EXAMPLE 2 EXAMPLE 2 EXAM

MAY, 2022

DON'T GET SHAKEN OUT OF THE BIGGEST COMMODITIES' BULL MARKET OF YOUR LIFETIME*

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DON'T GET SHAKEN OUT OF THE BIGGEST COMMODITIES' BULL MARKET OF YOUR LIFETIME*

By David H. Smith



Because if you don't plan your work (now) and work your plan (consistently going forward)...you most assuredly will!

This essay posits that even as the aspects of investment risk rise, financial opportunities for outsized gains for the average investor have never been more compelling... Specifically targeting Silver, Gold, Uranium, Copper, Rare Earths (REEs), and (possibly) block chain-enabled digital miners. Of course, adroit investors can still score gains in lithium, palladium, nickel, cobalt and zinc. But in the greater comparative sense, these last metals have already moved outside the price bag in terms of market recognition, and therefore make a less compelling case for continued high "multiple-x" gains going forward.

One way of making this distinction is to compare those commodities most likely to rise in a linear, progressivelymeasured fashion, with our specifically-targeted metals' group - each of which has the potential for an uncontrolled exponential "moon shot". More volatility translates in more profit opportunity.

We want to participate in and score big with the first sub-categories

list, because each is on the way to experiencing a "Boom", followed thereafter for the entire sector (subject throughout the remaining cycle to the specific metal's timing) by an "Echo". The Boom phase is where the market goes vertical, informed by FOMO and the investment public's "animal



Momentum, fundamentals and history

2 + 1 Uranium bulls, Courtesy Bannerman Energy



spirits", retraces a portion of its epic rise via a semi-collapse, then trades for a long time in a broad sideways trend with well-defined boundaries. With the right mindset, investors can more easily (and safely) make \$20 in the "Boom" than \$4 in the "Echo".

Marin Katusa coined these terms a few years ago. Reflection on this concept and an adaptation to my own investing approach has led me to some of the primary conclusions expressed in this essay. (If you choose to trek this path, your success will hinge on parsing out its tenets to fit your own specific needs and abilities.)

The nearby chart showing the last two completed uranium secular bull runs expresses this price flow exquisitely.

For the other metals mentioned, use this chart and substitute "gold, copper, and digital miners." I believe that silver's trajectory will look more like palladium's multi-year exposition, with a surprising rise, followed by a major retracement, then development of a wide trading range remaining well above the breakout from its historic iron dome ceiling of \$50. REEs may perform an extended 90% rise-to-collapse as they did the last time around. If memory serves, one of the more prominent REE stocks went to \$90, then fell to zero. Quite the ride - for a masochist!

WHY THESE METALS ARE SO "ASYMMETRIC."

"Asymmetric" in our sense means the perceived opportunity to turn small money into quite substantial money. Investors are coming off many years with regular stocks, of a perceived never-endingly- successful buy-the-dips mentality. Long bond rates may have hit their 40 year nadir. The S&P-Miners' divergence AND the discrepancy between senior and junior miners are at such a historic distinction that the term "nearrupture" might be more accurate. In fact, Stanley Druckenmiller's observation that "When you know you have an edge, push the advantage." seems a good fit currently. Combine these outlier advantages and you're looking at a full-on serrated blade edge!



The same goes for Senior Miners vs. the Juniors



WHY THE ENTIRE SECTOR MAY EXPERIENCE A STATISTICAL "FAT (OBESE?) TAIL"

We have reached this point for many reasons. Multiple-year lower mining grades, a lack of big new discoveries (plus increasing lead-times to production), expectations of a near-term green/EV revolution, a fractured supply chain, Ukraine...and more. Overlaying these factors is a literal series of concurrent paradigm shifts - all of which will necessitate discovering, learning and applying new sets of rules for success. The old rules will, like Douglas MacArthur's paean to old soldiers, "just fade away".

WHY (AND HOW) PARADIGM SHIFTING WILL EVENTUALLY END THESE METALS' RUNS.

Trends come to an end and reverse, before all but a small minority of participants realize the change and react by stepping aside and cashing out. What factors might cause this?

During the last five years or so, a nearrevolution in exploration procedures, robotics, drone deployment, waste rock removal, self-driving vehicles and airborne geophysical survey advancements are well on the way to pushing these labor-saving, reduced footprint operational metrics through the entire industry. E.g. an Australian company now markets a drone capable of performing a multitude of often dangerous operations 3,500 feet underground, controlled from the surface. And a fully-loaded ore train can be operated remotely over a 1500 km haul route from mine of origin to mill site.

It's almost a given that we'll see increased metals' output, though probably not in the quantity demanded by the most vociferous Green-EV-Energy-Tech exponents. But it could be enough to shorten the moon shot timeframes we're all hoping for. Remember that markets are invariably forwardlooking/discounting mechanisms.

Work to take as much of your profits out into market strength as you can. Sure you'll suffer some angst as you watch some markets continue higher on their own with your reduced if not eliminated positions, but in retrospect, you'll experience a lot more joy with what you kept, before they disappeared like Cinderella's proverbial coach, turned into a pumpkin! Think of the earlier-mentioned REE stock that went from \$90 to zero. That's a lot of money to leave on the table!

Uranium's shine may be dulled by improved methods of ISR/SABRE recoveries, SMR cookie-cutter successes (75 iterations are now on the drawing board.), or even commercialization of something like the long announced build-case for thorium. Quiet, ultimately gamechanging geothermal advancements are also being made by a process known as "Hot Dry Rock" (HDR).



SMR designs, courtesy IAEA.

WHY TRYING TO GET "THE LAST EIGHTH" DURING THE FINAL INNINGS COULD KNOCK YOU OUT OF THE GAME.

It's extremely difficult to quit or even cut back when you hold a winning hand. If how to exit isn't considered beforehand, emotion will certainly rule the day, putting off a decision. As you plan your investment campaign, build in some kind of a "good fit" exit strategy for all or most of your committed funds.

Just about every investment book out there tells you how to make a lot of money on your investments. But how many offer more than a passing reference on to how to keep most of it? David Morgan's co-authored book Second Chance, with chapters on how to get out via the Sacrifice Throw Portfolio (STP), accords with human nature's market spirits, and just might save your bacon, plus a whole lot more...



To Keep your Gold, you've got to know when to hold, and when to fold.

"How Much is Enough". Few investors of any stripe ever ask themselves such a question. I would suggest that this "make or break" perspective can help investors side-step the inevitable return wave that could carry your hardwon gains out to sea.

Robert Bishop made this statement a decade ago, before his retirement from a lengthy and successful career of writing about mining and commodities stocks, saying, "Having been around it (the resource sector) for 20 years, I've long recognized that my sector goes in and out of favor. But until the recent cycle, I never realized what I now regard as the simple truth of resource stock investing: there are times to be in the market, and times to be out of the market. Period." Nicely Said, Bob!

Bio Brief:

David H. Smith: Senior Analyst The Morgan Report ; Ambassador, the LODE Digital Silver-Gold project; https://ag.lode.one/; Co-Author w/ David Morgan Second Chance: How to Make (and Keep) Big Money from the Coming Gold and Silver Shock-Wave; Contributor, Money Metals.com

GLOBEX PLANNING TO OPTION ADDITIONAL PROPERTIES IN THE JOUTEL MINING CAMP

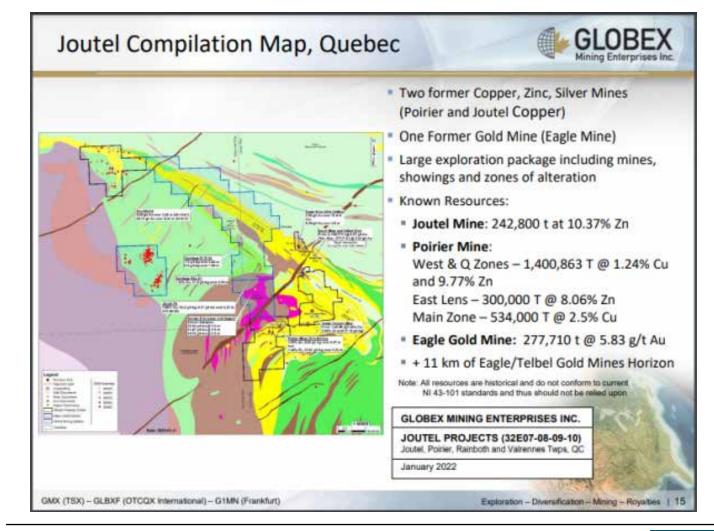
By David O'Brien

CONTINUING RECENT OPTION AGREEMENTS BY MAPLE AND ORFORD, NOW PRODUCING THEIR OWN NEWS, AS REPORTED BY YOUR AUTHOR

Iobex Mining Enterprises Inc. (GMX: TSX, GLBXF: OTCQX, G1MN: FSE) owns two copper/ zinc former producers; the *Poirier* and *Joutel* mines in the very active Joutel Mining camp. Maple Gold Mines Ltd. (MGM: TSXV, MGMLF: OTCQB, M3G: FSE) and Orford Mining Corporation (ORM: TSX-V) are actively exploring most of the rest of the mining camp under Options from Globex leaving these two advanced projects available for Option. "Globex already owns three former mines in the Joutel Mining Camp; the Poirier Mine (copper/zinc), the Joutel Mine (copper/zinc) and the Eagle Mine (gold). All three former mines have historical resources and underground access via shafts and drifts.

Recently, over 10 kilometers of the Eagle Mine horizon became available and Globex was able to acquire the entire strike length. The claims have seen historical exploration including drilling. The drilling defined the underlying mine horizon of interest over the entire acquired property. Numerous gold intersections are reported or indicated. Many of the older drill records report prospective geology (quartz veins, sulphides, alteration) but often, little or no assaying.

"Globex intends to compile the historical data and seek an option partner or buyer for the prospective Joutel Mining Camp package." commented Jack Stoch, **GMX**'s President, CEO and Director and he has done so resulting in the Maple and Orford options.



Joutel Compilation

Recent **Orford** commentary from David Christie:

The Joutel Eagle Gold Project optioned from Globex Mining Enterprises Inc. (see Globex press release dated November 30, 2021). David Christie, President and CEO of Orford, commented, "Orford believes its South Gold Zone at Joutel Eagle currently being drilled has great potential..."

https://orfordmining.com/



www.maplegoldmines.com



Maple Gold Mines executives are equally enthused about their Joutel Eagle Gold prospect: "The projects benefit from exceptional infrastructure access and boast ~400 km2 of highly prospective ground including an established gold resource at Douay (SLR 2022) that holds significant expansion potential as well as the past-producing Eagle, Telbel and Eagle West mines at Joutel. " From their website, an overview: "JOUTEL GOLD PROJECT Overview & Highlights

- Owned by 50/50 Joint Venture between Maple Gold Mines and Agnico Eagle Mines Limited
- Located in one of the world's best mining jurisdictions
- Excellent infrastructure and large operating mines in the region
- 39km2 property which hosted Agnico's high-grade past-producing Eagle-Telbel Mining Camp
- The Joutel property straddles the Harricana Break, a highly favourable geological structure, over a 15.7 km distance
- Significant historical data indicate the potential for high-grade mineralization both near-surface and more high-grade material at depth below old mine workings"

Northwest of Lebel-sur-Quevillon, Quebec, **Globex** has put together numerous claim packages each with gold intersections in historical drill holes or in surface trenches. Globex has undertaken compilation of all the historical data and flown several detailed mag surveys to prepare the properties for potential optioning. [Please refer to map above.]

Always entertaining to follow the serial entrepreneur and 'Option-machine' as Jack Stoch and company utilize other companies' money to develop their ~206 properties.

Using examples like **MGM** and **ORM** we see the unrealized potential of the many other properties in the Joutel camp.

Visit Globex here.

David O'Brien is the owner of Int'l Mining Research CENTRE which employs Media, Event and Online exposure, including eNews News Release Reprints & eNews 3rd-Party Articles. O'Brien also owns W.I.T. Marketing Writing, an Ad Agency, and has been contributing articles to TheProspectorNEWS.com, on demand. He owns no shares in the above companies.

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PROSPECTOR METALS FINDS IT "TOOGOOD" WORKING IN NEW FOUNDLAND

By Marc Challande

rospector Metals (TSX-V:PPP) is a Canadian financed exploration company that started trading on the TSXV since April 8th. The company has many highlights with three drill-ready projects and a full pipeline of recently staked claim blocks. Prospector Metals is focused on district scale early-stage gold and base metal projects; which are cost effective. Their core objective is to create a transformational shareholder value through the discovery of new mineral districts. The company is involved in many projects throughout Canada

sulphide and VMS type targets: Whitton, Roadcut, Wagg, Broddy

Savant Lake

The company can earn up to 70% of the property. The Savant Lake property is 22,900ha wide. This project has a high-grade gold mineralization over a 10x10km area. Still in the early stage, the Savant Lake project has volanogenic massive sulphide targets that need to be drilled.

Prospector Metals can earn a 70% stake in Savant Lake if the company spends \$200k, gives 8M shares, and commits to spends \$2M in work. Furthermore,



PROSPECTOR METALS' PROJECTS

Toogood, Newfoundland

The company owns 100% interest of an area of 11,825ha located approximatively 65km North of Gander, Newfoundland. High grade gold has already been discovered in initial exploration programs. To date, the LiDar, an airborne magnetic survey are completed. Stripping, trenching and chip sampling at Quinlan, Titan and the new Sherwood showing are completed and assays are pending.

Whitton Lake

The Witthon Lake Project is 100% owned and located within 20 km of Impala's operating Lac des Iles platinumpalladium-nickel-copper mine. The project exhibits multiple magmatic the company will have to make an additional payment of \$50k and 2M shares to New Dimension if mineral resources in excess of 1 million oz of gold is defined on the property.



The company also has numerous other projects in their pipeline including:

- The Fairchild Lake gold Project: 100% (earn-in) interest in the 2,228 ha (22.8 km2);
- The Fuchsite Lake Gold Project: 100% (owned) interest in the 3,744 Ha;
- The Gaffney Project: 100% (earn in): Interest in 8,172 Hectare (82 km2)
- The Schefferville project: 100% (owned)
- The Perk-Rocky project: 100% (earn in)
- The Campbell Lake Gold-VMS project 100% (earn in)

RECENT NEWS SHARED BY PROSPECTOR METALS

On April 11th, PPP gave updates on drill programs in Newfoundland and Ontario. The first program is expected to begin in May, on the Toogood project in Newfoundland. The company plans to drill 2,500m. Prospector Metals did trenching and showed the presence of hot rocks with results yielding up to 37.14 g/t Au over 0.8m at Titan, and 10.98 g/t Au over 3.45m at Quinlan.

"We are very excited to begin the first ever drill campaigns at our Toogood Gold Project in Newfoundland, Savant Lake, and Whitton Lake Ni-Cu-PGE Projects in Ontario. These projects have been advanced systematically by our top-tier technical team from grass-roots exploration through to drilling and offer credible opportunities for a major discovery."

Explorations will start early May at the Savant Lake Gold, with drilling targeted for Q3, 2022. In this project, high-grade gold up to 139 g/t Au has been sampled at multiple locations. A multi-year exploration permit has been issued at the beginning of April, 2022.



On April 21st, 2022, Prospector Metals shared updates about the Schefferville Gold Project. The exploration program will occur in two phases. The 1st phase has a \$1M budget and will encompass a detailed aeromagnetic survey, followed by intricate mapping, stripping, and sampling. Then, the company will start the second phase with drilling in the fall of 2022.

SHARE STRUCTURE/ FUNDAMENTALS

The stock is currently traded at \$0.55 for a \$30M market cap. The stock's 52-weeks high is \$0.19 and has a 52-weeks low is \$0.48. The stock is currently down 8% Year-overYear.

The company has 54.5M shares outstanding for 69.4M shares fully diluted. This is positive data as in most cases, companies traded on junior exchanges have more than 100M shares fully diluted. Out of all the shares outstanding, 20% are owned by insiders/advisors, 11.7% by Crescat Capital, 4.8% by Eric Sprott, and 3.5% by institutional companies. This leads to 32.7M shares available for the retail investors, or 60% of the total number of shares outstanding.

There are 4.3M options and their average exercise price is \$0.63. Concerning warrants, the company holds 10.6M of them and their average exercise price is \$0.93. On their latest financial statement (for the nine months ended September 30, 2021), the company reported a strong balance sheet. Indeed, the company had \$13.5M in total assets for no debt.

The company's most recent private placement was closed on April 8th, for a gross proceed of \$3.4M, through 3.6M shares issued at a deemed price of \$0.60, and all units linked to a warrant with an exercise price of \$0.90. If the share price is equal or greater than \$1.20 for 10 consecutive trading days, the company will have the right to accelerate the warrants' expiry date.

BOTTOM LINE

The company is starting its drilling campaigns in 2022. Positive results will drive the stock price up significantly. With all its pipeline projects, the company is will potentially provide more positive results, and augment its market cap.



11 / MAY 2022 EPROSPECTOR

SASSY RESOURCES' SHAREHOLDER VALUE PROPOSITION IS STRONGER THAN EVER

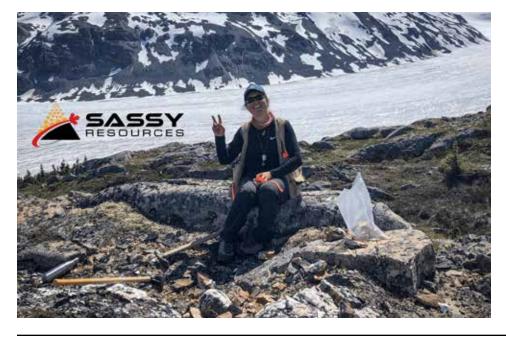
By Amanda Graff

SASSY BUILDS VALUE WITH ROBUST EQUITY POSITION IN GANDER GOLD SPINOUT, ENTRY INTO THE URANIUM BULL MARKET, AND HIGHEST-GRADE RESULTS YET AT THE FOREMORE PROJECT

or Sassy Resources Corporation (CSE:SASY), 2022 has been a year of hitting major milestones. Known for being the only publicly traded, junior exploration company in Canada to have a significant foothold in the country's two most exciting gold districts – the prolific Eskay Camp and the Central Newfoundland Gold Belt – Sassy Resources has further expanded, with plenty of exciting news to share.

As a leading force in the rapidly developing Newfoundland gold rush, Sassy recently announced the spinout of Gander Gold Corporation (CSE:GAND) to oversee a portfolio of eight strategically assembled, highly-prospective projects positioned throughout the Central Newfoundland Gold Belt. This move benefits Sassy shareholders through year-round news flow and a substantial equity position as the company takes an "all Newfoundland, all the time" approach to exploration through Gander Gold in which Sassy holds greater than 35 million common shares. On the other side of the country, Sassy recently announced drill results from the 2021 exploration program at the Foremore Gold-Silver Project, located in the prolific Eskay Camp of British Columbia's Golden Triangle, and confirmed hitting the highest-grade gold results to date. Sassy's also getting in on the uranium bull run that's being driven by the world's transition to a low-carbon economy. Earlier this year, the company signed a staged option agreement with Forum Energy Metals in which Sassy may acquire up to 100% interest in the Highrock Uranium project located in Saskatchewan, just south of Cameco's Key Lake mine and mill site.

In Northwestern Ontario, MAX Power Mining Corporation (CSE:MAXX), to which Sassy optioned its Nicobat claims – a nickel-copper-cobalt-PGE prospect – started trading on the CSE in February. Under the Nicobat option agreement, Sassy holds five million common shares in Max Power and an additional one million warrants with a \$0.25 exercise price.



The Sassy shareholder value proposition is now stronger than ever, and the company is on solid footing for direct exploration success, financial strength, and market capitalization growth. Sassy also benefits from a highly experienced management team led by President, CEO & Director Mark Scott, who has two and a half decades of experience in all phases of surface and underground mining with multiple mining majors.

"We now have members of the board, management team, and employees spread out across six provinces," said Terry Bramhall, Investor Relations Specialist for Sassy Resources and Gander Gold. "The company greatly benefits from Mark's boots on the ground management style. He personally oversees each project and ensures optimal performance in everything the company endeavors to achieve."

A DRIVING FORCE IN THE NEWFOUNDLAND GOLD RUSH

Spinout Gander Gold Corporation recently started trading on the CSE, cementing the company's dominant foothold in the Gander Gold Belt. Led by Sassy and famed Canadian mining investor Eric Sprott through a combined 63% ownership, Gander Gold is aggressively going for gold and becoming a leading force in the Newfoundland gold rush.

A pure gold exploration play with a massive land position of 2,263 square kilometres, Gander Gold's portfolio

is comprised of eight separate project areas that were strategically assembled prior to the staking rush ignited by high-grade drill results from New Found Gold's Keats Zone. Newfoundland is a highly favourable mining jurisdiction that's historically been underexplored for gold. In the late 1980s, a heavy exploration push revealed so many targets that they simply couldn't be processed fast enough to enable effective follow-up.

Armed with a new interpretation of the island's geological conditions and modern exploration technology and techniques, Gander Gold predicts this round of exploration will produce multiple new gold discoveries. Combined with current gold prices that are reaching all-time highs, there couldn't be a better time to be at the forefront of the gold rush. Mark Scott, President, CEO & Director of Sassy and Gander Gold, commented:

"We were looking for a project that would allow our company to work year-round and not be bound by a short exploration season. We ended up with the largest claim position in Newfoundland, highly prospective for gold and copper, and the project took on a life of its own. The spinout allows us to better serve Sassy shareholders with a solid equity position while avoiding dilution – Gander Gold benefits from a tight public float and a well-funded treasury."

