with China dominating conversion of Lithium into Lithium ion batteries (and having a stranglehold on Cobalt from the DRC) it does not pay to

be so simplistic in calculating where one's sources might be.

Ergo, with China being the principal midstream processor, can one be so blithely dismissive of the criticality of Lithium?

The various surveys that followed on the heels of the original BGS Criticality rankings now reinforce the sheer number of metals at risk, though as one can see below each agency producing these lists has differing views of the criticality of different metals within their remit.



We can note from the lists above that the US regards most metals as having some degree of criticality.

Conclusion

The critical metals space is torn with rising demand for metals that have seen little, to no, development since before the Commodity Supercycle even began and is now seeing a secular decline in Chinese production due to over-production, exhaustion and environmental devastation. This makes for a rather dramatic tug of war.

It is now clear that the genie set free by Trump's seemingly prophetic "Trade War" of the Chinese threat to supplies cannot be put back in its bottle. The "love" of the US industrial complex's for cheap Chinese minerals has now even been called into question. We doubt that the East Asians (i.e. Japan, Korea and Taiwan) and the Germans can ever be easily lulled back into a false sense of security (of supply) by the Chinese.

The legacy of underinvestment and the lack of capital markets' interest in specialty metals stories (beyond momentary pump-and-dumps) combined with the Chinese massive own goal in splurging its resource base in predatory pricing and, frankly, dumping

over three decades has made for a secular crisis in metals supplies.

This crisis is likely to be enduring and will definitely result in the long-term higher prices (even shortages).

All the chatter does not provide money for projects. Unfortunately, it is only metal price spikes that seem to do so. The soaring price of Lithium and Cobalt in 2017 was a case in point and then the Vanadium surge of 2018. However, the REE putsch of mid-2019 waxed and waned so fast that no party got any financings done before the brief window of opportunity slammed shut.

Less sexier metals never even get their day in the sun. Tellurium or Cesium could quadruple and it would not generate more than a muffled whisper in the trade journals. The same for individual Rare Earths such as Erbium and Dysprosium.

We are of the opinion that the critical “state” of the metals world will remain as long as the West is not self-sufficient in its supply of specialty metals. The Chinese have shown themselves to be malevolent players and that was while they had the whiphand in many metals. As they start to lose their grip the frustrations will start to rise, already we are starting to see some rancour in relations with Burma over neo-colonial resources policies being imposed by China on its neighbour. Other Belt-and-Road “beneficiaries” have found that Chinese largesse comes at a hefty price. Is this mere sparring or the first shots in a monumental struggle over the world’s most crucial mineral resources?

In retrospect, Trump’s “Trade War” of 2018-20 may be seen as the “phoney war” phase of a much bigger tussle over access to the world’s scarce specialty metals resources. The criticality rankings are the playlists for the background music as this

plays out.

Note from Publisher: Next week – on Wednesday, November 9th in Toronto, the inaugural [Critical Minerals Summit](#) is on! To secure a delegates pass, [click here](#) – READ: [Summit to Address the Impact of the \\$1.2 Trillion EV Market Demand by 2030 on the Critical Minerals Sector](#)

Pat Ryan of Ucore Rare Metals on the importance of securing a domestic rare earths supply chain

written by InvestorNews | March 28, 2023

In this InvestorIntel interview, host Jack Lifton talks to [Ucore Rare Metals Inc.](#)'s (TSXV: UCU | OTCQX: UURAF) Chairman and CEO Pat Ryan about the importance of securing a domestic rare earths supply chain and how Ucore is moving forward with their unique technology to commission a demonstration rare earth oxides processing plant by the end of the year.

In the interview, which can also be viewed in full on the InvestorIntel YouTube channel ([click here to access InvestorChannel.com](#)), Pat talks about his previous experience founding a Tier 1 automotive company and how important a stable and reliable supply chain is to the industry. "There are six times more critical metals in an electric vehicle than are in an internal combustion engine," Pat tells Jack. "The supply chain

to support it – the metallic supply chains – are needed. It's right back to the days of Henry Ford when we had to invest in rubber plants and invest in steel mills and things that were required to make sure he could build his Model T vehicles back then, and the same thing applies today."

Pat goes on to tell Jack about how Ucore is building that domestic rare earths supply chain to reduce reliance on China: "So building the supply chains you need best-in-kind tech to get the job done. We bought a company – Innovation Metals Corp. – a couple years ago, and we've taken that technology and are getting it ready for commercial prime time. Now we're developing a demonstration plant in Kingston, Ontario, working with Kingston Process Metallurgy, that will be commissioned in Q4 of this year, 2022. It'll be processing tens of tons of rare earth concentrate from several feedstocks and producing rare earth oxides."

Pat sums up his attitude towards establishing a domestic rare earths supply chain: "Let's get the job done – that's where my career has been and that's kind of my excitement about being the Chairman of Ucore as well."

To access the full InvestorIntel interview, [click here](#)

Don't miss other InvestorIntel interviews. Subscribe to the InvestorIntel YouTube channel by [clicking here](#).

About Ucore Rare Metals Inc.