Last year, the company hit the ground running with an aggressive inaugural exploration program in Newfoundland that involved collecting more than 20,000 soil and till samples, and completing property-wide LiDAR and MAG/VLF surveys across all eight project areas. The program also included the collection of 330 GT Probe samples at the Gander North project, along with a six-week prospecting campaign. Only 15 kilometres from the Keats Zone, Gander North is a 485 square kilometre project located along the eastern side of the Gander Gold belt, encompassing claims optioned from both Vulcan Minerals and famous Canadian prospector Shawn Ryan. The project returned impressive early results which will be followed up with further exploration, with drill targets to be delineated as work progresses in 2022.

A drill permit is in place for Gander North's Viking target where a multikilometre-longgold and copper anomaly was recently discovered that is open for expansion to the southeast in the direction of the historic Jonathan's Third Pond copper showing. This showing is described in historic assessment reports as a pervasive zone of silicification and alteration with pyrite-chalcopyritebornite mineralization.

Early-stage exploration work at Viking performed by Gander Gold has yielded extremely high gold-in-soil assays including 1.43 g/t and 1.15 g/t, suggesting the presence of a nearby mineralizing source. Copper-in-soil



samples returned values up to 245.5 ppm Cu, which is significant for soils in Newfoundland.

In addition to revealing enormous potential at the Viking target, results at Gander North also indicated the presence of previously unrecognized large regional structures stretching along a northeast trend of more than 40 kilometres, overlain by highly anomalous gold and copper soil and till geochemistry results. 58 samples of clustered high-grade gold assayed between 50 ppb Au and 756.1 ppb Au, and 23 samples yielded \geq 107.3 ppb Au. The prospecting team also collected multiple samples of mineralization associated with quartz veining and country rock, with results pending.

The Mt. Peyton project is another highly prospective, massive claim package totalling 955 square kilometres, situated between the Gander Gold Belt, which hosts New Found Gold's Queensway project and Labrador Gold's Kingsway project to the east, and Sokoman Minerals' Moosehead discovery to the west. The Mt. Peyton project features extensive southwest-northeast trending geophysical structures and a prominent fold nose in the southwest portion, recently renamed the Golden Horseshoe target. This target is associated with anomalous gold-in-till results and a linear structure running more than 20 kilometres.

Rounding out the company's portfolio are the Cape Ray II, BLT, Hermitage, Little River, Carmanville and Gander South projects. The 323 square kilometre Cape Ray II project, contiguous to Matador Mining's growing resource that's advancing towards production, is located in the southwest corner of the province, while the Little River and Hermitage projects in the far south are home to extensive outcrop yet to be explored. The BLT project provides Gander Gold with exposure to a large unexplored section of the Northern Arm Fault, northeast along the same regional structure that hosts Marathon Gold's multi-million-ounce Valentine deposit. The Carmanville project hosts multiple historic gold showings overlaying

magnetic lows, similar to other emerging discoveries in the area. Finally, Gander South is a block of strategically located claims along the Dog Bay Line, which forms the western edge of the Gander Gold Belt in close proximity to New Found Gold's Eastern Pond target.

"Results from last year's early exploration work across all eight projects are highly encouraging, and we're looking forward to following up on highgrade gold and copper soil anomalies at Gander North this coming season," said Mark Scott. "At Mt. Peyton, we'll be testing a newly identified structure with a potential strike-length of 22 kilometres overlain by anomalous gold and copper. These very large project areas sit on either

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- Jagged-edged placer from paleochannel can indicate nearby source
- Parallel and mirror image geology to Osisko's Cariboo Gold Project

PLACER RECOVERY

- 173.4 oz recovered from a single 24m long, 2.4m wide test crosscut
- 2022, initial 300m of paleochannel (100+ crosscuts)
- OMM has up to 15 km of potential paleochannel

See maps, photos and videos of placer recovery & exploration targets at ominecaminingandmetals.com Contact the Company at info@ominecaminingandmetals.com



side of the Gander Gold Belt, with early-stage soil and till sampling geochemistry results that are analogous to very significant developing discoveries in the area, including New Found Gold's Queensway project."

Final results from last year's exploration program will be released soon, and crews are preparing for a busy 2022 exploration season as the company forges ahead to create an all-Newfoundland vehicle with tremendous upside potential, both geologically and in the market.

HITTING THE HIGHEST-GRADE RESULTS YET IN THE PROLIFIC ESKAY CAMP

On the other side of the country, Sassy is actively advancing its 100%-owned Foremore Gold-Silver project, a largely underexplored contiguous land package stretching 146 square kilometres in the prolific Eskay Camp. This project features the drill-confirmed grassroots Westmore Discovery Zone containing high-grade gold and silver in quartz veins intersecting the Westmore granodiorite, and the More Creek Corridor which features gold and silver enriched VMS style mineralization containing high grades of zinc, copper, and lead.

Over the past two years, Sassy embarked on an aggressive exploration program at Westmore that involved drilling 18 holes and confirming the discovery of a structurally controlled gold-silver-rich system with a large surface footprint. Geological mapping at the outer edge of the intrusive suggests it runs one kilometre east-west and north-south with a depth beyond 400 metres. 1,026 surface samples were also collected, returning an average grade of 2.65 g/t Au, with the top 50 samples averaging 43.16 g/t Au and 329.26 g/t Ag.

2021 drill results at the Westmore discovery were exceptional with the last five holes intersecting shallow high-grade mineralization, and four holes returning visible gold while confirming continuity to depth of previous surface sampling results. The newly-named 4Amigos vein has a current strike length of 160 metres and is open for expansion to depth and along strike to the west, and along strike and downslope to the east. Drill highlights include:

- 55.2 g/t Au and 32.3 g/t Ag over 0.8 m within 1.5 m @ 26.6 g/t Au and 15.7 g/t Ag
- 86.4 g/t Au and 41.6 g/t Ag over 0.7 m within 1.4 m @ 43.2 g/t Au and 20.8 g/t Ag
- 26.3 g/t Au and 17.0 g/t Ag over 0.7 m within 2.2 m @ 8.4 g/t Au and 6.25 g/t Ag
- 20.2 g/t Au and 19.3 g/t Ag over 0.8 m within 1.6 m @ 10.2 g/t Au and 9.8 g/t Ag
- 503.0 g/t Ag over 1.0 m, 200 m south and 112 m below the 4Amigos vein

Channel sampling also revealed a new discovery consisting of a steeply dipping mafic volcanic hosted quartz vein up to 7.7 metres thick that's exposed over a distance of 130 metres



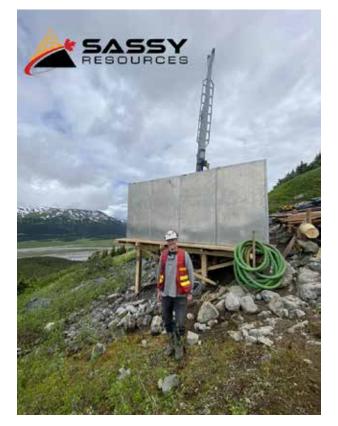
RKV PROJECT- COPPER NICKEL COBALT IN SOUTH CENTRAL NORWAY

BEGINNING WITH ARTIFICIAL INTELLIGENCE, PLAYFAIR IS USING MODERN EXPLORATION METHODS TO EXPLORE THIS 201 SQ KM HISTORIC COPPER NICKEL DISTRICT.

THE RKV PROJECT COVERS 2 PAST PRODUCING VMS COPPER MINES, A NICKEL-COPPER DEPOSIT AND OVER 20 ADDITIONAL KNOWN MINERAL OCCURRENCES

DRILLING CONTINUING AT COMPELLING COPPER DRILL TARGETS. SEE WWW.PLAYFAIRMINING.COM

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and is believed to continue underneath the glacier at the bottom of Westmore. Channel sampling from across this vein system returned 7.2 g/t Au and 230 g/t Ag over 2.0 metres, and the vein is yet to be drill tested.

In addition to the Westmore discovery, Sassy is also continuing to target gold-silver-rich deposits at the highly prospective More Creek Corridor. In 2020, Sassy expanded the More Creek Corridor to greater than 5 kilometres of potential strike length with the discovery of mineralization at the Toe of the More glacier. 2020 drill intersections at the BRT target located within the More Creek Corridor yielded 8.05 metres of 4.35 g/t AuEq beginning just 24.05 metres downhole, with individual narrower intersections assaying as high as 7.97 g/t Au, 453.00 g/t Ag, 11.82% Zn, 0.75% Cu, and 6.37% Pb.

"Our discovery potential is better than ever," said Mark Scott. "We recently published a number of high-grade gold intersections at Westmore which will be followed up with further diamond drilling in 2022. Surface sampling also produced an impressive number of gold, copper, zinc, and lead targets, and a propertywide deep penetrating airborne VTEM survey identified a number of conductors along More Creek which will be followed up with groundtruthing and possible drill-testing this year and beyond."

As the Foremore project is located within Tahltan Territory which comprises roughly 11% of B.C., all exploration activities are underpinned by a strong partnership with the Tahltan Nation and political arm, the Tahltan Central Government, (TCG). Prior to commencing work at Foremore, Sassy and TCG collaborated to execute a Communications and Engagement Agreement which was followed by an Opportunities Sharing Agreement outlining processes for procurement, training, and employment while optimizing opportunities for Tahltanowned businesses. The TCG Lands Department also reviewed the

company's exploration permit prior to its issuing from the province.

The Foremore project offers a rewarding work environment that provides a tremendous opportunity to participate in and learn about mineral exploration. Over the past two years of exploration, a large percentage of personnel have been employed directly from Tahltan Nation, filling a wide range of roles including camp medics, camp construction and maintenance, geological assistants, core cutting and drilling, sampling, drill pad construction, mapping and prospecting.

Opportunities are also available for technical and specialist roles including geologists, geological technologists, and diamond drillers, just to name a few. A number of contractors and suppliers at Foremore are also Tahltan-owned or engaged in relevant joint ventures. Commenting on the partnership, Mark Scott said:

"We continue to enjoy a strong relationship with the Tahltan Nation and actively prioritize local hiring for technical and operationsrelated roles. We also engage a number of Tahltan-owned and partnered contractors, and procure supplies including fuel and timber from these businesses. Meetings are held on a regular basis to ensure continued alignment and the optimization of opportunities as the project progresses."



WELL-POSITIONED TO CAPITALIZE ON THE NUCLEAR ENERGY PUSH

As the world transitions to a lowcarbon economy, nuclear energy will play a starring role. The urgency to reduce carbon emissions has prompted a renewed interest in nuclear energy generation, promising plenty of future demand for uranium. Following a decade of extreme underinvestment in the uranium sector, we're now entering a bull market, and Sassy Resources is well-positioned to benefit from the nuclear energy push.

Earlier this year, Sassy signed a staged option agreement with Forum Energy Metals under which Sassy may acquire up to 100% interest in the Highrock Uranium project located in Saskatchewan's Athabasca Basin region just south of Cameco's Key Lake mine and mill site. During Key Lake's mine life, 200 million pounds of uranium were produced at an average grade of 2.3% U3O8. Saskatchewan is home to the world's highest-grade uranium mines, producing high volumes of uranium concentrate with fewer tailings and waste rock.

Accessible by a winter haul road, Highrock's drill targets are ready to go, offering shareholders excellent leverage to a potential new discovery and uranium market upside this year and beyond. Fully funded by Sassy, the 2022 diamond drill program recently kicked off and will focus on the discovery of basement-hosted mineralization similar to NexGen's Arrow deposit and Cameco's Eagle Point mine.

"This is a highly prospective project proximal to globally historic production and existing processing infrastructure," said Mark Scott. "Forum has laid the groundwork for a follow-up drill-ready project that offers strong discovery potential. We'll start by evaluating results from drill holes completed this past winter, and we plan to fund further exploration activities over the next several years."

An immediate priority is the North target south of Cameco's Key Lake property boundary. There's also ample discovery potential at the south end of the Highrock claims where only one drill hole previously tested a very strong gravity low where the main conductor trends to the northeast. Weak alteration along a strong conductor was encountered in this hole, plus elevated uranium (8 ppm), vanadium (442 ppm), copper (421ppm), nickel (125 ppm), lead (46 ppm), and boron (116 ppm). Through gravity surveys previously carried out by Forum at Highrock, numerous gravity lows along a 10-kilometre-long graphitic conductor were identified which may be zones of alteration associated with uranium mineral deposits. Eight widely-spaced drill holes completed in 2016 tested only six kilometres of the conductor, and four kilometres remain untested at the southern end of the property. Initial drilling also detected zones of chloritization, bleaching, elevated boron and other pathfinder elements. Drill target selection will continue to be refined as the program progresses.

"The acquisition of Highrock positions Sassy with yearround direct exploration work and associated news flow in gold, zinc, copper, and uranium," said Mark Scott. "Combined with Sassy's equity positions in Max Power Mining and Gander Gold, Sassy has vastly increased our size and long-term financial strength, while fiercely protecting our share structure.

Looking forward, we will continue to evaluate acquisition, partnership, and investment opportunities to maximize value for our Sassy shareholders."

Learn more about Sassy Resources at: new.sassyresources.com

Learn more about Gander Gold Corporation at: gandergold.com



DOLLY VARDEN SILVER TRIPLES RESOURCE AND ADVANCES ONE OF THE LARGEST PRECIOUS METAL ASSETS IN WESTERN CANADA

By Amanda Graff

olly Varden Silver Corporation (TSX-V: DV) has had a remarkable year so far. Once a pure silver play focused on growing high-grade silver resources in the Golden Triangle through 100% ownership in the Dolly Varden project, the company recently acquired the neighbouring Homestake Ridge project from Fury Gold Mines that hosts a primarily gold with silver mineral deposit.

In combining the two adjacent properties, Dolly Varden Silver has consolidated seven high-grade silver and gold deposits along with historic mines to create the 163-squarekilometre Kitsault Valley project. Comprised of the same structural setting that hosts deposits like Eskay Creek and Brucejack, Kitsault Valley is one of the largest undeveloped silvergold assets in all of Western Canada, offering incredible economies of scale, operating and capex synergies, and upside potential.

"Combining a pure silver play with a primarily gold asset provides notable leverage and a unique precious metals combination, particularly at today's prices," said Rob van Egmond, Chief Geologist, Dolly Varden Silver.

The company's management team has effectively tripled its resources to 34.7 Moz of silver and 166 Koz of gold Indicated, and 29.3 Moz of silver and 817 Koz of gold Inferred. With a current total resource of 138 Moz of silver equivalent, Dolly Varden Silver has far surpassed industry thresholds, and is on track to become the next predevelopment company operating in an ideal mining jurisdiction.

"Consolidating these assets was the logical next step - we knew from Homestake's previous PEA that it offered robust economics and highgrade deposits, and the project is located along the same structural trend as the Dolly Varden Mine," said Rob van Egmond. "We've achieved economies of scale and now have a dedicated team exploring everything from one camp. Future economic analysis of the deposits can now include a model where numerous deposits feed into a single mill. From a resource standpoint, we're now well over the industry threshold that attracts majors for takeovers, investing, or advancing."

Dolly Varden Silver's hot streak is attracting attention, and the company was recently selected as a 2022 top junior stock by Bob Moriarty of 321gold who referred to them as "absolutely brilliant." The company also caught the attention of investors and recently closed a private placement involving renowned investor Eric Sprott and Hecla Mining with aggregate proceeds of \$13 million, boosting their treasury to \$27 million.

CONSOLIDATING HIGH-GRADE DEPOSITS TO ACHIEVE ECONOMIES OF SCALE

Located directly northwest of the Dolly Varden Mine, Homestake Ridge is a 7,500-hectare land package home to three known deposits: Homestake Main, Homestake Silver, and South Reef. In 2014, 90,000 metres of drilling resulted in a resource estimate of 165,993 ounces of gold and 1.8 million ounces of silver Indicated and 816,719 ounces of gold and 17.8 million ounces of silver Inferred. The project's previous PEA produced an after-tax net present value of US\$173 million and an internal rate of return of 32%, with an estimated production of 590,040 ounces of gold equivalent over a 13-year initial mine life.

Southeast of Homestake Ridge, the Dolly Varden Mine is an 8,800-hectare property home to four historic deposits known as Wolf, North Star, Dolly Varden, and Torbrit, which collectively produced more than 19 million ounces of silver over four decades. Roughly 86,000 metres of drilling has been completed on the property since 2017, resulting in several new discoveries including wide mineralization intervals that connect Torbrit with the North Star target to the west. In 2019, the property's resource estimate was updated to 32.9 Moz Indicated and 11.477 Moz Inferred.

Together, these two properties comprise the Kitsault Valley project which boasts a collective mineral resource base of 34.7 million ounces of silver and 165,993 ounces of gold Indicated and 29.3 million ounces of silver and 816,719 ounces of gold Inferred. Combined with shared infrastructure and proximity to a power grid and access road, it's expected that substantial codevelopment synergies will emerge as these deposits are advanced.

There's room for this highly-prospective land package to grow through



additional exploration along a combined 15-kilometre strike-length. Consolidation also eliminated project boundaries, enabling the comprehensive regional targeting of an unexplored 5.4-kilometre Kitsault Valley gap where there's ample potential for new discoveries. CEO & Director of Dolly Varden Silver, Shawn Khunkhun commented:

"We're excited to combine two adjacent precious metals projects located in one of the world's top mining jurisdictions. We expect this combination will result in synergies in exploration, development, permitting, and production. We look forward to continued engagement with Indigenous and community partners to ensure the responsible development of this compelling project."

UPGRADING AND EXPANDING RESOURCES THROUGH AN AMBITIOUS DRILL CAMPAIGN

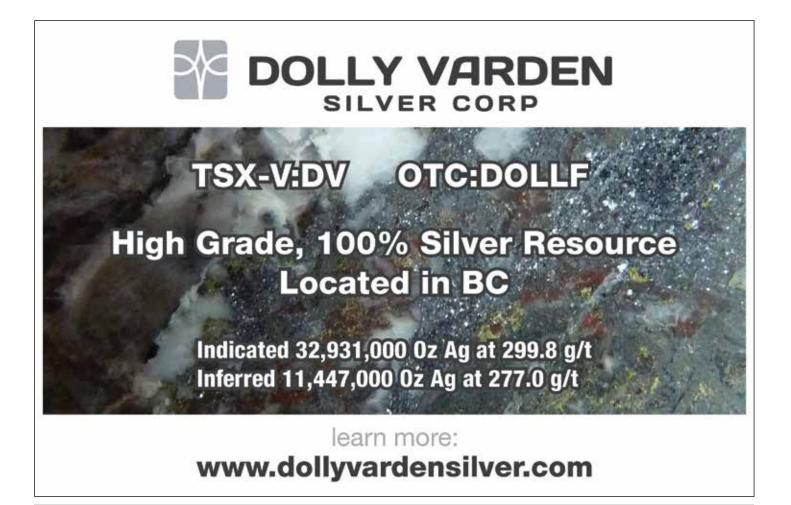
When it comes to exploring the newly consolidated Kitsault Valley project, Dolly Varden Silver plans to hit the ground running. They're mobilizing early and plan to drill between 30,000 – 50,000 metres, three to five times more than the ambitious drill campaign the company carried out last year.

"We're getting an early start and embarking on a large-scale program to test several theories and really get to know the Homestake Ridge deposit," said Rob van Egmond. "The bulk of exploration will focus on upgrading inferred resources to measured and indicated, and once defined, we'll start testing down plunge and along strike to define and target high-grade ore shoots. On the Dolly Varden side, we'll aim to connect Torbrit with Homestake the newly consolidated, along unexplored border."

Around 75% of the initial 30,000 metre exploration program will comprise infill drilling to upgrade the existing mineral resource, and step-out drilling to uncover mineralization of known deposits at depth and outside of existing resources. The remaining 25% will be dedicated to exploration drilling with a focus on the 5.4-kilometre trend between Dolly Varden's Wolf deposit and the gold and silver deposits at Homestake Ridge.

Geological and geochemical modelling indicates there are more deposits to be discovered in this area, and there's expansion potential at the favourable volcanogenic Torbrit horizon, as well as at the Wolf zone where potassic anomalies have been identified.

2022 exploration will follow on the heels of last year's successful program. In 2021, Dolly Varden Silver completed 10,506 metres of resource expansion, upgrade, and exploration drilling across 31 holes including 21 holes at the Torbrit and associated Kitsol target. The company reported wide sections



of silver mineralization from several zones that comprise Torbrit, the largest of the four deposits on the Dolly Varden property. Drill highlights included:

- 12.28 metres true-width averaging 354 g/t silver from a depth of 134.85 metres at Kitsol
- 18.27 metres true-width averaging 230 g/t silver from a depth of 157.12 metres at Kitsol
- 0.70 metres drilled length averaging 1,220 g/t silver from a depth of 361.45 metres at Torbrit North
- 16 metres drilled length averaging 212 g/t silver from a depth of 165 metres at Torbrit
- 5.1 metres drilled length averaging 364 g/t silver from a depth of 120.5 metres at Torbrit

These results combined with an extension of high-grade silver mineralization at the Wolf deposit demonstrated the continued resource expansion potential within a twokilometre-long gap that runs between known deposits on the Dolly Varden property. Lying roughly 2,000 metres north of Torbrit, the Wolf deposit is the northernmost of the Dolly Varden deposits, hosting 402,000 metric tons of Indicated resource averaging 296.6 g/t (2.1 million oz) silver, plus 9,500 metric tons of Inferred resource averaging 230.6 g/t (70,000 oz) silver.

Earlier in the year, Dolly Varden Silver reported high-grade results from 2021 drilling at Wolf which included a hole that tested the southwest projection of the Wolf vein about 94 metres downplunge, cutting 1.22 metres averaging 1,532 g/t silver, 0.44 g/t gold, 2.11% lead, and 1.07% zinc within a 17.5-metrethick breccia zone averaging 214 g/t silver and 0.47% lead.

"The 2021 program was split between exploration, infill, and expansion drilling around the known resource," said Rob van Egmond. "Infill drilling successfully confirmed thicker intercepts and expansion drilling identified new lenses and extensions in the north. On the exploration side, we achieved encouraging results that included a 94-metre step out at the Wolf vein and newly defined areas of potassic alteration below a sediment cap that sits in the bottom of the valley. Holes up to 300 metres deep tested gold and copper trends leading up to Homestake Ridge which resulted in highly anomalous gold discoveries surrounding the intrusive at depth."

Once 2022 drilling is complete, Dolly Varden Silver will prepare a new resource estimate for the combined Kitsault Valley project which is anticipated for Q2 of next year. The report will incorporate Dolly Varden drill results since 2018 along with Homestake Ridge drill results from this year.

COMMUNITY ENGAGEMENT FACILITATES WORLD-CLASS MINERAL DEVELOPMENT

As Dolly Varden Silver embarks on an ambitious exploration program and advances the Kitsault Valley project to the PEA level, the company's commitment to community engagement remains steadfast. Dolly Varden Silver is a founding member of the B.C. Regional Mining Alliance (BCRMA), a partnership between the B.C. government, First Nations (the Nisga'a Lisims Government), and Industry (economic mineral explorers).



With a focus on exploration projects in B.C.'s Golden Triangle, the BCRMA showcases to an international audience how collaboration between government, industry, and local Indigenous peoples is facilitating world-class mineral development in the province's vibrant and competitive mining sector.

Involvement in the BCRMA reflects Dolly Varden Silver's commitment to benefiting local communities by building strong relationships with First Nations stakeholders; maximizing training, employment, and contracting opportunities; and engaging in regular, transparent dialogue.

The Kitsault Valley project lies within the Nisga'a territory, and currently, 30% of the company's exploration team is from the Nisga'a First Nation, the original occupant of the Nass River Valley of northwestern B.C. This strong relationship is a significant asset to Dolly Varden Silver, and one that the company greatly values.

"We have agreements in place and schedule regular consultation meetings, but it's more than that," said Rob van Egmond. "We've developed a great working relationship with the Nisga'a First Nation and it's like working with family. Now that we're growing and advancing our project, we'll be actively seeking to further our engagement with First Nations stakeholders while opening up new channels for consultation."

In support of local economic development, Dolly Varden Silver has enjoyed a longstanding partnership with Indigenous-owned Savage Pads, a full-service construction contractor that has provided specialized services to the Dolly Varden project for more than 10 years. The company was founded by Phillip Clayton, who leverages his knowledge of engineering and constructing helicopter and drill pads to provide training and employment opportunities to local community members.

With the consolidation of the Kitsault Valley property, the Savage Pads team has mobilized a large crew to construct pads that can be customized to almost any type of terrain. As part of this service, the company brings in all materials required to construct the pads, modifies construction to the unique landscape, dismantles the pads, and provides full land reclamation after use. In light of current timber costs, a unique technique is employed that fully reuses timber and incorporates it into various components of the pads while leveraging fallen trees to increase pad stability.

Savage Pads has also participated in road and bridge construction, and mobilizes camps for operation. With a commitment to diversification, the company recently expanded its services to include highly-skilled core cutters, geological technicians, medics, and first responders on the team.

Savage Pads collaborates with the Nisga'a Employment, Skills and Training (NEST) organization which provides resources and services to support the Nisga'a people in finding and keeping meaningful employment. Through their partnership with NEST, Savage Pads employees can achieve certification for their specialized skillsets.

Training is also provided through the Gitlaxt'aamix Village Government, the administrative capital of the Nisga'a Nation, which provides training and certification in a number of capacities including the transportation of dangerous goods, emergency services, ATV, and backroad training. Phillip Clayton's involvement with the Gitlaxt'aamix Village Government spans back more than a decade through his work as a grant writer and his involvement in developing a number of community health and youth programs.

Phillip Clayton's commitment to excellence is reflected in Savage Pads' operations, where no project is considered too vigorous, and challenges are tackled head on. The company excels at meeting customer needs and delivering on aggressive timelines, which has solidified the company's working relationship with Dolly Varden Silver year after year.

"We have an excellent working relationship with Dolly Varden Silver and are essentially on a handshake agreement," said Phillip

ABORIGINAL MINER

Clayton, Founder of Savage Pads. "Our crews are highlytrained and skilled problemsolvers so no job is too complex. Previously, crews would be flown in from Kamloops, and the transition to leveraging local talent has facilitated cost savings related to transportation and accommodation while minimizing risk."

Rob van Egmond added: "Savage Pads has been instrumental to our operations. We prioritize local hiring because the skillset is there, and community members have a deep knowledge of the local area in addition to a vested interest in project success. It's a true team environment where everyone is working together towards a common goal."

Learn more about Dolly Varden Silver Corp. at www.dollyvardensilver.com



Bravada Gold Corporation (BVA-TSX.V; BGAVF-OTCQB; BRTN-Stuttgart) is an exploration and development company with a portfolio of ten high-quality properties for 810 claims (6,500ha) in two prolific Nevada gold trends. Bravada's value is underpinned by a substantial gold and silver resource with a positive PEA at Wind Mountain. The Company also holds a royalty on a high-grade gold property in Ontario.

Partners typically spend approximately US\$1,000,000 on Bravada's properties each year advancing the company's projects.

Wind Mountain Au/Ag project

- 2021 Drilling infilled higher-grade portions of the disseminated Resource and expanded shallow parts of the vein zone at the Feeder Target to +300m beneath overburden cover;
- Substantial gold and silver resource with positive PEA in 2012, with updated resource and PEA expected in Q2 or Q3 2022
 Highland Recently returned to Bravada after Headwater Gold Inc completed 7 holes (~2,133m) on several targets.
- Many attractive high-grade gold targets remain on this large and largely alluvial-covered property.
- **SF/HC** Two "Proof-of-Concept" drill holes in 2019 confirmed the presence of a gold system in favorable host rocks and structures that are similar to those at the large, high-grade Goldrush deposit nearby. Adjacent HC claims were acquired, and additional claims were staked to allow further exploration of this large Carlin-type gold system.
- **Baxter** Drill ready after detailed soil-sampling program.
- Pete Hanson & Gabel Expected to be drill ready after a soil-sampling program on each.
- North Lone Mtn Zinc and gold soil anomalies drill ready.
- Shoshone Pediment Permitting two barite open pits by Baxter Hughes, Royalty to Bravada possible 2022/2023.

TSX:BVA.V | BRTN:STUTTGART | BGAVF:OTCQB | WEBSITE:www.bravadagold.com | EMAIL:ir@mnxltd.com



THE NEXT CONTRIBUTOR OF GREEN ENERGY AND ZERO EMISSION CRITICAL METALS

By Christian Elferink

oyal readers of The Prospector News know by the world is committed to a cleaner tomorrow. To realize this the world needs metals and a lot of them. The government of Canada is expecting that the global clean technology market is growing to C\$2.5 trillion and the end of 2022 which will put additional pressure on the demand side of the critical metals that will be used in this progress. Canada is also committed to a clean energy future having pledged to reduce emissions to 30 percent below 2005 levels by 2030. In addition, Canada has set a goal of increasing the share of zero-emitting sources to 90 percent by 2030. This is where the following company comes into play.

CLEAN AIR METALS INC. (TSX-V: AIR)

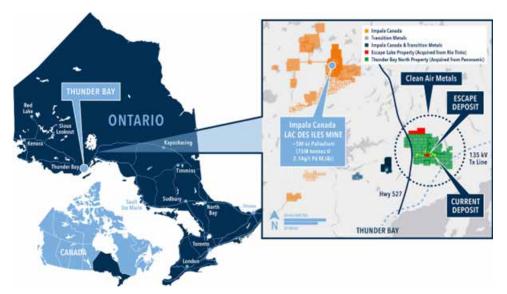
Canadian-based and listed Clean Air Metals Inc. is committed to being the next contributor of green energy and zero emission metals to Canada and the rest of the world. Clean Air Metals' flagship asset is the 100% owned, high grade Thunder Bay North Project, a platinum, palladium, copper, nickel project located near the City of Thunder Bay, Ontario and the Lac des Iles Mine owned by Impala Platinum. The company acquired The Thunder Bay North Project for a total of C\$15 million in 2020. The Escape and Current deposit that are situated on the project have almost \$100 million in past exploration work by prior owners Rio Tinto and Panoramic Minerals The Thunder Bay North Project hosts the twin magma conduit bodies which host the Current and Escape deposits forming the basis for a robust preliminary economic assessment (PEA) around a ramp access underground mine and on-site milling complex. The in December 2021 released PEA shows some very promising numbers:

- Pre-tax net present value (NPV) of \$425.0 million, and after-tax NPV of \$293.0 million, at a 5% discount rate.
- Pre-tax internal rate of return (IRR) is 31.1%, and the after-tax IRR is 25.2%.

- Capital payback is 2.6 years from start of production.
- Revenue's average \$239.8 million per year from sale of PGE and Copper mineral concentrates.
- Total mined metal production over a 10-year mine life based on the present resource base is expected to be 629 k oz Platinum, 618 k oz Palladium, 111 M pounds Copper, 57 M pounds Nickel, 38 k oz Gold, 850 k oz Silver, or 2,886 k oz PtEq insitu.
- 65.2% of total mineral production occurs in the first 5 years.
- Operating margin of 59% in the first 5 years and Life-of-Mine Operating margin of 53%.

Clean Air Metals acknowledges that their project is located is on the traditional territories of the Fort William First Nation, Red Rock First Nation and Biinjitiwabik Zaaging Anishinabek and is committed to stewarding Indigenous heritage and remains committed to building, fostering and encouraging a respectful relationship with them. The company and the First Nations Groups signed an exploration agreement on April 13, 2022 that confirms a framework for a mutually beneficial relationship between the involved parties.

Chief of Red Rock Indian Band, Marcus Hardy, stated that "the Participating Communities appreciate

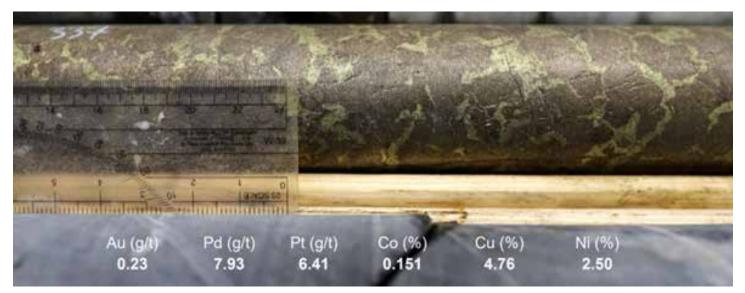


ESG RESPONSIBILITY

Clean Air Metals takes its ESG responsibilities very seriously. The company is striving for carbon neutrality via sourcing their energy through a 100% renewable gird supply based on hydro, wind and solar and is committed to maximize electrification of their future underground equipment. To further strengthen its goal of being carbon neutral the company is planting new trees in harvested areas and is investigating carbon capture with mine tailings. the commitment to equity, diversity and inclusion that Clean Air Metals continues to demonstrate. Sustainable development by Clean Air Metals of the critical minerals platinum, palladium, copper and nickel found at the Thunder Bay North Project will allow our youth and young adults to address climate change and participate meaningfully in the global transition to cleaner forms of energy."

THE PATH FORWARD

The Company currently drilling 16,000 metres with two diamond drills operating



at the Thunder Bay North Project focused on increasing drill density within the PEA mine plan in preparation for feasibility studies and large-diameter drill bulk sampling year by year within the proposed PEA mine plan in preparation for metallurgical optimization. The prefeasibility study is planned for delivery in early 2023. Exploration upside includes the search for the source of high-grade

massive sulphide intercepts identified in the system. Recent assays from infill drilling show some promising results:

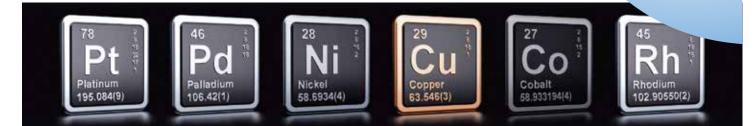
- 90.0m @ 1.04g/t Platinum, 1.33g/t Palladium, 0.49% Copper and 0.28% Nickel
- 46.0m @ 3.03g/t Platinum, 3.94g/t Palladium, 1.33% Copper and 0.51% Nickel

Mill recoveries, concentrate grade and smelters terms are being further optimized to potentially make cobalt and rhodium payables metals and improve the nickel payability. 2022 is shaping up to be a pivotal year for Clean Air Metals as they take the necessary important steps to becoming next contributor of green energy and zero emission metals.



- Current Lake & Escape Lake Pt-Pd-Cu-Ni Deposits
- Total Indicated Resource at 3 Million oz PtEq
- Utilizing Norilsk-style Magma Conduit Model for Exploration Based on Structure, Stratigraphy and Presence of Massive Sulphides
- 4g/t at Lower Current and Bridge Zone
- Accomplished Management Team
- Well Financed
- Social License to Explore Written Communication **Protocol with 3 First Nation Communities**

TSXV AIR **OTCOB CLRMF** FRA CKU



NEXGEN ADVANCES THE LARGEST DEVELOPMENT-STAGE URANIUM DEPOSIT IN THE WORLD

By Amanda Graff

AS THE CLEAN ENERGY REVOLUTION CALLS FOR MORE URANIUM, NEXGEN IS POSITIONING CANADA AS A TOP GLOBAL PRODUCER

s net-zero targets drive a global energy transition, uranium will fill many gaps related to green power. Last year, uranium was one of the hottest commodities with spot prices hitting a nine-year high. This surge was partly due to the launch of the Sprott Physical Uranium Trust (SPUT) which was formed to create continuous price discovery in the physical spot market. Within four weeks, SPUT sequestered +10Mlbs, causing an 80% spike in uranium spot prices.

Uranium demand is escalating worldwide – China recently announced plans to build 150 nuclear reactors over the next 15 years, and the U.S. has 95 nuclear reactors in operation, with bipartisan government support for these reactors to stay operational longer. We're witnessing a paradigm shift in nuclear energy policy among developed markets with plans to compete on a global stage through buildouts of nextgeneration reactors. At the same time, supplies are dwindling as the market has been drawing inventory levels down for more than 10 years.

Currently, half of global uranium production comes from just 10 mines across six countries. Canada is the fourth largest producer of uranium, accounting for nearly 10% of the world's output. This output comes from the Athabasca Basin, a region in the Canadian Shield of Northern Saskatchewan and Alberta, home to the richest uranium endowment on earth.

HOLDING A DOMINANT LAND POSITION IN THE ATHABASCA BASIN

At the forefront of uranium mining in the Athabasca Basin is **NexGen** **Energy Ltd., (TSX: NXE) (NYSE: NXE) (ASX: NXG)**. A well-funded exploration and development company with roughly \$170 million in the treasury, NexGen holds the most dominant land position in the southwest part of the region. The company's portfolio of high-impact projects span 199,576 hectares and includes 100% ownership in the Rook I property that hosts the world-class Arrow Deposit along with the South Arrow, Harpoon, Bow, and Cannon discoveries.

NexGen is led by a highly experienced team of uranium industry professionals with a successful track record of uranium discovery and developing projects from inception to production. The company is backed by a strong shareholder base including CEF Holdings and Queens Road Capital, and is on pace to become one of the top 10 mining companies in the world.

"Historically, Canada has always been a substantial and stable uranium supplier," said Travis McPherson, Senior Vice President of Corporate Development, NexGen Energy. "20% of Canada's electricity grid is powered by uranium, and the U.S. is the largest consumer followed by Europe and parts of Asia."

"Our country's uranium future is looking positive, where it once looked bleak," he added. "Over the past decade, there's been a decline in uranium production and replenishment, partly due to a long bear market and a lack of incentives to undertake necessary exploration spending. With our project



alone, Canada can regain its position as the top global uranium producer and lead the world in terms of social and environmental stewardship. When we reach production, we'll be generating in excess of \$1 billion in annual after-tax cash flow which will leapfrog NexGen into the top 10 mining companies globally."

With 100% ownership of a generational, development-stage asset combined with a portfolio of strategic exploration assets, NexGen delivers sustainable long-term benefits to stakeholders, and is well positioned to actively restore Canada as a global leader in the delivery of clean energy fuel. Fiercely committed to sustainability, NexGen is the recipient of PDAC's 2018 Bill Dennis Award and the 2019 Environmental and Social Responsibility Award. The company has also signed a number of industry-leading benefit agreements with local Indigenous communities, and is a major economic stimulator across Northern Saskatchewan.

ADVANCING THE LARGEST DEVELOPMENT-STAGE URANIUM DEPOSIT IN CANADA

NexGen's Rook I project is the largest development-stage uranium deposit in the world. The project recently advanced through a Feasibility Study based on US\$50/Ib U3O8 that outlined elite environmental performance and industry-leading economics. While NexGen applies for a 24-year permit, Rook I's initial 11-year mine-life boasts an after-tax NPV of \$3.47 billion and an average annual production of approximately 25 M lbs U3O8 over the first decade of operation.

NexGen's current focus includes progressing through advanced engineering in support of mine and mill construction at the project's Arrow Deposit, and further exploring untested locations, as Rook I is home to numerous electromagnetic conductors and structural corridors yet to be explored. Travis McPherson commented:

"Advancing our project through the regulatory process and into production will help solidify Canada's energy security and independence for future generations. The introduction of tax incentives in the latest federal budget for uranium exploration as a critical mineral bodes well for supporting a pipeline of projects that will cement our country's domestic supply of this highly soughtafter commodity."

The Arrow Deposit is Canada's largest high-grade uranium discovery, conducive to conventional lowcost bulk underground mining methods, best-in-class tailings and



environmental mine management. It hosts measured mineral resources of 209.6 m lbs of u308 contained in 2.18 m tonnes grading 4.35% u308, indicated mineral resources of 47.1 m lbs of u308 contained in 1.57 m tonnes grading 1.36% u308, and inferred mineral resources of 80.7 m lbs of u308 contained in 4.40 m tonnes grading 0.83% u308.

Last year, NexGen carried out a highly successful, first-pass field program focused on regional exploration and geotechnical site confirmation encompassing 18 holes and more than 10,000 metres of drilling. The program's primary objective was to target high priority areas within a 10-kilometre radius of Arrow along the Patterson Lake Corridor that hosts the Arrow Deposit, in addition to priority targets along the Derkson Corridor which runs directly parallel to the east.

The Below Arrow target involved exploring greater than 300 metres beneath the Arrow Deposit to test for a replication at depth where highgrade mineralization remains open. Intersections of an omalous radioactivity in two of three holes confirmed the presence of mineralization below and indicated further potential, ultimately confirming the theory of a repetition at depth. Results of the regional exploration program also demonstrated the fertility of conductors at Camp East, Derkson East, and Derkson West target areas. Highlights included:

- AR-21-268 (Below Arrow) intersected 8.5 m of total composite mineralization, including 6.5 m up to 3,530 cps from 1128.5 to 1135.0 m downhole.
- RK-21-140 (Camp East target on the Patterson Corridor) intersected anomalous radioactivity up to 1,380 counts per second (cps) from 166.0 to 167.0 m downhole.
- Drilling on the Derkson East and Derkson West conductors intersected intervals of brittle structural disruption and hydrothermal alteration consistent with those recognized in uraniumbearing systems.
- Hole RK-21-136 (Derkson West target) intersected 0.5 m of

THE CREE MINERAL

EXPLORATION

BOARD

anomalous radioactivity up to 3,100 cps from 166.5 to 167.0 m downhole.

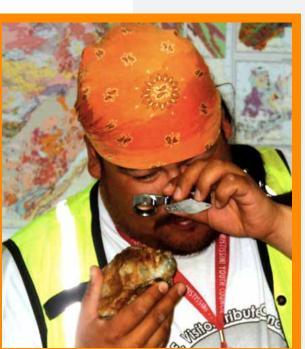
Leigh Curyer, Chief Executive Officer of NexGen commented: "2021 exploration results confirmed the unprecedented potential for additional Arrow-type mineralization zones at Rook I. NexGen is entering an exciting stage of project development, continued exploration of numerous targets, and initiation of site-based infrastructure activities."