Ucore is focused on rare- and critical-metals resources, extraction, beneficiation, and separation technologies with the potential for production, growth, and scalability. Ucore has an effective 100% ownership stake in the Bokan-Dotson Ridge Rare Earth Element Project in Southeast Alaska, USA. Ucore's vision and plan is to become a leading advanced technology company,

providing best-in-class metal separation products and services to the mining and mineral extraction industry.

Through strategic partnerships, this includes disrupting the People's Republic of China's control of the US REE supply chain through the near-term development of heavy and light rare-earth processing facilities – including the Alaska Strategic Metals Complex in Southeast Alaska and the long-term development of Ucore's heavy-rare-earth-element mineral-resource property located at Bokan Mountain on Prince of Wales Island, Alaska.

To learn more about Ucore Rare Metals Inc., [click here](#)

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If you have any questions surrounding the content of this interview, please contact us at +1 416 792 8228 and/or email us direct at info@investorintel.com.

Ucore Rare Metals is building its rare earths Field of Dreams with RapidSX

written by InvestorNews | March 28, 2023

To misquote the famous line in the 1989 movie '[Field of Dreams](#)', "if you build it, they will come" (the actual line from the movie is he will come – referring either to Kevin Costner's character's father or shoeless Joe Jackson or perhaps both). Making a giant leap from that to the world we find ourselves in today, where 80% of the world's rare earth resources are controlled by China, if you build it, or at least can process the raw materials into rare earth oxides (REOs), then arguably everyone will come. OK, maybe that was a bad segue but you're just going to have to live with it. The point is, there are

billions of dollars being invested over the next couple of years on EV battery manufacturing facilities in North America and the U.S. has recently implemented legislation (the [Inflation Reduction Act](#)), which requires that 40% of battery components be sourced from factories in the U.S. or its free trade agreement partners, and that Chinese components and minerals be phased out beginning in 2024. On-shoring is the name of the game as we transition to a lower carbon future.

There are numerous rare earth explorers pursuing processing capabilities but perhaps no one is closer to commissioning than [Ucore Rare Metals Inc.](#) (TSXV: UCU | OTCQX: UURAF). Ucore is focused on rare- and critical-metals resources, extraction, beneficiation, and separation technologies with the potential for production, growth, and scalability. Ucore has an effective 100% ownership stake in the [Bokan-Dotson Ridge Rare Earth Element Project](#) in Southeast Alaska. Ucore's vision includes disrupting the People's Republic of China's control of the U.S. rare earths supply chain through the near-term development of heavy and light rare-earth processing facilities – including the Alaska Strategic Metals Complex in Southeast Alaska. And to that end Innovation Metals Corp., a wholly owned Ucore subsidiary, has developed the RapidSX separation technology resulting in the production of commercial-grade, separated rare earth oxides at the pilot scale.

Sounds promising but what exactly is [RapidSX](#)? The process combines the time-proven chemistry of conventional solvent extraction (SX) with a new column-based platform, which significantly reduces time to completion and plant footprint, as well as potentially lowering capital and operating costs. SX is the international rare earth industry's standard commercial separation technology and is currently used by 100% of all rare earth producers worldwide for bulk commercial separation of both heavy and light rare earths. Utilizing similar chemistry to

conventional SX, RapidSX is not a new technology but represents a significant improvement on the well-established, well-understood, proven conventional SX separation technology preferred by rare earth producers. As an investor, I prefer disruption of existing technology versus reinventing the wheel as it is typically more capital efficient and quicker to market, unless of course, it's cold fusion type of disruption, in which case I'm all ears.

As for the progress of RapidSX, [Ucore announced](#) in mid-July that it had upscaled its rare earth Demonstration Plant capabilities and streamlined the RapidSX commercial deployment plan. In early 2022 Ucore received very positive results from the [independent RapidSX technology evaluation](#), including the conclusion that a RapidSX production plant can potentially have a 2/3rds smaller footprint than a conventional SX facility with the same throughput. The team then received buy-in from all stakeholders to expand the design and construction of the Demo Plant. Ucore's enhanced Demo Plant will be able to process: tens of tonnes of mixed rare earth concentrate on a per annum basis; many feedstock sources, including planned light and heavy rare earth element feedstocks for the Strategic Metals Complexes; and all RapidSX splits required to produce individual praseodymium, neodymium, terbium, and dysprosium. Ucore has planned product qualification trials in Q4-2022 for prospective North American metal/alloy makers and original equipment manufacturers (OEMs).

All this is only one aspect of Ucore's business, they are also a rare earth explorer with the advanced Bokan-Dotson Ridge rare earth deposit. Highlights at Bokan include a NI 43-101 [Preliminary Economic Assessment](#), with a resource estimate that remains open down-dip and on-strike with further drilling planned. The project can be "near shovel ready" for construction in less than 30 months after receipt of the next stage of development funding. And the Company boasts that Bokan is the

highest grade NI 43-101 HREE resource in the U.S. But we'll save digging further into the details on Bokan for another day.

Bottom line, Ucore is very close to churning out rare earth oxide material at its Demonstration Plant which could lead to supply offtake agreements with EV manufacturers and/or other downstream customers. This could be huge for Ucore in light of the fact that on-shoring is going to be a high priority for the foreseeable future. With a market cap of C\$34 million, there could be a bright future for Ucore if all the pieces fall into place.