Travis McPherson added: "Results exceeded our expectations. We hit mineralization across a number of targets which speaks to our inhouse skillset in addition to the significant endowment of regional trends - this property is highly prospective and very fertile. This year, we're following up on a number of these prospective targets, looking for other Arrow-type deposits. In conjunction with the regional exploration drill program, field work was completed in support of front-end engineering design. This consisted of surface studies to confirm near-surface geotechnical conditions and assess

CONSEIL CRI SUR

LEXPLORATION

MINÉRALE



The main purposes of this Cree Mineral Exploration Board

 assist the Crees in accessing mineral exploration opportunities;
 facilitate the communication and the access to eeyou Istchee for Minerals Exploration Companies who want to work in the region;

■ facilitate the development of mineral exploration enterprises with Cree entrepreneurship; favorise the Joint Ventures projects Cree and Exploration Companies;

provide scientific and technical expertise to Cree and none-Cree companies;

act as an intermediary between offers and demands of services made to Crees and Cree enterprises in matters relating to mineral exploration;

The Crees and CMEB are open to all kind of project in the domain of minerals exploration.

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www.cmeb.org https://www.facebook.com/CreeMineralsExplore/





potential borrow pit locations to inform detailed engineering and execution planning. Diamond drilling was also carried out to confirm rock mass characteristics in close proximity to the planned underground life-of-infrastructure and tailings management facility. As a low-cost, environmentallysound project, Rook I incorporates elite standards that include a unique approach to tailings management and ongoing decommissioning. Sustainability has always been a key driver of NexGen's operations and the company's robust ESG profile includes environmental stewardship, zeroharm health and safety, reclamations and continuing land use, regulatory compliance, and strong community relations. Travis McPherson commented:

"When we discovered this deposit in 2014, we knew it would be substantial. but it has outpaced anyone's reasonable expectations. Leveraging the ideal land-based setting and stable ground conditions, we developed a unique reclamation strategy that involves mining out nonmineralized areas to store tailings, rather than storing this material at surface. This completely eliminates surface tailings from the designs so that generations

CHEECHOO: LARGE-TONNAGE GOLD DEPOSIT IN EEYOU ISTCHEE, QUEBEC

- 2.0 Moz Au inferred resources (93 Mt @ 0.65 g/t Au)
- Excellent gold recovery
- Low strip ratio
- 15 km from Newmont's Eleonore gold mine
- New resource estimate & PEA planned for 2022

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from now, no one will know this was once a mine site. From an environmental and social perspective, we're aiming to set an industryleading example that the province and country as a whole can and should be very proud of."

POSITIVELY IMPACTING SURROUNDING COMMUNITIES THROUGH TRUST AND TRANSPARENCY

Since the company first began exploring in the Athabasca Basin, NexGen has always been dedicated to fostering collaborative, respectful relationships while maximizing value for all stakeholders and Indigenous peoples. This dedication is demonstrated through the company's development of meaningful community programs that focus on youth and are centered around culture, education, health and wellness, and economic capacity building.

These initiatives include school water fountains, student scholarships, a breakfast club that makes meals available to more than 1,100 students at three local schools, financial support for the management of recreational activities, participation in cultural days, sponsorship of hockey and volleyball teams, recreational programming, and warm winter school apparel.

Project-related initiatives include a summer student employment program, on-the-job training such as the driller program, and procurement opportunities for goods and services. NexGen prioritizes local hiring, with potential to create 1,700 jobs over the mine lifecycle with a peak of 4,400 during the construction phase based on total direct and indirect jobs as outlined in an EY economic analysis.

"We're committed to consistently delivering on what we promise, which is reflected by our track record," said Travis McPherson. "Everything we do is intended to fully maximize employment, education, training, health and wellness, and capacity building for the long-term prosperity of Indigenous groups and local communities. Construction is just one example where 92% of project needs can be fulfilled by companies and people residing in Northern Saskatchewan."

To further the company's commitment to local communities, NexGen was pleased to appoint Project Liaison Manager Robert St. Pierre to the team. As past President of the Local Métis #39, and having served as the Mayor of La Loche from 2016 to 2020, Robert brings a wealth of valuable expertise to the company and is deeply committed to the advancement of





local communities. Commenting on NexGen's philosophy and spirit of engagement, Travis McPherson said:

"As spot prices increase, we'll continue along an upwards trajectory, positioning our company to make a significant, positive impact across communities, particularly within Northern Saskatchewan."

NexGen's commitment to community engagement is also demonstrated by the signing of a number of agreements with Indigenous groups. Most recently, the company was pleased to announce the signing of an Impact Benefit Agreement (IBA) with the Clearwater River Dene Nation (CRDN), covering all phases of the Rook I project. Negotiated and developed from a Study Agreement signed in 2019, the IBA defines the environmental, cultural, economic, employment, and other benefits to be provided to the First Nation, and also confirms CRDN's consent and support for the project throughout its lifecycle.

The 2019 Study Agreement upon which the IBA was based identified potential impacts to Aboriginal and treaty rights, CRDN socio-economic interests, and potential avoidance and accommodation measures in relation to the project. The Agreement also outlined a commitment to establish joint working groups to ensure the inclusion of Traditional Knowledge in Environmental Assessments and incorporate Traditional Land Use and Dietary studies that are designed, scoped, and completed by the community.

ChiefTeddyClarkoftheCRDN, commented:

"Since 2013, the Rook I project has been a platform for both NexGen and CRDN to set an elite standard on Indigenous engagement, participation, and partnerships, for projects located in traditional territories. The signing of this IBA formalizes these new standards, and provides all CRDN members with opportunities for lifelong jobs and business opportunities in our own backyard."

"Over the past 10 years, our community and NexGen have built a meaningful relationship based on respect, trust, and confidence, and this agreement formalizes this relationship," he added. "NexGen has always demonstrated interest in our success and we look forward to advancing this project throughout all phases of its lifecycle."

ABORIGINAL MINER

NexGen has also negotiated, developed, and signed an Impact Benefit Agreement with the Buffalo River Dene Nation (BRDN), and a Mutual Benefit Agreement (MBA) with the Birch Narrows Dene Nation (BNDN), both of which were based on a Study Agreement similar to that developed with CRDN. Upon the signing of these agreements, Chief Elmer Campbell of Buffalo River Dene Nation spoke to the community's strong relationship with NexGen, commenting:

"The jobs and business opportunities that our members will obtain through this project that incorporates elite environmental and cultural practices is very exciting. Our community and NexGen have built a meaningful relationship over the past six years based on trust, respect, and confidence, and this Agreement reflects those key principles."

Chief Jonathan Sylvester of Birch Narrows Dene Nation commented:

"I'm pleased to announce that we have signed an MBA with NexGen. Our community stands to benefit with environmental monitoring, jobs, business opportunities, and payments to support community priorities. NexGen has been working with us in a respectful way."

Travis McPherson added: "The signing of these agreements formalizes an engagement process that reflects our philosophy of genuine respect and transparency. We introduced ourselves to local communities from day one and our partnerships evolved organically from there over many years of building mutual trust. Communities and community leaders were already doing an exemplary job advancing the area, and we're here to support and augment these efforts."

Learn more about NexGen Energy Ltd. at nexgenenergy.ca



PUMA EXPLORATION ATLANTIC CANADA'S NEWEST GOLD DISCOVERY

By Marc Challande

uma Exploration (TSX-V:PUMA) is a Canadian-based mineral exploration company focused on discovering gold in New Brunswick. Instead of being involved in the province's niche industry (forestry), the company is making a name for itself as one of the first exploration companies to focus on gold in the region. PUMA made a major gold discovery in the summer of 2021 when it drilled 5.55 g/t gold over 50.15 m during its inaugural drilling campaign on its property (see Puma's Sept. 15, 2021 news release).

LOCATION OVERVIEW

The company owns three properties on the western edge of the Bathurst Mining Camp, which currently hosts 46 deposits. In 2001, the BMC accounted for a significant portion of Canada's zinc (30%), lead (53%), and silver (17%). Other companies have stakes there, including Trevali Mining (TV.TO) and Osisko Metals (OS.V).

When it comes to gold exploration in the area, Puma was the first mover in what is becoming an emerging gold camp. PUMA's extensive 40,000ha land package is ideally positioned in this mining-friendly jurisdiction. The location is served by excellent infrastructure, mining infrastructure that's already in place, and the availability of a trained workforce.

PUMA's flagship Williams Brook Gold Project covers more than 30,000ha of exploration land and hosts the O'Neil Gold Trend (OGT). This 7km long structure hosts gold-bearing gold veins at the contact between sediment and pervasive altered and brecciated rhyolite. PUMA is currently focused on the OGT. A \$2.5M 10,000m drilling program was launched in early 2022 and is projected to be completed by the end of June. The objective of the 2022 drilling program is to test the O'Neil Gold Trend along its 750 meters strike length and confirm the depth extension of the high-grade gold-bearing quartz veins found on the surface. To date, more than 6,000 metres have been drilled.

On Apr. 28, PUMA shared its first set of results from the ongoing drilling program at the OGT. The company reported a near-surface high-grade gold intersection of 34.93 g/t Au over 3.00 metres within a wider zone assaying 6.47 g/t Au over 16.90 metres in hole WB22-25, 300 metres northeast of the company's 2021 discovery. Additional high-grade intercepts include 22.28 g/t Au over 3.20 metres within a wider gold intercept of 3.97 g/t Au over 22.10 metres in hole WB22-36 and 1.00 g/t Au over 33.35 metres in hole WB22-26.

"We are systematically building our model and demonstrating again, step by step, the gold potential of the O'Neil Gold Trend and the

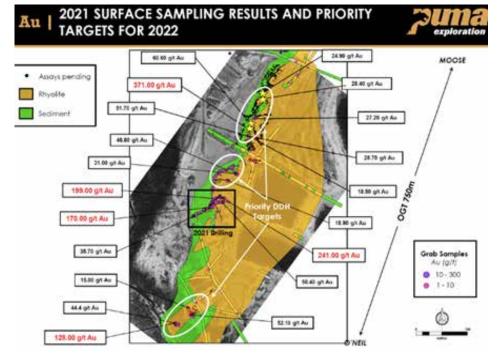
entire Williams Brook Project," Marcel Robillard, President and CEO of Puma Exploration.

These results are very impressive. Usually, anything over 2 grams gold/

tonne is deemed to be good. The company has only been "shallow drilling" with a 100m maximum depth drilled to understand the geometry of the veins at depth and build the exploration model. PUMA's advantage over its peers is that they can precisely target the gold-bearing quartz veins they want to hit since they can see them at surface. The company is just in the early stages of its development program at Williams Brook, and the upcoming months will be more than exciting. Assay results are pending for an additional 2,000m of core already sent to the laboratory. These results should add more value to the project's future.

After completing the 10,000 m drilling program at the OGT, Puma will launch

Hole ID	From (m)	To (m)	Length (m)	Au (g/t)
WB22-19	7.25	7.6	0.35	8.27
WB22-25	2	5	3	34.93
WB22-26	3.5	4	0.5	183
WB22-26	25.5	26.5	1	22
WB22-33	30.35	30.65	0.3	30.5
WB22-36	4.5	5.15	0.65	59.6



a surface exploration program along the remainder of the 7km long OGT and on its other properties. Another two gold trends, WB1 and WB2, that a previous operator drilled in 2008 look promising. Also, Puma's contiguous Jonpol and Portage properties, located approximately 10 kilometres east of Williams Brook, host numerous gold occurrences grading up to 17.1 g/t Au. Exploration work on the remainder of Williams Brook, Jonpol and Portage will resume this summer to identify prospective targets for future drilling.

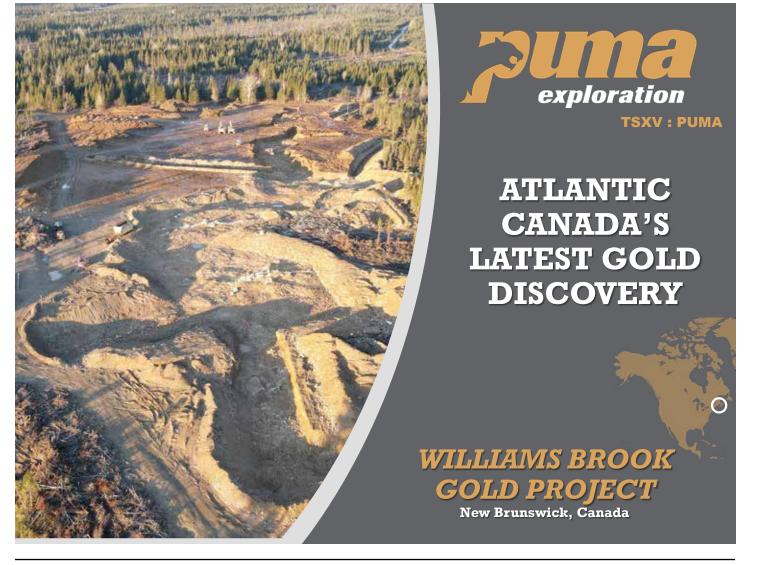
SHARE STRUCTURE

Investors witnessed a 52-weeks high of \$0.64 and a 52-weeks low of \$0.16. Besides the recent worldwide geopolitical turmoil pushing investors to invest in commodities, plus current drilling programs, these events should lead the stock price closer to its highs than its lows. The average volume decreased (120k for the 50-days averagevs.75k for the 10-days average), but any significant news will augment the volume. There are currently 106M shares outstanding, with 44% locked (10% institutions, 4% insiders, 30% family & friends). This number could increase through a healthy dilution as the company has leverage to exercise warrants. There are 36M warrants (wt. av. \$24) and 8.2M options (wt. av. \$0.31) that could lead to \$11M cash added if the company needs it (PUMA also has \$4M in cash). Fully diluted, PUMA has 150.3M shares. The junior mining industry expects a higher, fully diluted share as many companies need to raise cash for drilling campaigns. Another positive aspect is their insiders, Richard Thibault (director), Marcel Robillard (president), and Dr. Laura Araneda (director), recently each added \$50k worth of options with an exercise price of \$0.50. Moreover, there

have been no less than 89 buys over the last 12 months. It is very positive data as it means insiders do believe in their projects.

BOTTOM LINE

Investing in Puma Exploration is a safe strategy, as the commodity industry and, more significantly, the gold sector is gaining traction. Thanks to all the data PUMA gathered last year from thousands of grab sample and drill hole assays, VTEM results, radiometry, structural analysis from Mira Geoscience and AI technology from Windfall Geotek, the knowledge of the geological team led by Dominique Gagné, will continue to help the team develop this project. Puma Exploration (PUMA.V) represents a great opportunity if you have not invested in gold stocks yet.



GOING FOR THE JACKPOT IN LITHIUM

By Christian Elferink

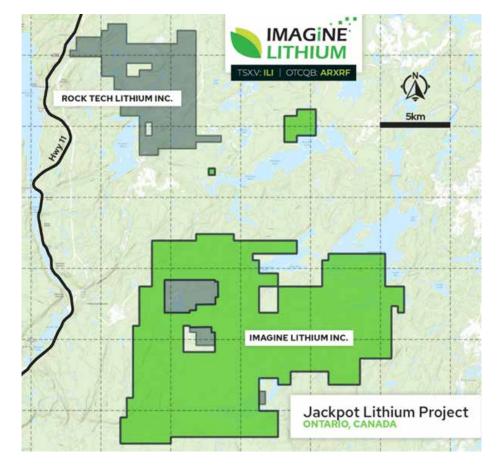
ithium is hot. Prices have been skyrocketing due to additional demand for the metal that is needed to power the global energy to transition to a more sustainable world. This transition is progressing in a faster phase than lithium companies can develop their project so the future will face a supply and demand problem. The International Energy Agency (IEA) estimated that demand for lithium would rise by 900% by 2030, and by 4,000% by 2040 based on goals set by the Biden administration. This exponential rise in demand would mean that a lot of new lithium projects will have to become viable within the next years. This lithium explorer could play a crucial role in that supply side.

THE JACKPOT LITHIUM PROJECT

Imagine Lithium Inc. (ILI-SX:V) (OTCQB:ARXRF) is a junior mining exploration company focused on seeking and acquiring world-class mineral projects. The company holds the Jackpot lithium property located near Nipigon, Ontario.

Imagine Lithiums 100% owned Jackpot Lithium property is located near the Georgia Lake Area which lies about 140 kilometers NNE of Thunder Bay, Ontario. The project is easily accessible as it is situated 12 km by air from the TransCanada Highway and the main railroad which connects to the port town of Nipigon, on Lake Superior.

The Jackpot Property was drill tested in 1955 by the Ontario Lithium Company Limited which drilled a total of 32 diamond drill holes. The historical drilling confirmed the presence of at least two spodumene-bearing granitic pegmatite bodies, one at the surface (Dike No. 1) and a second body (Dike No. 2) lying beneath the Dike No. 1.



Dike No. 1 is a 6 to 9 meters thick, flat-lying body occurring as outcrops and further exposed by historic trenching. A review of Ontario government assessment files suggests little drilling was completed on Dike No. 1 as efforts appear to have been focused on the larger (No. 2) Dike. The 1955 drill logs extracted from archived files indicate assaying from only one drilled section within the No. 1 Dike, even if spodumene is identified in several drill logs. Records from DDH 428 intersected 1.47% Li2O over 3.96 m from the surface. The company has not verified the reported assays. The No.1 Dike represents a readily accessible target for trenching and bulk sampling and to acquire sufficient material for metallurgical testing. Dike No.2 is not exposed at surface and was discovered by historical diamond drilling. Historical drill intercepts include 1.52% Li2O over 10.6 metres (drill hole 411) and 1.17% Li2O over 21.2 metres from drill hole 407. The project hosts two historical non 43-101 compliant resources;

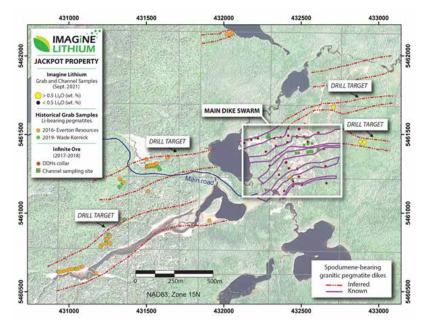
- Jackpot deposit: 2Mt @ 1.09% Li2O
- Newkirk-Vegan showing: 750kt @ 1.38% Li2O

The first work by Imagine Lithium on the Jackpot property was done in 2018. Approximately 90 kg of spodumenebearing granitic pegmatite rocks were collected from the surface and sent for assaying. Five of seven samples returned significant lithium values with samples returning in excess of 2% Li2O. Significant results include the following: 0.85%, 2.08%, 1.02%, 2.01% and 2.82% Li2O (lithium oxide). The company completed 53 drill holes (9,496 metres) and 8 drill holes (298 metres) from its shorthole program in 2018. The company has identified that the Jackpot project consists of a swarm of parallel lithium-bearing east-west trending dykes and that mineralization is open in all directions. A drill program is underway to expand upon the historical resources.

FIRST NATIONS EXPLORATION AGREEMENT

On March 21st, 2022 the company announced that it signed a field exploration agreement with the local First Nations Groups. The agreement sets out a framework for Imagine Lithium's consultation and accommodation activities with the First Nations Groups in connection with exploration activities at the Jackpot Lithium Project. Under the terms of the Agreement, Imagine Lithium has agreed to, among other things, grant an aggregate of 3,000,000 common share purchase warrants ("Warrants") to the First Nations Groups, with each First Nations Group receiving 1,000,000 Warrants.

The company is currently 3,000 meters to test targets in and around the Main Dike Swarm as well as along strike to the east and to the west. In addition, core from four previously unsampled drill holes have been sent to the lab for analysis. The company will provide updates as information from the drill rig and assay results become available.



President and CEO of Imagine Lithium, J. C. St-Amour stated: "Never has there been a better time to be involved in lithium exploration in Ontario, with the Provincial government unveiling its first ever critical minerals strategy that aims to position Ontario as a global leader in the supply chain of critical minerals and outlines a made-in-Ontario electric vehicle supply chain strategy. Our goal this year is to aggressively drill, define and expand the known lithium mineralized areas while making new lithium discoveries on this vast property in Ontario. Our current program is well funded and we are currently drilling on the property."

The brand, **IMAGINE LITHIUM**, reflects the Company's focus on lithium exploration in the safe, environmentally conscious mining jurisdiction of Ontario, Canada.

IMAGINE the economic stimulus and social benefits that lithium exploration and a future lithium mine can bring to the Nipigon region of Ontario. **IMAGINE** the environmental benefits that lithium brings to the global community as the world adopts clean electric vehicles powered by lithium-ion batteries.

IMAGINE a global electrification strategy that uses lithium batteries to bring clean, reliable electricity to communities far and wide, fundamentally enhancing quality of life.

The future is here.

IMAGINE the possibilities. IMAGINE LITHIUM.

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COMMENTS ON THE SUPPLY CHAIN CONUNDRUM

By Mickey Fulp

n Q4 2021, main stream media's go-to buzz phrase to describe America's ongoing economic struggles was "supply chain crisis".

Over these past four months, news sources of every ilk have inundated us with anecdotes, reports, stories, and opinions on supply chain breakdowns. Many reasons are promulgated but as per usual, coverage is simply a series of superficial headlines.

I submit that even well-informed Americans have gained little knowledge or insight into the myriad of components that constitute a supply chain.

Supply chains are driven by simple supply-demand fundamentals. On the other hand, they are quite complicated with many sequentially active parts from start to finish. In our capitalist economy, the motivation to turn a profit controls every step of every supply chain.

Rest assured that the US of A's current supply chain problems go much deeper than 50 or 100 container ships from China that have been parked for weeks or months off the SoCal coast due to overwhelmed port facilities in Long Beach and Los Angeles.

At MercenaryGeologist.com, we strive to educate the layman. Therefore, I illustrate a typical copper supply chain below.

Copper was chosen because it is widely recognized as a leading economic indicator for the short-term economic health of the world. So from mine to consumer, here is the

so from mine to consumer, here is the supply chain for copper used in domestic electrical and plumbing applications:

- Rock containing copper sulfide is extracted from an open-pit or underground mining operation.
- Copper sulfide ore that grades 0.3 to 2.0 % Cu is transported by conveyor, tram, truck, or rail to a proximal or regional processing complex.

- At the processing complex (mill), the ore is crushed, ground, floated, skimmed, and dried to produce a copper sulfide concentrate that grades around 28-30% Cu.
- The copper sulfide concentrate is transported by truck, rail, and/ or ship to a large smelter complex operated by a major integrated miner or sovereign entity.
- At the smelter, the concentrate is treated by pyro-metallurgical processes and converted into high-grade blister copper grading around 98.5% Cu.
- The smelted copper is upgraded at an electrolytic refinery to extremely pure metallic copper grading a minimum of 99.9% Cu. It is then made into thick copper rod and large diameter cable.
- Copper rod and spooled cable is transported via truck, rail, and/or ship to a primary manufacturer.
- At the primary manufacturer, large diameter rod and cable is extruded or tooled into much smaller-scale

copper rod, tubing, wire, plate, sheeting, bars, and windings.

- These smaller-scale copper products are subsequently transported to secondary manufacturers that configure or install the material into final electrical, electronic, and plumbing products.
- Products include copper-bearing components for radios, televisions, motors, transformers, computers, phones, appliances, tubing for plumbing applications, and rods, insulated wire, and components for transmitting and regulating electricity.
- These products are transported via truck or rail to a wholesale distributer.
- The wholesaler sells bulk volumes of intermediate and final products to assembly plants, large contractors, and retail stores.
- Bulk shipments are delivered by truck or rail to the retail store.
- The retail store sells single and small lot products to local construction contractors, electricians, plumbers, and



individual do-it-yourselfers for installation into multi-and singlefamily housing units.

So there is a 13-step chain from the mining of copper ore to delivery to a consumer who installs copper-bearing products into a dwelling.

Supply chains can be impacted at a plethora of choke points in supply, demand, processing, manufacturing, and transportation. Note that transportation bottlenecks often play an outsized role in inefficiencies.

Most current supply chain problems in the hard commodities sector have been caused by a variety of factors that were spawned or exacerbated by politically-motivated government lockdowns, work stoppages, and draconian regulations during the Wuhan Lab virus panic. Included are:

- supply disruptions and destructions;
- pent-up post-pandemic demand;
- bottlenecks in all modes of transportation;
- worker shortages;
- higher input costs for energy and labor;
- slowdown of the Chinese export sector;
- small business shutdowns and bankruptcies.

Given a normal world economic environment, most of the disruptions to well-functioning and reliable commodity chains are supply shortages caused by geopolitical events.

And these are contributing mightily now.

Both long-lived and newly-minted resource nationalism in major producing countries (e.g., Chile, DRC, Indonesia, Peru, Philippines, and Zambia) has compromised copper, nickel, and cobalt supplies. High energy prices and power shortages are severely affecting zinc smelters in the Euro Zone and aluminum smelters in both China and Europe.

With many world-traded hard and soft commodities trading at or near all-time

highs, I opine that the root cause for our current supply chain turmoil is the exponential increase in money supply that has produced the highest inflation rate in 40 years. Although inflation is rampant worldwide, I will focus only on the homeland.

Runaway inflation in the late 1970s to early 1980s generated a threefold response in the United States: Fed Chairman Volker raised interest rates to record levels; Reagan and a Republican Congress drastically cut taxes; and the federal government ran huge budget deficits. These actions generated an immediate recession but our economy was back on track in relatively short order.

This time is different. Our current problems were spawned during the housing bubble collapse in 2007 and the subsequent global economic meltdown in 2008 to 2009.



DEVELOPING TWO OF CANADA'S TOP ZINC CAMPS

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Admittedly clever central banksters pulled the world economy from the brink of collapse by dramatically increasing the money supply and subsidizing failed financial institutions and giant legacy corporations with the fiat currency that was created.

Once the threat subsided, the US Federal Reserve created a new bubble in American stock markets and banksters thru out the world instituted negative real interest rates.

But massive budget and trade deficits have led to an ever-burgeoning domestic debt load over the past 14 years. US government debt now vastly exceeds GDP and the Fed's usual solution of raising interest rates to levels that can tame record inflation is nigh impossible now. Such actions would cause the country to default on the dollar for the third time in 99 years.

How the self-appointed *cognoscenti* hope to resolve the current economic quandary is way beyond my pay grade so I will leave it there.

Here's what I know: In an inflationary economic environment the way to preserve one's wealth is to convert devaluing fiat currencies into inherently valuable assets.

Buying gold and land may be wise moves at this juncture.



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THE NEXT MAJOR METALS PRODUCER IN THE IBERIAN PYRITE BELT IN SPAIN

By Christian Elferink

ince my last article in the November issue about Denarius Metals the company has made quite the progress. On February 1st, 2022 Denarius Silver Corp. announced that it changed its name to **Denarius Metals** Corp. (TSX-V: DSLV) to better reflect the current focus of the company. For the readers not already familiar with the company – Denarius Metals Corp. is a Canadian junior company engaged in the acquisition, exploration, development, and eventual operation of mining projects in high-grade districts, with its principal focus on the Lomero-Poyatos Project in Spain.

LOMERO-POYATOS PROJECT

The company's 100% owned Lomero-Poyatos Project is located in the northeast part of the Spanish/Portuguese Iberian Pyrite Belt in the Huelva Province of Southern Spain. The project



is surrounded by great infrastructure, easy access to water, processing facilities and access to a port. Several surrounding villages provide the company with potential sources of labour, accommodation, and services.

The Lomero-Poyatos Project is a classic high-grade shear-hosted massive sulfide (VMS) system that the area is known for. The massive sulphide and semi-massive sulphide zones at Lomero-Poyatos are significantly enriched in gold. These zones transition downwards to a zone of stockwork mineralization at much lower polymetallic grades, while gold grades persist with values up to 1.0 g/t over 2-3 m widths. In terms of gold content, the Lomero-Poyatos deposit has the highest gold grades in the IPB with values of 2.0 m at 14.1 g/t Au and 0.55 m at 16.84 g/t Au being returned from CMR/Newmont drill holes in 2007. There is copper-enrichment in the central and eastern parts of the historic mine, with some zinc-gold enrichment towards the western margin of the deposit.

Lomero-Poyatos deposit has an average ENE (075°) strike and dips about 35°N. At the surface there are two separate mineral deposits: Lomero (east) and Poyatos (west) that combine to form a single deposit at depth.

The Lomero-Poyatos deposit has a historical (non-NI 43-101 compliant) inferred mineral resource estimate of 20,930,000 Mt at 3.08 g/t Au, 62.38 g/t Ag, .90% Cu, .85% Pb, 3.95% Zn. The resource remains open at depth and along strike.

A fully funded 23,500m drilling program with 3 drill rigs consisting of 81 drill holes, including 17 extension holes started in October last year. This inaugural drilling program is primarily designed to conduct 50x50 meters infill drilling to validate historical data. Recent results show promising results. The results from the validation and infill holes confirm the grades and width of the historical drill holes. This increases the company's confidence in the geological understanding and data validation that will be carried out for

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Lomero-Poyatos – Spain

Exploration Program - Validation of Historic Resource

Initial drill results increase our confidence in the Historical Resource

Comparison of Validation holes with Database Holes (CMR):

Surface Drilling										
Hole	Phase	From (m)	To (m)	Width	Cu %	Pb %	Zn %	Aggit	Au git	Min. Type
LP21001	Validation	54.45	60.55	6.10	0.53	0.43	0.09	15.65	1.20	SAP/MS*
L03-15	CMR*** hole	57.00	59.00	2.00	0.47	0.26	0.06	17.50	1.91	SM
LM21002	Validation	189.25	214.00	24.77	0.12	0.46	1.67	13.22	0.72	SM
L12-88	CRI**** hole	190.70	210.15	19.45	0.25	0.60	1.21	6.08	0.66	SM
LM21003	Valtotil	128.70	133.10	4.40	0.87	0.11	0.12	11.45	0.67	MS
1.03-41	CMR	141.00	144.00	3.00	1.20	0.03	0.02	6.00	0.74	SM
	S Messive Solph M Semi-Massive						Conpa	y press rate	ere sand in	mary 19, 201
	CMR Cambridge CRI: Corporació									



Location of Drill Holes

the updated Mineral Resource estimate. The area tested by drilling to date is over 1,000 m along strike and 300 m in vertical depth and will continue to expand as the program progresses. Most of the holes have intercepted massive to semimassive sulfide mineralization. To date, 100% of the Validation phase and 70% of the Infill phase have been completed. Current infill drilling continues to intersect medium to high-grade gold and polymetallic mineralization, mainly associated to thick intersections, over 350 meters strike length below Level 5 of the historical mine in the central and eastern portions of the deposit. Infill drilling also continues to show increasing zinc and gold grades in progressively narrow massive to semi-massive intersections at depth at the western end of the permit. The ongoing drilling program has already verified the reliability of the historical drill results and will allow proper 3D modelling of the deposit in order to prepare an updated NI 43-101 compliant mineral resource estimate and scoping study by the third quarter of this year.

		EXPL		ON COP	1							AND	MERCED
		Silver		Gold		Zinc		Lead		Copper		Silver Equivalent	
Category	Tonnes	g/t	M oz	g/t	000 oz	%	M lbs	%	M lbs	%	M lbs	g/t	M oz
Indicated	12.3M	106	42.1	0.07	28	3.3	895	1.3	358	0.16	44	347	137

WEBSITE: www.southernsilverexploration.com

• **100% OWNERSHIP** - Following the highly accretive acquisition of Electrum's 60% stake

- MULTI-COMMODITY EXPOSURE-NI 43-101 resource; 116Moz Ag, 1.9 Blbs Zn, 0.9Blbs Pb, 142Mlbs Cu
- TARGETING PEA BY Q2 2022 Excellent metallurgical recoveries/Engineering studies underway
- **DISCOVERY POTENTIAL** 10,000 m drill program at CLM (4 targets) underway
- COMPELLING VALUATION Trading at a 67% discount to primary silver developers on an EV/oz basis
- SUCCESSFUL MINE EXPLORERS Grown AgEq resources by ~200% since initial 2016 resource estimate
- **↑33%** in tonnage and **↑26%** in silver eq. resources in October 2021 NI 43-101 Resource Update

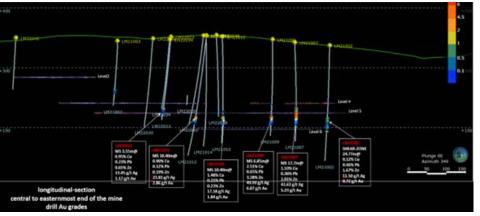
Oro Cu-Mo-Au Project, New Mexico, USA

- Cu-Mo-Au Porphyry Target multiple drill-ready targets within a six sq.km alteration footprint
- Z-TEM survey over entire property completed and evaluated, additional claim stake
- Initial drilling at Oro Project (~4,000 m) underway

SSV:TSX.V SSVCL:SANTIAGO SSVFF:OTCQX



EMAIL: ir@mnxltd.com



Serafino Iacono, Executive Chairman and CEO of Denarius, commented,

"We are very encouraged by these additional drilling results and excited to be moving the exploration program into the geophysical survey phase. Our drilling to date has demonstrated that the Lomero-Poyatos deposit is still open along strike to the west and at depth, and has high-grade gold and polymetallic mineralization. The addition of a third rig to the operation has allowed us to accelerate the drilling program and gives us the flexibility to move a rig to test geophysical targets as soon as results are available. We are confident that our exploration campaign at the

exploration campaign at the Lomero-Poyatos Project will

continue to be a key value driver for Denarius as we move forward".

SPAIN AS A MINING JURISDICTION

When investors think of mining jurisdictions, Spain might not be the first jurisdiction that comes to mind. The Iberian Pyrite Belt stretches along most of the southern parts of Portugal and Spain and is about 250 kilometres long and 50 kilometres wide. The Iberian Pyrite Belt is known for its high-grade volcanic-hosted massive sulfide (VMS) systems and is home to several major mining companies such as: Trafigura Mining Group, ALMINA, Atalaya Mining, Lundin Mining, Sandfire Resources and, First Quantum Minerals. There are currently over 80 known deposits producing zinc, lead, silver, copper, gold, and tin which makes it one of the largest concentrations of massive sulfides in the world. Could Denarius be next in line of producing companies? They certainly seem to be on the right path.



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GREAT ATLANTIC RESOURCES CORP

By Marc Challande

reat Atlantic Resources (TSX-V:GR) is a Canadianbased company focused on exploring Atlantic Canada. The company owns several projects, 6 in New Brunswick and 4 in Newfoundland. They have a significant low market cap of \$6M.

Out of the ten properties, many of them have a significant growth opportunity. The company's project gathers various different metals, including gold and cobalt. These metals will be demanded more and more in the future as gold represents the safest asset globally and cobalt will be used for lithium batteries. With governments pushing toward EV vehicles, cobalt prices will increase.

NEWFOUNDLAND

The Golden Promise Gold Property



This property is the most advanced and significant (16,500ha) that Great Atlantic has. It is also the company's top priority project. It is located within the central Newfoundland gold belt, near the town of Badger. Great Atlantic already reported multiple gold-bearing veins/quartz systems and zones within the Property. On April 12th, the company announced it had received its additional gold assays of the third and fourth drill holes and fifth to eight holes of the 2021 drilling program.

"Highlights from the recent gold assays include 4.02 grams / tonne (g/t) gold over 0.60 meters core length in GP-21-151 at the Jaclyn Main Zone and 30.6 g/t gold over 0.41 meters core length in GP-21-156 at the Jaclyn North Zone. Multiple gold-bearing intervals occur in GP-21-151 based on these recent gold assays and previously reported gold assays."

The South Quarry Property



This area is a high-priority tungsten property with lithium potential. It is

located in East-Central Newfoundland covering an area of 1,925ha. The South Quarry Property represents a great opportunity as tungsten metals has various qualities (tough and dense, is resistant to corrosion, does not break down or decompose, and has the highest melting temperature of any metal). They are involved in the Pilley's Island Property. The Pilley's Island Property consists of 10 adjoining licenses covering 4,600ha. Great Atlantic also owns the Southwest Golden Promise Gold Property, covering 1,000ha.

NEW BRUNSWICK

The Kagoot Brook Cobalt Property

in North-Central Located New-Brunswick, area the covers approximately 4,230ha and cobalt geochemical anomalies, which some are reported as highly anomalous. This property has been optioned to Explorex Resources. Cobalt has magnetic properties and high resistance to heat and corrosion. It is an ample opportunity as 42% of the global cobalt supply is used specifically for battery lithiumion cells. This metal's global demand is estimated at 4-5% CAGR (Compound Annual Growth Rate) to 2030.

The Keymet Property

This is a high-priority precious metalbase property located in North-East New Brunswick, near Bathurst. On April 20th, the company announced it



received gold assays and multi-element analyses for drill cores samples from the first five holes of the 2021 diamond drilling program.

Highlights include a new gold discovery (Debler Zone) in drill hole Ky-21-25, including 3.17 grams / tonne (g/t) gold over 0.70 meters core length and polymetallic veins in hole Ky-21-27 (Elmtree 12 Zone), including 7.02% zinc equivalent over 0.92 meters core length.

Great Atlantic Resources Corp is also involved in many other properties. The Mascarene Property contains multiple metals, including copper, cobalt-nickel, and gold occurrences, and covers 2,080ha. The McDougall Road Property covers 330 hectares and could potentially host gold veins. The Porcupine Property covers 2,830 hectares with lead, zinc, and copper verified by an expert. This project has been optioned to Fort St James Nickel Corp. The Glenelg Vanadium Property covers 1,185ha and hosts cobalt, copper, nickel, lead, and gold and/or silver. Great Atlantic has an agreement to earn a 100% interest in the property.

SHARE STRUCTURE/ FUNDAMENTALS

The stock is traded at \$0.22 for a current market cap of \$6M. Investors witnessed a 52-weeks high of \$0.84 and a 52-weeks low of \$0.19. The stock price is currently down 52% Year-over-Year but seems to have bottomed at this price and is now consolidating above the \$0.20 range. The Company has 28M shares outstanding for shares fully diluted. This number is very low, but it is common to see companies having more than 100M shares fully diluted in most cases. Because companies need to raise cash, they do private placements through diluting shares. The company has 1.3M options with an exercise price of \$0.61 and 382k warrants with an exercise price of \$0.82. The company cannot execute them in both cases as the stock price is under the exercise price. Six buying orders occurred over the last 12 months, including two major orders coming from Chris Anderson, CEO. Chris Anderson bought CAD 83.48 worth of stock, representing 339,500 shares. This always leads to positive sentiments from investors when they see insiders buying shares. Regarding the volume, it recently decreased however, it is not worrisome because several companies traded on junior exchanges saw their volume lowering, with investors waiting for more certainties about the worldwide economy.

BOTTOM LINE

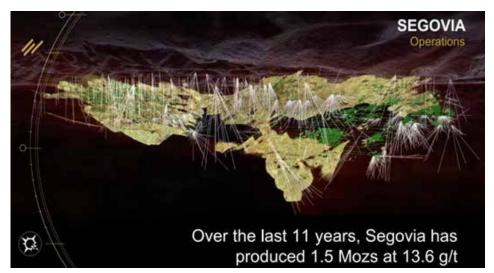
Great Atlantic Resources Corp has a lot of upsides, thanks to its many projects located in New Brunswick and Newfoundland. Its Keymet Property and Golden Promise Gold Properties' recent news are optimistic for the company's future. Compared to the company's opportunity, the stock price is low. They have four technical reports about its projects; you can read them here.



MID-TIER GOLD PRODUCER WITH ASSETS IN COLOMBIA AND GUYANA

By Christian Elferink

CM Mining Corp. (TSX: GCM; OTCQX: TPRFF) is a midtier gold producer with a proven track record of mine building and operating in Latin America. In Colombia, the Company is a leading high-grade underground gold and silver producer with several mines in operation at its Segovia Operations. Segovia produced 206,389 ounces of gold in 2021. In Guyana, the Company is advancing its fully funded Toroparu Project, one of the largest undeveloped gold/copper projects in the Americas, which is expected to commence production of more than 200,000 ounces of gold annually in 2024. GCM Mining pays a monthly dividend to its shareholders and has equity interests in Aris Gold Corporation (~44%; TSX: ARIS; Colombia - Marmato, Soto Norte; Canada - Juby), Denarius Metals Corp. (~29%; TSX-V: DSLV; Spain - Lomero-Poyatos and Colombia - Guia Antigua, Zancudo) and Western Atlas Resources Inc. (~26%; TSX-V: WA: Nunavut – Meadowbank).



years and have produced an estimated 6 million ounces during that period. The El Silencio, Providencia, and Sandra K underground mines are currently being mined by the company. The fourth operating mine, The Carla Mine, lies just 10 kilometers to the southeast of the Segovia mines on the Carla property. The Segovia operations are



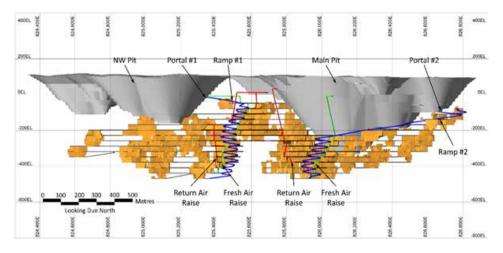
COLOMBIA – SEGOVIA OPERATIONS

The company's flagship Segovia Operations lies 180 kilometres from the capital Medellin and covers approximately 9,000 hectares. The high-grade mines that lie within the Segovia Operations have been in continuous production for over 150 one of the highest-grade underground mines in the world as its produced dore with an average head grade of 13.8 grams per tonne gold over the last 10 years. The company is expecting to produce between 210,000 to 225,000 ounces of gold from the Segovia Operations in 2022. On April 18th, 2022 the company released the production numbers of the first quarter. For the first quarter of 2022, a total of 142,819 tonnes, equivalent to 1,587 tpd, were processed at Segovia at an average head grade of 12.1 g/t gold compared with a total of 132,289 tonnes, equivalent to 1,470 tpd, at an average head grade of 12.8 g/t in the first quarter last year. Consolidated gold production in the first equates to 51,486 ounces. GCM Mining's trailing 12-months' total gold production at the end of March 2022 was 207,282 ounces, up about 0.4% over last year which puts the company on track to meet 2022 annual guidance.

GUYANA - TOROPARU PROJECT

In June 2021 GCM Mining acquired all of the shares of Gold X Mining and its Toroparu Project in Guyana. GCM Mining also closed a \$300 million Senior Notes offering to fund the development of the project. The Toroparu PEA affirms the economic viability of the open pit and underground mining operations. The PEA shows a US\$ 794 million aftertax NPV 5% with an IRR of 46% based on a US\$1,500 per ounce gold price. The total life-of-mine gold production of 5.4 million ounces represents an 88.4% recovery of the 6.2 million ounces of gold fed to the milling circuit at an average grade of 1.78 g/t Au over the 24-year mine life. Average annual gold

production is estimated to be 225,000 with an AISC of US\$ 916 per ounce over the 24-year mine life. The initial capital expenditures for the project are estimated to be US\$355 million which is to be incurred from 2021 through 2023. Based on the technical and financial merits of the project, GCM Mining already commenced pre-construction activities at the Toroparu Project site consisting of preliminary earthworks, development of the permanent mancamp, airstrip and rock quarries. Preparations are also being made for the rehabilitation of the historical access road commencing early next year. A PFS focused on the initial 10 years of surface mining is expected to be finalized early in the third quarter of 2022, at which point formal construction of the project is expected to commence. The final mining license is also expected to be received in mid-2022. In light of the various preconstruction activities underway, the company anticipates that production will commence from the fully funded Toroparu Project in early 2024.



WHY INVEST IN GCM MINING CORP.?

GCM Mining is only two years away from being a producer with two assets that will effectively double the current production profile of > 200,000 ounces per year and is currently fully funded to execute this plan. The company has a healthy balance sheet and also continues to pay a monthly dividend returning approximately CA\$1.5 million of Free Cash Flow to shareholders. With a dividend yield of approximately 3.5% GCM remains one of the highest yielding companies in the sector and the only producer that provides a monthly dividend to its shareholders.

The Segovia Operations and the Toroparu Project provide excellent exploration potential which allows the company to quickly add ounces to the life of mine and provide additional upside to shareholders.



VANADIUM UPDATE 2022 – TIMING IS NOW

By Andrew O'Donnell

s we embark on a new year, vanadium continues to emerge as one of the most promising yet understated opportunities. Many of us have been flirting with this high-value strategic metal for some time,drawn to its unique characteristics that make it highly practical in the infrastructure and aerospace sectors, not to mention a major player in the world's green revolution.

Amazingly, a mere sprinkling of vanadium fortifies steel, rendering it lighter yet twice as strong. In 2018, vanadium was considered the best performing metal of the year, outperforming cobalt, lithium, and nickel. This was the result of a perceived vanadium shortage in the steel sector due to China strengthening its rebar standards.

As China moves forward on their massive Belt and Road infrastructural initiative, it will require and reserve more vanadium for itself, providing a long-term structural increase in demand. The more exciting component of the vanadium growth story is it's starring role in the burgeoning battery market with a renewable energy storage technology known as the vanadium redox flow battery (VRFB) which is starting to take off.

Adding this new demand for vanadium in the green energy battery space is translating into higher vanadium prices. Since early 2021, vanadium is back on a rising metal price trajectory like other green energy battery metals. As each large solar or wind project demands a disrupted chunk of the world's vanadium in a VRFB application, we believe there will be a significant shift over the next five years where vanadium's role in the green energy space may surpass that needed in the steel sector.

THE OPPORTUNITY

The large energy storage battery market is huge and accelerating for solar, wind, and grid scale storage green energy solutions. We will see a massive spike in demand for efficient energy storage, green technology, and renewable solutions. The COP26 coalition, a conglomerate of banks, insurers, and investors worth \$130 trillion recently vowed to put



99.9% fine vanadium

combatting climate change at the centre of their work and gained firmer support for green investing.

Let's put this in perspective: the world economy is around \$94 trillion. That's a lot of money creation focused specifically on climate change. Regardless of your thoughts on the global economy, I think it's fair to say this narrative will play out as predicted.

The VRFB battery portion of that market is small but now growing. There's considerable blue-sky potential for its market share to grow as it offers superior performance, safety, cost effectiveness, lifespan and recyclability when compared to lithium-ion in industrial energy storage applications. It's been said that largerscale deployments over the next five years could result in redox batteries revolutionizing modern electricity grids. It's one third the cost of lithiumion, is reusable and recyclable, has a longer lifespan of 25+ years, is nonflammable, and extremely safe. There's even an opportunity to combine lithium with vanadium in electric car batteries for longer charges.

Here's evidence that vanadium is gaining steam. A rise in China's vanadium demand alone from the redox battery industry is expected to hit >250% to a minimum of 9,100t of vanadium pentoxide (V2O5) equivalent in 2022, up from last year's 3,640t, on the backs of energy storage projects that started production in the first half of the year.

This coupled with Biden's Build Back Better bill which earmarks roughly \$7 billion for grant awards aimed at expanding U.S.-based battery raw materials, research and development, and supply chain, has investors very excited about vanadium's future prospects. This U.S. commitment can only accelerate the opportunity and is obviously very good news for U.S.based vanadium projects.

As this green energy revolution unfolds, the question is will you act? The second question is do you invest in one of the world's few vanadium producers, a redox battery company, or a vertically integrated mining company? Let's consider some options.

MAJOR GAINS TO BE MADE ON U.S. SOIL

There are a few great reasons why we need to look at U.S-based vanadium companies that can deliver the goods and create a domestic source of supply. Let's consider some facts: there's the strength of the redox battery for large scale solutions, grids, and power storage; vanadium's value to supply chains; and Biden's infrastructure bill and grants.

I'm particularly interested in **Phenom Resources (TSX.V: PHNM)**, formerly known as First Vanadium Corp., which was recognized as a Venture 50 company in 2019. They're uniquely positioned with an NI 43-101 compliant vanadium resource in mining-friendly Nevada and they have the capability to develop. If the narrative unfolds as predicted, I believe this company offers the highest



probability of asymmetric gains, with potential to partner with battery manufacturers, or vertically integrate all processes from mining to battery selling, to supply growing U.S. demand.

Phenom's Carlin Gold-Vanadium property is comprised of 150 unpatented mining claims and 80 acres of fee simple land

covering 2,608 acres in northcentral Nevada, six miles south of the town of Carlin which is a major rail hub to both coasts. The project is blessed with access to skilled labour and considerable infrastructure advantages resulting from massive investments and mining along the Carlin Gold Trend by majors Newmont and Barrick. These advantages include road accessibility from both mining-steeped Carlin and Elko, and power located less than five miles from the project.

The Carlin property was first explored and drilled in the late 1960s by Union Carbide Corporation which resulted in a significant historic deposit, but the timing wasn't right. Phenom saw the opportunity and acquired the property in late 2017, embarking on an exploration program that resulted in confirming and improving the



geological model, continuity of the grade, and tonnage. In short, Phenom's exploration work and metallurgical breakthroughs revealed impressive vanadium recovery rates of 80%, a large resource that is open to expand, and high vanadium grades, all near-surface and amenable to open pit mining.

It is now the largest, highest grade primary vanadium resource in North America with a resource of 303 million pounds Indicated and 75 million pounds Inferred, with excellent grades of 0.615% and 0.520% (V205) respectively. At current prices, this resource is worth roughly US\$3.7 billion in the ground and the deposit remains open in some directions, pointing to further possible upside potential.

It's worth noting that Phenom's brilliant group of metallurgists, each with their own speciality, developed the breakthrough metallurgical flowsheet that is now protected by the company's patent. The flowsheet uses a series of conventional processes and refinements that have never before been combined in such a way for vanadium. And the process does not require a roaster, which typical vanadium projects around the world require. These days, building a roaster is not only expensive but nearly impossible to permit due to environmental and social considerations.

A Preliminary Economic Study has been completed on the project which details a 20-year project life with an operating cost of just over US\$5/lb V2O5, while vanadium prices are currently around US\$10/lb V2O5. And the Study only represents about half of the company's resource. As vanadium prices rise alongside demand, lower grades could be tapped, resulting in potential to double the project life.

The Carlin vanadium project is not only

highly prospective, its also exceptionally unique. Under the direction of renowned Carlin gold specialist and mine finder Dave Mathewson, Phenom has discovered a Carlin-type gold system below the vanadium resource; not too surprising since the project lies on the Carlin Gold Trend. This offers optionality for both the company and investors. The gold system is distinct and physically separate from the vanadium resource, opening up opportunities for JVs, spinouts, and numerous other possibilities. Another ace up Phenom's sleeve is

the U.S Department of Homeland Security's demand for a domestic supply of critical metals and minerals including vanadium. The U.S. is not particularly comfortable with 75% of global vanadium coming from China and Russia. Not to mention the commitment by BlackRock, the WEF, the UN, and the Biden administration to drive green initiatives with battery energy storage as a major area of focus. This means projects operating in Nevada could get approved and incentivized to accelerate by the federal government.

Phenom is looking into applying for a piece of the US\$7 billion grant money pie that is earmarked for the battery supply chain in Biden's infrastructure bill.

With its robust lithium and vanadium deposits combined with a miningfriendly mentality, I view Nevada as a possible state leader in the green energy supply chain with potential for a fully integrated battery factory located in close proximity to vanadium sources. This would allow Phenom to reap the rewards of vertical integration as demonstrated by Largo Resources and Bushveld Minerals. The state is also home to Tesla Giga Nevada, a lithium-ion battery and electric vehicle component factory, positioning it as a truly ideal location to facilitate the swift development of redox battery solutions on American soil.

My faith in Phenom is also driven by the depth of technical talent that their management team brings to the table - few junior miners compare on this front. What makes them unique is that while they've invested in top shelf technical talent, they don't have a marketing or promotions team

and fresh grassland in foreground. 3d rendering.

and get right to the hard data. We could use a lot more of that today!

The company is led by President & CEO Paul Cowley. a professional geologist whose four-decade long career has involved various technical and managerial roles exploring for gold, base metals, diamonds, industrial minerals. and coal worldwide. Paul has been involved with various high-profile projects including the Escondida world-class copper mine in Chile and the Slave Gold project in the Canadian arctic where he managed a team that discovered four gold deposits amounting to over eight million ounces. One of those is Canada's fourth richest gold mine currently in production.

In addition to Paul's leadership, the company's team of business, metallurgical, geological, mining and construction advisors is second to none.

THE GLOBAL BATTERY RACE IS ON

I predict that over the next decade, we will see the tides change for vanadium as the need for high performance batteries, green energy storage solutions, and renewable technologies continues to skyrocket. Just imagine the myriad of projects that will emerge as the world begins to capitalize on the superior qualities of redox batteries that are safer, cheaper, reusable, recyclable, and offer unmatched performance and longevity.

The tides are already beginning to shift with innovations like Japan's solid-state battery. Japanese industrial manufacturer Hitachi Zosen recently developed a battery that is claimed to harness one of the highest capacities in the industry, seven times greater than previous models. According to the Osaka-based company, the new Eco friendly battery energy storage system in nature with misty forest in background an operate under

a larger lange of comperatures and is

non flammable. It will soon be tested in industrial machinery and space, and there are plans to double the battery's capacity by 2025.

Also in Japan is Sumitomo Electric providing redox batteries to electric power companies, renewable energy producers, power retailers, and end consumers. Joint ventures are also shaping up in this arena including EVERFLOW, a partnership between Schmid and Nusaned, a subsidiary of Saudi Aramco, that will facilitate the construction of a factory and development of vanadium redox flow battery technology.

In China, redox battery provider VRB Energy recently unveiled a plan to build a gigafactory for the production of vanadium redox flow batteries in the Hubei province. The project will include developing a 100 MW solar park linked to a 100 MW/500 MWh vanadium flow battery, and constructing a research and development facility.

Another notable player in the redox battery market includes verticallyintegrated Rongke Power who developed a 200MW/800MWh vanadium flow battery in China as part of the government's efforts to spur interest in the technology. The battery provides power during peak hours of demand to enhance grid stability and resolve black-start conditions in case of emergency. Rongke has deployed almost 30 similar projects, some of which are attached to operating wind farms in the Liaoning province of China.

There's also LSE-listed redox flow battery manufacturer Invinity Energy Systems that is looking to supply California with the technology by participating in four separate energy storage projects funded by the California Energy Commission (CEC). In 2020, the CEC released a grant funding opportunity to promote innovative, longer-duration, non-lithiumion energy storage solutions and all four Invinity submissions were accepted.

There are three vanadium producers in the world outside of China and two of them, Largo Resources and Bushveld Minerals, have gone vertical in the sense that they're building battery divisions to capture the massive opportunity in long duration energy storage. These two companies also happen to be the largest Western-based publicly traded vanadium players.

By fully integrating, these companies now have dedicated marketing

and sales teams to compete with the lithium battery counterpart. With metal sourcing, processing, manufacturing and distribution under one umbrella, these companies can offer competitive pricing to their battery buyers. The more solar and wind projects that adopt vanadium batteries, the more mainstream they will become.

This is hardly an exhaustive list of companies, but it's a starting point to illustrate the global shift underway that will drive demand for green metals like vanadium. With states like California providing grants for redox batteries, we see great things in store for Phenom Resources, a company that has the right deposit in the right jurisdiction, unmatched expertise, and the capacity to create a domestic supply chain.

It's vanadium's turn to take the spotlight.



SCIENCE IS UNLOCKING THE POTENTIAL OF BC'S GOLDEN TRIANGLE

By Lawrence Roulston

he Golden Triangle is widely recognized as one of the most richly mineralized areas on the planet. That in-the-ground wealth is now beginning to be exploited, spurred by \$4 billion of investment from Australia's largest gold producer, Newcrest. Investors in the juniors are also profiting, with the latest example being the joint Newmont/Skeena bid for Questex, which was priced at 50% above market.

The Golden Triangle features one of the highest-grade gold-silver mines of all time - Eskay Creek, which was mined by Barrick; and one of the largest gold-copper deposits in the world -Seabridge's KSM. With that abundance of mineral wealth, it is no surprise that several exploration companies are searching for the next big discoveries. Boots-on-the-ground has been the core of exploration in the region for decades and has generated a vast amount of information. That approach is now being supplemented with a more scientific approach. In fact, some of the explorers are going beyond merely using the most advanced geoscience available - they are working toward advancing that science in the search for new orebodies.

A case in point is Mountain Boy Minerals. As CEO Lawrence Roulston explained:

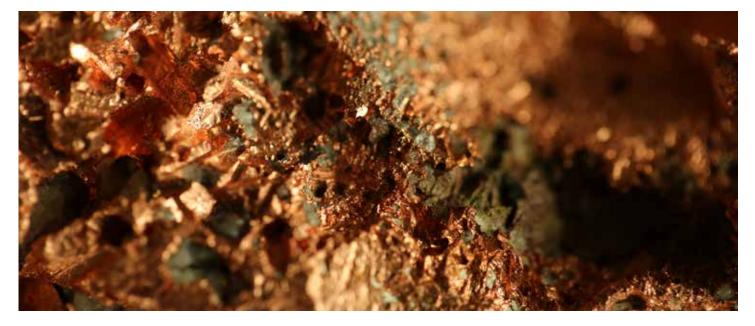
"On our Telegraph project, high grade values of gold, silver and copper have been identified by multiple explorers, each focused on small target areas and acting independently. In the early days, there was no geological model to tie it all together. We have now consolidated the property and compiled that wealth of information. Our first season confirmed and expanded on that data set. Now, we are applying leading edge geoscience to work toward a major discovery. Our geological team, working in conjunction with skilled researchers from the Mineral Deposit Research Unit (MDRU) and the Geological Survey of Canada (GSC), is doing a

superb job of data-mining the wealth of information available on this project."

Quoting from the Company's May 4, 2022 news release:

Dr. Christopher Lawley at the GSC and Dr. Farhad Bouzari from the MDRU have analyzed a suite of samples that include 80 drill core samples from the 2014 drilling and 40 surface samples from the 2021 program.

Christopher Lawley has been working as a gold metallogenist at the Geological Survey of Canada since 2012. His research interests range from analytical method development to the application of geochemistry as tracers and chronometers of mineral systems. His preliminary work at the Telegraph project has identified several lithologies, including numerous samples characterized as alkalic rock types using immobile element ratios. The data further demonstrates that potassium and sodium rich samples are associated with the highest gold values. This is consistent with observations at other gold-rich porphyry systems in the region, which have demonstrated an affinity for potassic- and sodic-altered rocks.



From a critical mineral perspective, nearly all the samples carried anomalous copper, gold, silver. antimony, rhenium, and tellurium concentrations relative to bulk continental crust, with several samples that were highly anomalous in these elements. High palladium to platinum (Pd/Pt) ratios were also observed, which are considered typical of Au-Cu porphyries in the Golden Triangle and elsewhere. Further analysis in the form of microscopy will be performed on the samples.

Dr. Farhad Bouzari joined MDRU as a research associate in 2006. His main research interests are anatomy and evolution of porphyry copper deposits particularly distal and deep features and their application in vectoring towards mineralization. Using short wave near infrared (SWIR) analysis, Dr Bouzari is able to identify the specific alteration minerals in hydrothermal systems. Initial results from the SWIR analysis confirm the presence of porphyry-style alteration minerals and suggest that multiple hydrothermal pulses have altered and mineralized the host rocks in both the Dok and Yeti targets on the property.

Dr. Lawley's and Dr. Bouzari's research is enhancing the Company's understanding of the origin and formation of the volcanic and intrusive rocks and the resulting hydrothermal systems that occur with the emplacement of these rocks. This understanding will help in vectoring toward the most highly mineralized parts of the system.

Roulston further explained:

"Even the classic porphyry model is being updated, with recognition that alkalic porphyry deposits differ in terms of their alteration patterns. Alkalic systems are important in that they are associated with higher gold contents and explain the exceptional endowment

of gold in the aptly-named Golden Triangle."

The Canadian Government is providing financial support to the mining industry through the GSC in general and through a program known as "Targeted Geoscience Initiatives." They have also recently enhanced the tax benefits available in the popular "flow-through" program. In addition to investors getting a 100% writeoff for exploration expenses, they now get an extra 30% tax credit for exploration aimed at "critical metals". Importantly for the Golden Triangle, copper is included in the list of critical metals.

Expect to see a lot of news from the Golden Triangle in the coming months as modern geoscience enhances the exploration powers of juniors, who are now fueled by an enhanced flowthrough investment climate. The growing interest of the majors to get a piece of the action in this rapidly evolving mining region promises an exciting period for shareholders of the companies exploring this region.



THE WHITE GOLD RUSH IS ON

By Andrew O'Donnell

f you're a bit older than me, you may associate lithium with a sedative used in psychiatric medication, and you wouldn't be wrong. However, those who've been paying attention know lithium is now a key driver in the world's race to a cleaner future, so much so it's been dubbed "white gold," and the rush is on.

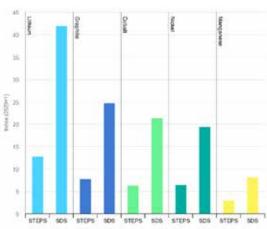
The price of lithium is soaring, up 280% since January of last year, and establishing a domestic lithium supply has been likened to the modern-day version of oil security. According to the U.S. Geological Survey, the U.S. is lagging behind, with only 1% of global lithium domestically mined and processed, and only one operating lithium mine, Albemarle's Silver Peak in Nevada. In response, the administration released a blueprint to jumpstart domestic lithium production and refinement along with battery manufacturing.

By 2030, global demand for lithium is expected to surpass two million metric tons, and growth in the EV sector will account for more than 90% of this demand, according to Benchmark Mineral Intelligence. But global demand for lithium is not just driven by Tesla, Neo, or Rivian, it's part of a bigger transportation picture that includes buses, trains, and the aerospace sector. It's an essential ingredient in our personal devices, energy storage systems, ceramics and glass, lubricants, pharmaceuticals, Internet of Things (IoT) infrastructure, and 5G innovation.

As countries scale up their climate change targets, clean energy technologies will become the fastest-growing segment of demand for critical minerals. Though this demand will primarily be dominated by graphite, copper, and nickel, lithium will see the fastest growth rate, with demand spiking by over 40 times. It's become such a critical element in our daily lives that Lithium Americas CEO Jon Evans likened lithium to the blood in our body, remarking:

"It's the chemistry behind how lithium-ion batteries"

work. It remains the common denominator in all battery technologies, even what we're looking at now for next-generation batteries."



Growth in demand for selected battery-related minerals from clean energy technologies in 2040 relative to 2020 levels by scenario

THE ELECTRIFYING FUTURE OF TRANSPORTATION

For every 1% surge in EV market penetration, the world's need for lithium will rise by an estimated 70,000 tonnes per year. And lets' not forget that many countries including the U.K., Sweden, the Netherlands, France, Norway, and Canada have announced an eventual phase-out of combustionengine cars, while the Biden administration faces intense pressure from Washington to follow suit.

As EV adoption ramps up, a key concern for manufacturers and countries alike is reducing cobalt content in the cathode and striving for higher energy density, prompting a shift away from cobalt-rich chemistries. This will result in modest growth in the lithium iron phosphate (LFP) battery market for heavy trucks and entry-level car models, and we're already seeing an increased use of LFP batteries in China. Further gains in energy density and declining battery prices will require breakthrough technology which is expected in the form of lithium metal anode all solidstate batteries (ASSBs) that will hit the market by 2030.

In addition to car manufacturers, all modes of transportation – buses,

planes, boats - are shifting to renewable energy, prompting significant demand for lithium batteries because they're versatile, recyclable, and re-usable. As EVs are on the path to matching combustion-engine cars in terms of price and distance, it might only be a matter of time before most or all transportation is electric. The impact of lithium batteries in transportation also includes aerospace applications from drones to satellites, and Israeli firm Eviation is working on a prototype of a completely electric aircraft that will be able to carry nine passengers for roughly 1,000 kms at 3,000m and 440km/h.

Furthermore, Silicon Valley start-up Cuberg is pursuing advancements in lithium metal battery which could be twice as dense as lithium-ion, and its first customers are in the aviation industry. The company was recently acquired by EV battery giant Northvolt, and if they can scale-up their technology as quickly as they hope, we could see lithium metal batteries powering small planes and EVs in the next decade.

Another lithium-based battery that's gaining steam is the Li NMC due to its superior energy density, unit weight, and volume. Leveraging this technology, Polish battery supplier BMZ recently launched Magnus+, next-generation energy supply а and storage system dedicated to commercial applications that can reach nearly 700 kWh. It's envisioned that this system will be used to power everything from electric or hybrid buses, trucks, vans, trains, diggers, dumpsters, and road sweepers. The world is watching as the race for the most efficient lithium-powered transportation solution rages on.

SEABORNE LITHIUM PRICES 2020-2021



Lithium prices are soaring and the search is on for the next motherlode to meet the needs of battery manufacturers. Graphite is facing a similar shortage – not just for pencils, high-grade graphite is also a critical battery component..

A CRITICAL ELEMENT IN THE CLEAN ENERGY STORAGE BOOM

Along with transportation, the world's need for lithium is also catapulted by the overarching clean energy storage boom to combat climate change. Energy storage is a key component of the world's energy transition journey to mitigate the intermittency of renewable energy generation and facilitate smart grid development. According to a recent International Energy Agency (IEA) report, in 2020, energy storage additions rose to a record-high of 5 GW, and overall investment increased by almost 40% to \$5.5 billion. In the same year, spending on grid-scale batteries rose by more than 60%, driven by a push for renewables investment.

This exponential growth was largely driven by China and the U.S. In 2020, capacity additions in China more than doubled and the following year, the country announced plans to install over 30 GW of energy storage by 2025, representing a nearly ten-fold increase in installed capacity. In the U.S., capacity additions from utility-scale projects more than guadrupled and over U.S.\$1 billion was authorized to support the research and development of a range of storage technologies over a five-year period. The White House also issued an executive order pledging to achieve a carbon-free electricity sector by 2035.

New policies and projects in key markets have facilitated growth in global energy storage deployment, but even faster acceleration is required to align with the IEA's Net Zero Emissions by 2050 targets which will require nearly 600 GW of battery storage capacity installed by 2030. As the power sector faces increased pressure to decarbonize electricity generation, energy storage systems will be heavily leaned on to address the hour-to-hour variability of renewables like wind and solar. manganese-cobalt counterparts. They also have the capacity to maximize onsite generation by storing energy for use at different times, and buffering large loads so they can be more easily and inexpensively connected, turning power sites into smart microgrids.

As the world's demand for lithium heats up, will there be enough supply? In 2019, global lithium production stood at 77,000 tonnes but analysts expect worldwide demand will more than double by 2024, and the World Bank predicts five times more lithium than is currently mined will be needed to meet global climate targets by 2050.

INNOVATION IS THE KEY TO SUSTAINABLE LITHIUM MINING

Many companies are eagerly searching for the next motherlode of lithium, but there's a couple of problems – namely, that it's in short supply and lithium mining can carrya heavy environmental price tag. There's a reason why lithium is often referred to as white petroleum: in 2020, data analytics specialist Roskill produced a Sustainability Monitor to analyze energy consumption and CO2



The energy transition is likely to fuel a sustained increase in demand over the next two decades for metals such as lithium. (Credit: Shutterstock/Ksenia Ragozina)

In China, LFP batteries are increasingly favoured for grid-scale installations because they're safer, more durable, and lower cost than their nickelemissions of the lithium supply chain, finding that on average, nine tonnes of CO2 is emitted for every tonne of refined lithium carbonate equivalent (LCE) produced.

High-emission intensity is also associated with transporting lithium,

particularly from Australia to China for refining, not to mention the refining process itself, in part due to China's power grid mix and reliance on coal. With demand for lithium set to skyrocket and ESG becoming central to a company's investment appeal, scrutiny of lithium sectors will continue to intensify.

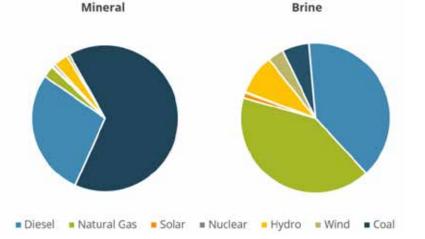
Luckily, there are solutions. For example, lithium is traditionally produced from hard rock mining but a shift to producing lithium from brines can greatly lower the carbon footprint. Brines are underground reservoirs that contain high concentrations of dissolved salts – lithium, potassium, sodium – and it's a more carbon-friendly option for sourcing the white gold. Alex Keyes, a clean vehicles manager at Brussels-based Transport and Environment, was quoted as saying:

"Given the enormous demand we're likely to see over the coming years, it's going to mean we need extraction, and recovering lithium from geothermal brine looks very promising." Continuous innovation is making this possible like what's coming out of clean technology firm Aceleron who realized battery waste would become a serious problem as demand for energy storage continued to rise. The company's mission is to enable the battery industry to extract more value before batteries reach material recovery stage. This led to the discovery that most lithium-ion cells were assembled using permanent assembly methods, and the company developed their own assembly technology that allows batteries to be easily

disassembled for repair, reuse, and recycling.

As more and more innovation comes to life, extracting additional value before the recycling phase will become new the reality. Touching on this topic, co-founder of Tesla and battery recycling company Redwood Materials, J.B. Straubel said: "We need to basically fill the pipeline. Once

The contrast in fuel use breakdown between mineral and brine lithium supply



A snapshot from Roskill's Sustainability Monitor.

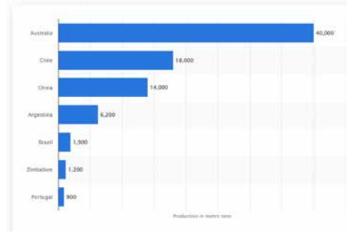
Many people are also looking towards recyclingtechnologytotakethepressure off. Minimizing our dependence on cobalt, introducing battery collection and recycling schemes, and exploring uses for second-hand batteries can lower the environmental impact and minimize waste. we have the fleets built, we don't need to keep mining very many materials in order to keep sustaining it, renewing it. So every single year that goes by, from now until we end up in a closed loop system, the recycled material content will get higher and higher."

RAMPING UP A DOMESTIC LITHIUM SUPPLY CHAIN

Another key issue is the lack of domestic lithium supply on U.S. soil. Last year, Australia produced more than half of the world's lithium followed by Chile and China. The U.S. only has one operating lithium mine, Albemarle's Silver Peak in Nevada, and the company has not yet released production numbers, but reports say the project produces roughly 5,000 metric tons of lithium, about 1% of the world's total.

Major countries in worldwide lithium mine production

(in metric tons)



This graph from Statista shows who is producing lithium and what this means as far as production, supply chain, and logistics. Shipping costs have increased dramatically along with everything else as inflation soars. It will take major investments in mining projects to lock in prices and meet the hunger of clean tech companies.

Also in the U.S., there's Lithium Americas open-pit Thacker Pass project 200 miles north of Reno, which is getting a lot of attention but won't begin production for at least two years and won't ramp up for a while after. It's been stalled by lawsuits and permitting delays, as well as opposition from environmentalists and local communities. If the project proceeds, it's expected to produce about 60,000 tons of lithium a year, 12% of global lithium production.

There's also a lithium project that's being eyed in Elko County, and Surge Battery Metals has the Northern Nevada Lithium project about 45 miles northeast of Wells and 21 miles southeast of Jackpot. The search is underway for more lithium, and the Nevada Division of Minerals has 17,928 inferred lithium placer claim point listings as of January. California is another state with impressive lithium-producing potential. East of San Diego, the Salton Sea is known as "Lithium Valley," and Berkshire Hathaway has 10 geothermal plants in the area under subsidiary Cal Energy. They're looking at ways to extract lithium from the underground brines, and have predicted they could potentially produce 90,000 metric tons of lithium a year by 2027.

The development of sustainable techniques to extract lithium from brines is currently being led by Controlled Thermal Resources, a company that's operated geothermal power plants in the region for decades. They're working to combine lithium extraction with their geothermal production, and will leverage geothermal power plants to power the extraction process.

Let's hope these projects come to fruition and allow the U.S. to join the ranks in major lithium producing countries! On that note, I've recapped the world's five largest lithium mining companies in operation today.

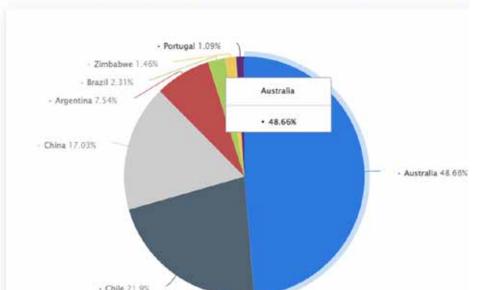
THE WORLDS' LARGEST LITHIUM MINING PLAYERS

1. Jiangxi Ganfeng Lithium

Founded in 2000, this company is the world's largest lithium mining player with a market cap of \$27.38 billion, and \$767.5 million in 2019 revenues. Headquartered in Xinyu, China, the firm also holds lithium resources in Australia, Argentina and Mexico. It's the largest lithium metal producer in the world, while its lithium compound capacity ranks third worldwide and first in China. The company claims to be the only one in the industry that has the commercial-scale technologies required to extract lithium from brine, ore, and recycled materials.

2. Albemarle

Albemarle is a fine chemical manufacturing company based in North Carolina that operates three divisions – lithium, bromine specialties, and catalysts. Founded in 1994, the firm has grown to establish itself as the second-largest lithium miner in the world with a market cap of \$16.73 billion, and \$3.59 billion in 2019 revenues.



Distribution of lithium production worldwide in 2020, b

3) Tianqi Lithium

Founded in 1995, this is the third-largest lithium miner in the world with a market cap of \$11.79 billion and 2019 revenues of \$748 million. Based in Chengdu, China, the firm claims to hold "world-leading positions" in its major businesses of lithium resource investment, lithium concentrates extraction, and the production of advanced lithium speciality compounds.

4. Sociedad Química y Minera

With a market cap of \$6.38 billion and 2019 revenues of \$1.86 million, this Chile-based chemical company is the fourth-largest lithium miner in the world. Founded in 1968, SQM supplies iodine, lithium, and other industrial chemicals, and produces lithium carbonate from its Salar del Carmen plant, close to Antofagasta, Chile.

5. Mineral Resources Limited

Founded in 1993, this company is the fifth-largest lithium mining company in the world with a market cap of \$5.66 billion and \$1.16 billion in 2019 revenues. The West Australian-headquartered firm's operations include open-pit mining of iron ore and lithium, as well as lithium hydroxide processing. The company produces lithium in Australia from the Mt. Marion project located in the Goldfields, and Wodgina, in the Pilbara region. People tend to focus on the end product and for good reason, it's more interesting and often something we as retail investors might use. However, the real investment is not in who can develop the better battery right now, but in who will sell them the critical materials needed and where they're being mined.

Could lithium supply eventually outpace demand? Not according to Benchmark Mineral Intelligence who graphed out the climbing supply of lithium and predicted that the world will supply about three million metric tons by 2040 but will need seven million metric tons. Commenting on the subject, a Tianqi Lithium spokesperson told S&P Global Platts:

"Due to its strategic significance, lithium resources will be more difficult to obtain and control. Therefore, lithium resources will become a key factor restricting the development of the industry in the mediumand long-term."

The white gold rush is on, and investors and industry experts alike will be watching closely to see how this scenario plays out in the years ahead.

XIMEN MINING CORP

By Marc Challande

imen Mining Corp (TSX-V:XIM) is a Canadian-based company headquartered in Vancouver. The company is involved in precious metal projects. XIM owns a 100% interest in three of its precious metal projects; two gold projects, The Amelia Gold Mine and The Brett Epithermal Gold Project, and the Treasure Mountain Silver (which is now optioned). The company also holds mineral claims in the Greenwood mining camp and has expanded its holdings to include the Kenville mine.

PROJECTS OVERVIEW

The Treasure Mountain Silver Project is located in Southern British Columbia and has an area of 10,800ha. The property is part of the Intermontane Belt, which has known mine productions of gold, silver, lead, and zinc. The project is currently optioned to New Destiny Mining (NED.V) for staged cash and stock payments.

Nearby properties include Nicola Mining (NIM.V) which hosts polymetallic veins, and Westhaven Ventures (WHN.V), which reported gold and silver in its Shovelnose Gold Property.

The Gold Drop Project is located in Southern British Columbia and has an area of 18,500ha. Optioned in August 2019 to GGX Gold Corp (GGX.V), XIM received staged cash, stock options, and work commitments. Nowadays, Ximen is still a shareholder and maintains its 2.5% net smelter return royalty. This property hosts numerous low-sulfide, gold, and silver-bearing quartz veins, with four previously mined. It is a historic property as the first work occurred in the 1890s.

The Brett Epithermal Gold Project is located in Southern British Columbia and has an area of 20,000ha. This project has been 100% owned and controlled by Ximen since 2000. It has an area of 20,025ha epithermal gold district. The advantage of this project is that epithermal gold deposits offer some of the world's largest and highest-grade gold mines. The Kenville Gold Mine Project is located in Southern British Columbia. In 2019, the company acquired 100% of the former producing Kenville Gold Mine. The Mine Crown granted mineral claims and surface rights. Also, the company got all existing permits, infrastructure, and equipment. The mining property consists of 15 crown-granted mineral claims and three mineral claims. The company has been advised by the Ministry of Energy, Mines, and Low Carbon Innovation (EMLI) that a draft permit for the proposed mine development and underground drilling will be made available.

"With the Development Permit near at hand and US\$5,000,000 funding arranged for development, as well as the additional financial support of a Mid-Tier Gold producer, 2022 should mark the start-up of the Kenville Gold Mine," states Christopher Anderson, CEO,

T**he Amelia Gold Mine Project** is located in Southern British Columbia. In addition, Ximen has signed an

agreement to acquire specific Crowngranted mineral properties covering the Cariboo-Amelia gold mine, located in Camp McKinney. The Cariboo-Amelia is famous for being British Columbia's first dividend-paying lode gold mine and the largest producer of the Camp McKinney.

On March 31st, Ximen announced that it received the steel sets required for the initial construction of the New 1200 Meter Portal. They also reported that it secured and ordered vital supplies and equipment to anticipate the new portal development at the Kenville Gold Mine.

"This industrial site will have a small environmental footprint. It has been an objective of Ximen to bring meaningful and impactful jobs to families while providing the opportunity to work and live in close proximity." Chris Anderson, CEO

SHARE STRUCTURE/FUNDAMENTALS

There are currently 98M shares issued and outstanding for 116M shares fully



diluted. It is very positive because mining companies often have more than 150M shares fully diluted as they must raise more cash to expand or continue their operations.

About options, there are 2.1M options with a weighted average exercise price of \$0.56.

There are more warrants than options. The company has 22M warrants with a weighted average exercise price of \$0.52. This means that the company cannot convert these options and warrants to raise more cash.

Recently, the company closed a Private Placement. Indeed, Ximen Mining raised \$1.3M (through 8.8M units at \$0.15 and 1 warrant at an exercise price of \$0.25). Chris Anderson (director and CEO) was a part of the financing, which closed on April 20th. The CEO is also active on the market, as Chris Anderson bought seven times on the market for one sell over the last six months. If we focus on the insider ownership/ major shareholders, this data is as high as 26%. It is optimistic because, in most cases, investors consider 25% ownership as a healthy company.

Among the major shareholders, we can find New Gold (NGD.TO). On February 7th, New Gold announced it acquired a 9.9% interest in Ximen. and commits to maintain this equity. This partnership is essential to Ximen's long term goal. According to Ximen's president and CEO, New Gold's decision to invest in Ximen projects and development plans is an excellent starting point. New gold is a Canadian

company that engages in the

exploration, development, and operation of mineral properties. It primarily explores for gold, silver, and copper deposits.

The stock price is close to its 52-weeks low of \$0.155 and has a 52-week high of \$0.33.

BOTTOM LINE

Ximen Mining looks like a safe investment from many sides. The first side is the company is involved in the safest sector, as commodities are much demanded. Next, XIM has recently closed financing and now has more leverage to continue its operations. The news about the Kenville Gold Mine project is also a great indicator that the company is going in the right direction. The company is clearly undervalued, and all the future catalysts will help XIM gain more traction from investors.



WHY IS COPPER SUCH A HOT METAL RIGHT NOW?

By Andrew O'Donnell

GROWING GLOBAL DEMAND, CLIMATE CHANGE MANDATES, AND A CHALLENGING SUPPLY SCENARIO INDICATE A POTENTIAL MULTI-YEAR BULL MARKET

hen compared to lithium, vanadium, and cobalt, copper may not be the sexiest metal in the green revolution, but the facts and figures point towards a multi-year bull market.

In 2021, cooper made history by hitting its highest level ever in Q2, with prices rallying above U.S.\$10,700 per tonne as the world slowly regained its footing from the pandemic and top consumer China staged an economic rebound. The red metal then continued to trade above U.S.\$9,000 per tonne for most of the year, and prices are expected to hold steady at U.S.\$9,813 per tonne this year, dipping to U.S.\$8,375 per tonne in 2023, according to The Bank of America.

Copper's diverse utility was first recognized more than 10,000 years ago and it's proving to be a game changer in the electrification of our future. According to the U.S. Geological Survey, copper is currently the third most consumed industrial metal in the world. A surge in funding available to foster green innovation combined with dwindling global production and disruptions in top producers Chile and Peru, means copper's future is looking bright for years to come, particularly for junior miners with projects in place operating in countries like the U.S., Canada, and Australia.

Add in Biden's Build Back Better framework and China's Belt and Road Initiative, and copper becomes a thrilling investment theme. Referencing copper's supply and demand situation, a metals strategist at Goldman Sachs said "copper is the new oil." This sentiment was echoed by BlackRock's global head of thematic and sector-based investing, Evy Hambro, who said:

"We've got decades worth of high rates of investment in infrastructure as the world seeks to decarbonize. That's a widely held consensual view. What we're likely to see is strong demand that will keep prices at very good levels for the producers for many years into the future, and that could be decades."

A GLOBAL SURGE IN RED METAL DEMAND

Roughly 25 million metric tons of refined copper was consumed in 2020, and over the next 10 years, worldwide demand is expected to rise by 31%. Why the growth?

Considering that 72% of copper consumption resides in the power, utilities, and electrical products sector, there are many reasons behind the surge, but perhaps the most exciting part of the story comes down to the global commitment to fight climate change.

We're seeing a significant spike in demand for energy efficient storage, green technology, and renewable solutions, that are all backed by a massive influx of capex. As an example, the COP26 coalition, a conglomerate of banks, insurers, and investors worth \$130 trillion recently vowed to put combatting climate change at the centre of their work and gained firmer support for green investing.

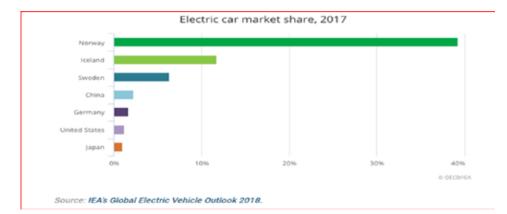
Copper will play a big role in green tech and is a staple in 5G wireless, EVs, grid-scale energy storage systems, and renewable power plants. Over the next decade, as tens of millions of EVs hit the road, more copper will be needed to build and connect new power plants. This boom will also spur investments in copper battery foil. Furthermore, wind and solar farms use an enormous amount of copper: according to the Copper Alliance, wind turbines require 2.5 - 6.4 tonnes of copper per MW for the generator, cabling, and transformers, while photovoltaic solar power systems use roughly 5.5 tonnes of copper per MW.

Renewable energy uses significantly more copper per megawatt hour of power generated when compared to coal or nuclear power. According to market research analyst Fitch Solutions, renewable energy will be the dominant contributor to green copper demand, accounting for an average of 62% of annual demand between 2021 and 2030. The firm is so confident in this green metal that copper recently made its way on to Fitch Solutions' list of commodities of the future.

If we're talking about copper, we can't forget its role in computer technology advancements. According to Moore's Law, we can expect the speed and capability of our computers to increase every couple of years, leading to exponential growth. We're already seeing IBM and other hardware goliaths choosing copper over aluminum to manufacture super powerful computer chips.

Copper's superior electrical conductivity results in much faster operating speeds and greater circuit integration – 400 million transistors can now be packed onto a single chip while power requirements are reduced to less than 1.8 volts. The use of copper conductors in the chip is considered the last link of the copper computer chain, as it's also used in external cables and connectors, bus ways, printed circuit boards, sockets, and leadframes.

Beyond computers, copper is also an essential component in new infrastructure and electrical grid build-



outs. It's no secret that the U.S. requires a staggering level of infrastructure upgrades, and copper will take centre stage. Plus, there's a growing demand for eco-friendly homes and places like California are requiring new homes to include solar panels. Copper also fortifies homes: copper shingles and other house-related applications are fire resistant, built to endure harsh weather, and can last up to 100 years.

The red metal also strongly underpins all things transportation-related. Today's transportation by land, sea, and



air is faster and safer than ever, in part due to copper alloy's high conductivity and strength which lends itself to the manufacturing of motors and wiring, springs, steering systems, avionics and many other applications.

Modern aircrafts require reduced weight and fuel output, which is made possible through computer-operated systems that leverage electronic signals transmitted by copper. Modern trains also rely on electricity supplied by copper cables and overhead conductor wires. The most powerful trains manufactured by GE and GM use about 16,000 pounds of copper.

EAST MEETS WEST

A discussion of booming copper demand is not complete without mentioning two of the biggest infrastructure initiatives in history that are happening right now - Biden's Build Back Better and China's Belt and Road. According to the International Copper Association, the multi-trillion-dollar Belt and Road Initiative (BRI) is so immense, it could single-handedly result in global demand for copper rising 22% by 2027. Traversing several continents, BRI includes major projects across 71 countries, and it's rumoured that Chinese firms have secured more than \$340 billion in construction contracts.

Cooper demand will be driven upwards by new project construction, particularly with regards to power and transportation infrastructure, increased power purchasing across connected nations, and the use of copper-dependent applications in project development

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SIGNIFICANT MILESTONES:

 Bankable Feasibility Study with Pre-tax NPV (Net Present Value with 5% discount rate) of \$60.7M (up 29.4% from \$46.9M) and Pre-tax IRR (Internal Rate of Return) of 57.9% (up from 48%) Figures updated in February 2022

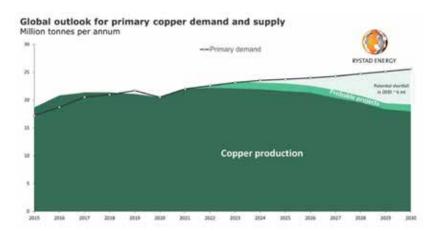
Plant Design and Equipment Procurement will also be pursued following the Feasibility Study

Plant Construction – target start in Q4 2022

Patent Filed for Novel Process for Bioleaching Pyrrhotite Tailings
 Using Natural Bacteria Holds Zero-Carbon Potential for
 Green Steel and EV Battery Metal Applications

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including HVAC units and EVs.

Multinational mining company Anglo American has estimated that by 2030, BRI will require an additional 5.6 million tonnes of production capacity to meet growing demand.

On the other side of the world, Biden's Build Back Better legislation has earmarked \$555 billion to tackle the U.S.'s most significant sources of global heating gasses – energy and transportation – through a variety of grants, tax incentives, and other policies aimed at fostering renewable energy technologies and major investments in EVs and public transit services. The legislation will incentivize zero emission public transit, a national network of electric vehicle chargers, and a renewable energy grid.

And that means... you guessed it... the country will need more copper.

THE ROLE OF CHINA IN THE COPPER BOOM

While we're on the topic of China, its worth noting that the country currently consumes nearly 14 million tonnes of copper per year which is more than the rest of the world combined.

According to the MIT Energy Initiative, China recently imposed a mandate on automakers requiring that EVs make up 40% of all sales by 2030, while Beijing is working on plans to eventually ban the sale of fossil fuel-powered vehicles. Many other countries are following suit including Germany, France, Norway, the U.K., and India.

The implications of this will be felt on a global scale as these mandates will drive

up the production of EVs and batteries to the point that the cost of both will decline worldwide. Furthermore, offset benefits related to air pollution, human health, climate change, and national security may be significant enough to offset production costs.

China is currently in the second phase of its adoption which includes credit percentage targets for car manufacturers that will increase from 14% in 2021 to 18% in 2023. The Phase 2 policy also reduces the maximum New Energy Vehicle (NEV) credit per vehicle and tightens the technical requirements for determining credit value.

Like the rest of the world, these mandates will create a supply challenge for China. In addition to foreign investments in mining projects around the world, China has spent more than \$16 billion in the last 12 years to acquire overseas copper companies and assets. 40% of the country's copper needs are currently met by Chinese-owned mines in Africa and other parts of the world, which has more than doubled in the past decade. However, even with these assets in place, domestic supply in China last year hovered around just two million tonnes including scrap, while mined copper production continues to struggle.

WILL DEMAND OUTPACE SUPPLY?

Supplying the anticipated growth in demand could be constrained by declining ore grades, lack of investment in new mines, political instability in copper producing countries, and the ample time required to bring new discoveries into production. Supply and demand could level out, however, if the uptake of EVs and green tech is slower than anticipated or if a trade war erupts between the U.S. and China.

According to Nornickel, the world's largest producer of high-grade nickel and a major producer of platinum and copper, the copper market will experience a mild deficit of 82kt this year, even though global mine production is expected to increase by 4%. This projected increase is attributable to the ramp-up of new mines in the Democratic Republic of the Congo (DRC) and Peru as well as the expansion of existing projects.

However, the company estimates that the current number of probable copper mining projects is not sufficient to meet future demand and the market could slide into a sizeable deficit, if no new projects are started in the next few years.

According to a recent article, copper stocks are approaching historically low levels, with only 200,402 tonnes of available inventory held by the LME, COMEX and SHFE, with New York responsible for more than half the total. This inventory doesn't even cover three days of global consumption which surpassed 30 million tonnes for the first time last year. Many market watchers predict that supply will only continue to tighten over the coming decades.

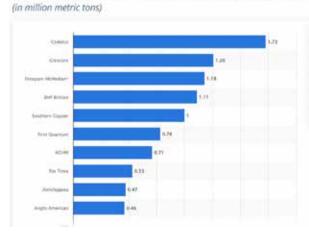
The top four copper producing countries in the world are Chile, Peru, China, and the DRC, with Chile and Peru accounting for nearly 40% of the world's primary mine supply. There's some big projects and expansions happening including Kamoa Kakula in the DRC, Grasberg in Indonesia, and Spence in Chile.

These projects will be followed by some medium-sized mines in Chile and Peru: this year, Anglo American will start production at the Quellaveco mine in Peru which will produce 300,000 tonnes of copper, and Teck Resources will be starting up Quebrada Blanca Phase 2, a project that will be watched closely. China is also in the process of building new copper mines.

Though South America has the largest copper pipeline, projects are often vulnerable to water scarcity, environmental challenges, political instability, and resistance from local communities. These obstacles make it difficult for both majors and juniors to develop projects, with supply from Peru especially impacted. Antamina, a large open pit mining operation in Peru halted production, and the Las Bambas mine had temporarily suspended output due to protesters forming road blockades. As a result, projects in the U.S., Canada, and Australia are becoming highly sought after, and the next few years will see exciting opportunities open up for juniors that have copper projects in place with strong upside potential.

THE CURRENT PRODUCTION LANDSCAPE

Leading copper miners worldwide in 2020, by production the TSX. These include the



The updated list can be seen on Visual Capitalist: https://www.mining.com/web/the-largest-coppermines-in-the-world-by-capacity

Global top 20 copper mines (Based on Jul 2017)

Mine Company 1 Escondida BHP Billiton (57.5%), Rio Tinto Corp. (30%), Japan Escondida Chile 1,270 (12.5%) 2 P.T. Freeport Indonesia Co. (PT-FI), Rio Tinto 750 Grasberg Indonesia Freeport-McMoRan Inc (72%), affiliates of Sumitomo Corporation 3 Morenci US 520 (28%) 4 Buenavista del Cobre Grupo Mexico Mexico 510 (former Cananea) Cerro Verde II Freeport-McMoRan Copper & Gold Inc. (54%), Compañía de Minas 5 Peru 500 Buenaventura (19.6%), Sumito (Sulphide) Anglo American (44%), Glencore plc (44%), Mitsui (8.4%), JX б Collahuasi Chile 454 Holdings (3.6%) BHP Billiton (33.75%), Teck (22.5%), Glencore (33.75%), Mitsubishi 450 7 Antamina Peru Corp (10%) MMG (62.5%), Guoxin International Investment Corporation 8 Las Bambas Peru 450 Limited (22.5%), CITIC Metal Co., Ltd. (15%) Norilsk Nickel 9 Polar Division 450 Russia ribk/ Talmakh Mills) (h) El Teniente 10 Chile 432 Codelco Anglo Amercian (50.1%), Mitsubishi Corp. (20.4%), Codelco (20%). 11 Los Bronces Chile 410 Mitsui (9.5%) 12 Los Pelambres Antofagasta Pic (60%), Nippon Mining (25%), Mitsubishi Materials Chile 400 (15%) 13 Chuquicamata Codelco Chile 350 Codelco 330 14 **Radomiro Tomic** Chile

WHERE LIES THE OPPORTUNITY?

This is a lot of information to absorb, and you may now be asking: how do I take advantage? Do I buy a producer or an explorer? Should I buy the level of risk. This brings us to stocks: a wise approach for retail investors, but do we look at producers or project generators? Currently, an opportunity presents itself in both but given all the data, the length of the downturn

commodity or the company? These

two key questions reflect your risk

For the experienced investor, buying a

commodity on the futures market can

be a great strategy, but it's aggressive,

needs to be managed actively, and

because of its natural leverage ability,

A lower risk alternative might be to buy

the Index. There are several metals and mining ETFs, most notably the S&P/TSX

Global Base Metals Index, comprised

of four ETFs that trade on

Claymore Global Mining ETF, the Claymore Global

Mining ETF Advisor Class,

the Horizons BetaPro Global

Global Top 20 copper refineries (Based on Jul 2017)

is not suitable for most investors.

tolerance and your potential gain.

Base Metals Bull pro + ETF, and the Tas Horizons BetaPro B.C Global Base lar Metals Bear + ETF. mi (TS ETFs are great the in theory, but

it's a passive investment strategy that doesn't pack a punch in terms of return. Most investors are looking to achieve growth which is only attainable by taking a certain in the mining cycle, and the amount of current drilling that's ongoing, a focus on junior miners offers the best option for maximum growth.

In Canada, there are some big operations to consider and a lot of activity happening in B.C. This includes Copper Mountain Mining Corporation's (TSX:CMMC) Copper Mountain mine, of which the company holds a 75% stake, with the remainder owned by Mitsubishi (TSE:8058).

Imperial Metals (TSX:III) runs the 30,000-tonne-per-day Red Chris copper mine, and also restarted operations at its Mount Polley copper-gold mine.

KGHM (KGH) is one of the largest copper-mining companies in the world and is currently developing the Ajax

	Refinery	Company	Country	Capacity (k tonnes)
1	Guixi	Jiangxi Copper	China	900
2	Jinchuan	Jinchuan Non Ferrous Co.	China	650
3	Daye/ Hubei (refinery)	Daye Non-Ferrous Metals Co.	China	600
4	Birla	Birla Group (Hidalco)	India	500
5	Yunnan Copper	Yunnan Copper Industry Group (64.8%)	China	500
6	Pyshma Refinery	UMMC (Urals Mining & Metallurgical Co.)	Russia	460
7	Amarillo	Grupo Mexico	United States	450
8	Chuquicamata Refinery	Codeko	Chile	450
9	Toyo/Niihama (Besshi)	Sumitomo Metal Mining Co. Ltd	Japan	450
10	Onsan Refinery I	LS-Nikko Co. (LS, Nippon Mining)	Korea Republic	440

project, an open-pit, copper-gold mine. Taseko Mines (TSX:TKO) holds the B.C.-based Gibraltar mine, the second largest open-pit copper-molybdenum mine in Canada, while Teck Resources (TSX:TECK) majority owns and operates the Highland Valley copper mine.

It's also worth considering project generators that collect data, do their research, and put boots on the ground to find and develop new projects. These companies typically seek to handoff projects in the form of buyouts or takeovers after they've located the resource. They play a crucial role in technology development, meeting carbon quotas, and creating a greener future.

But more on that next time. For now, I hope I've stimulated your interest in the many opportunities that present themselves as this red metal heats up and plays a starring role in our green tech future, not to mention, multi trillion-dollar infrastructure initiatives.

THE FLATION DEBATE: A "HAWKISH" (?) UPDATE

By Chris Temple

s this is written, the Federal Open Market Committee has commenced its latest meeting to set monetary policy. Everyone, their dog and even the fleas on those dogs expects the central bank to notably ratchet up their inflationfighting efforts come this (Wednesday) afternoon at 2:00 p.m. Eastern time.

Specifically, this will come in the form of **1**. A 50-basis point (half a percent) increase in benchmark short-term interest rates, together with the strong hint that similar hikes are on the table near-term and **2**. More color on just how quickly the Federal Reserve will begin selling assets from its uber-bloated balance sheet. On that latter, expectations are that the central bank will be net sellers of nearly \$100 billion/month between mortgage securities and Treasury paper.



All else being equal, this will be designed to further crimp lending (which, at least for home mortgages, finally has slowed abruptly, even if housing prices themselves in most places remain high) and take some of the inflationary steam out of the system. Of course, we would never be in this predicament in the first place had the Fed—led by the Arthur Burns of our time, Jerome Powell—not as a first matter gone so nutso with money printing over the last couple years.

Getting Warmer and Warmer... in the Best Possible Ways

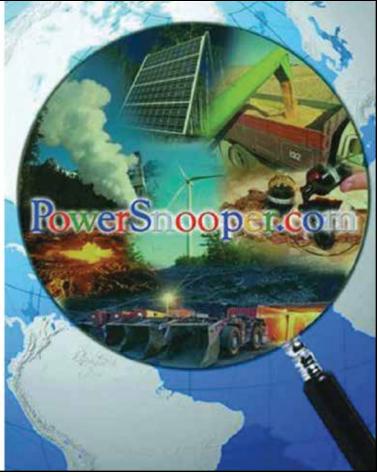
Alternative Clean-Tech Power Sources Investigate • Invest



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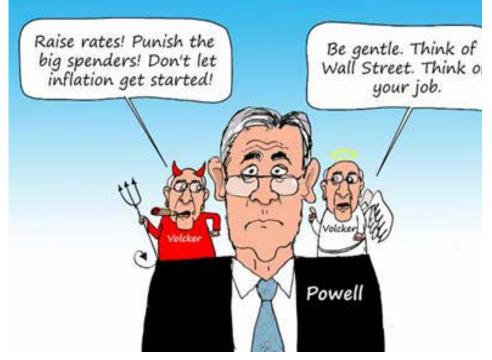
DOBrien@InternationalMiningResearch.com



President Nixon's Fed Chairman Burns made consumer and producer price increases back in the 1970's worse than they would have otherwise been by printing too much money and keeping rates too low; ostensibly to help "cushion the economy," first off, from the Arab oil embargo and its effects. The oil wasn't coming anyway; no matter what Burns did. So all he succeeded in doing was driving its price up even farther with his cheap money policy (and prices for everything else as well.)

Obviously, Powell did not learn from this history; nor did anyone around him and/ or his legions of apologists. "Cargo Plane Jay" went far beyond the past money printing antics of "Helicopter Ben" Bernanke, Burns, that mad monetary scientist Alan Greenspan (who never met an unregulated derivative he didn't like) and the rest. Indeed, in scarcely more than two years, the Powell-led Fed created some 30% of the total dollars EVER brought into existence!

Powell's justification was to "cushion" us from the self-imposed deep—but short—recession in the wake of the



Wuhan Virus-caused lockdowns and such. But like Burns, he made all this far worse by raising the prices of most everything by flooding the system with too many dollars.

So-not without some justificationmarkets and pundits alike (and the average American consumer reeling under the consequences of Powell's disastrous policy) now look to the



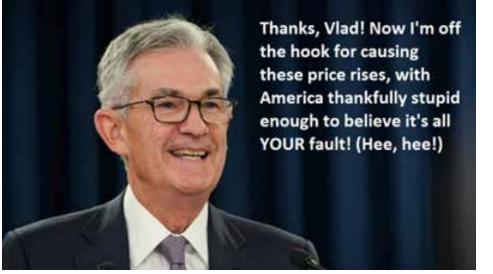


arsonistand wonder how eager a fireman he's now going to be. Some of the more simplistic analyses are comparing him to another former Fed Chairman, Paul Volcker, who belatedly was brought into the picture to put out Burns' inflationary inferno of the 1970's. Back then, at least Volcker started with a clean slate. It remains to be seen whether Powell has either the ability or the will—or will be allowed by circumstances—to clean up *his own* mess.

One of the issues today that confuses this whole "flation" thing-let alone the "mix" of said factors we are in store for in the months and years ahead—is the fact that the average pundit and economist does not understand the genesis of inflation in the first place. This is one reason, of course, that a President Biden can even try and sell his malarkey to the public that all this inflation raging out there is the fault of Russian President Vladimir Putin. He, for one, will never acknowledge that the primary cause of rising prices for everything is the arsonist he just gave a second Fed term to.

The question now is whether/when—in trying to undo some of this disaster— Powell pushes us back to the other extreme and inflated asset classes **DEFLATE sharply.** I will again predict to you that—long before the still-liquid U.S. economy grinds down into a recession because of modestly tighter monetary conditions—the Fed's rate hikes, rising market interest rates and, now, a near-20 year high in the U.S. dollar will cause a deflationary implosion in the markets. While all the moving parts and pieces may not be quite the same, the *pattern* of such a thing will be the same as back in 2008: a rapid, gut-punch reversal into some deflation in markets that will, in turn, drag down the economy into a worse recession than we are already in store for.

But this time around—unlike 2008 we have a number of now-systemic factors baked into the cake that will not uniformly lead to lower prices, even if demand gets hit somewhat in a new global recession. Ominously, the new global currency and commodity wars now unfolding—made worse by the



As I have previously explained (the BEST primer on this was a talk I gave last Spring for our Chicagoland gathering; see https://www.youtube. com/watch?v=UqmLVmeoUkI) the mess Powell has made for *all of us* is courtesy of his even more overextending the asset inflation regimen created by Volcker in that previous Fed chairman's "second act." Much more so, Powell's wildly inflationary policy of the last couple years especially has *already* given us hyperinflation: in asset valuations of all manner.

Russia-Ukraine war and the generally counterproductive sanctions regimen enacted by the "West" (*read*—war mongering United States-led N.A.T.O.) will be making this worse. And because of abysmal U.S. policy decisions, the cost to our nation especially of all manner of materials needed for the coming "Green economy" will stay in the stratosphere for some time to come; together with conventional energy.

So while I never would have said this even a year ago, brace yourselves for a

considerably worse "Stagflation" than what we all endured a generation ago. Don't be surprised when stocks lose another 20-30% or so...the economy is more firmly in recession...but the cost of living is still rising much nearer to 10% than Powell's now-obliterated target of 2%.

Ahead of our Strategic Investment Insights conference (see https:// strategicinvestmentinsights.com/) on May 6 & 7 in the Chicagoland area, one of our panelists for the Friday night session I did a pre-conference video with was Lyric Hughes Hale. During this lively and nostalgic discussion, we importantly discussed some ways in which the present narrative in the markets (what else is new?) is playing catch-up to a great extent: focusing almost completely on inflation and even more hyperinflation allegedly to come, and less on factors that could upend that outcome; at least for a while.



I urge you to watch our comments on this: a recording is at https://www. youtube.com/watch?v=s3U-j-YXsyc.

Some of you "old-timers" know Lyric as the widow of the late, great economist David Hale; among other things the Founder of David Hale Global Economics and—as I reminisced during our discussion—among the first and best economists Yours truly looked to many years ago when I was trying to make sense of the markets. As was David, Lyric is an economist who is extremely clinical in her approach; all about data, money, trends and common sense, sans ideologies and preconceived notions.

We'll be continuing to compare notes going forward. I will specifically in the weeks and months ahead endeavor to keep my own audience *ahead of* (rather than playing catch-up) the evolution of the various "Flations" we'll be dealing with.



It is with great sadness that we report the Jim Dines, "The Original Goldbug," passed away peacefully at his home in California on 12 April 2022 at the age of 90. Editor, Financial Analyst, author, and precious metals-mining industry expert, Mr Dines was known for his willingness and courage to contradict the prevailing conventional sentiment of the financial community in formulating his predictions and forecasts, almost always to the benefit of subscribers to his premier publication The Dines Letter (TDL). Continuously published since its start on Wall Street in 1960, TDL is the longest surviving newsletter of its kind.

It was my pleasure to have met Jim at a conference in California sometime in 2010. In the previous months I had attempted to encourage him to contribute material to The Prospector on the topic of Rare Earths. Having just turned 78 and longing for a more quiet retirement Jim turned me down. I met up with him and some of the "Dinettes", models that worked for his fashion agency to try one last time. I remember the conversation well as we discussed the emerging cannabis market and its potential for growth. I alluded that it would be fine until a US Federal gov't shut it done. Jim opined that it would not happen due to "States Rights" and explained why. I came away with a broader understanding of how there could be conflicting Federal and State laws in the US, and that my hypothesis may not have been as clear as I thought.

Never did get Jim to write for me but the knowledge gained was worth far more. Always approachable Jim provided this knowledge to his many followers over the years and will be missed.

"In lieu of sending flowers, the (Dines) family requests that you get yourself properly dressed, grab some excellent reading material, take yourself to lunch and order a nice glass of wine."

I encourage us all to do just that as it is a fitting tribute to one of the great characters that makes our business interesting.



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