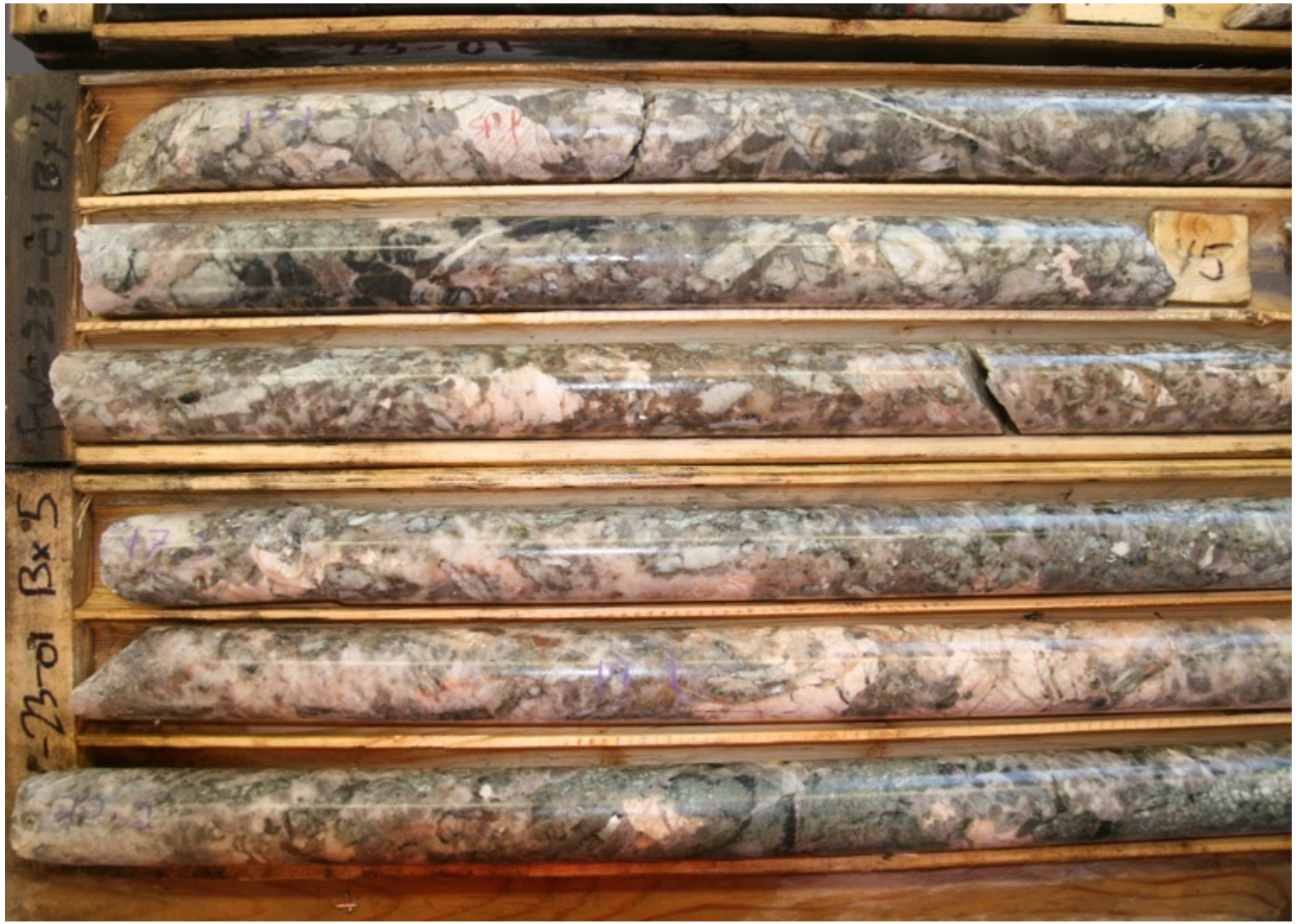
VOLTA METALS

DISCOVERING NORTH AMERICAN CRITICAL MINERALS

Hard Rock Lithium in NW Ontario



CSE: VLTA

voltametals.ca

February 2024

CAUTIONARY STATEMENTS

Certain statements contained in this presentation constitute forward-looking statements within the meaning of Canadian securities legislation. All statements included herein, other than statements of historical fact, are forward-looking statements which may include, without limitation, statements about the Company's plans for its investments and properties; the Company's business strategy, plans and outlook; the merit of the Company's investments and properties; timelines; the future financial performance of the Company; expenditures; approvals and other matters. Often, but not always, these forward looking statements can be identified by the use of words such as "estimate", "estimates", "estimated", "potential", "open", "future", "assumed", "projected", "used", "detailed", "has been", "gain", "upgraded", "offset", "limited", "contained", "reflecting", "containing", "remaining", "to be", "periodically", or statements that events, "could" or "should" occur or be achieved and similar expressions, including negative variations.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any results, performance or achievements expressed or implied by forward-looking statements. Such uncertainties and factors include, among others, changes in general economic conditions and financial markets; the Company or any joint venture partner not having the financial ability to meet its exploration and development goals; risks associated with the results of exploration and development activities, estimation of mineral resources and the geology, grade and continuity of mineral deposits; unanticipated costs and expenses; and such other risks detailed from time to time in the Company's quarterly and annual filings with securities regulators and available under the Company's profile on SEDAR at www.sedarplus.com. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended.

Forward-looking statements contained herein are based on the assumptions, beliefs, expectations and opinions of management, including but not limited to expectations that the Company's activities will be in accordance with its public statements and stated goals; that all required approvals will be obtained; that there will be no material adverse change affecting the Company, its investments or properties; and such other assumptions as set out herein. Forward-looking statements are made as of the date hereof and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by law. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, investors should not place undue reliance on forward-looking statements.

This presentation of VOLTA Metals Ltd. ("VOLTA" or the "Company") is for information only and shall not constitute an invitation or offer to buy, sell, issue or subscribe for, or the solicitation of an offer to buy, sell or issue, or subscribe for any securities. It has been provided solely to assist the recipient in evaluating the Company. This presentation is not, nor is it to be construed under any circumstances as a prospectus, a public offering of securities, or an offering memorandum as defined under any applicable securities legislation. This presentation does not contain all of the information that would normally appear in an offering document registered under applicable securities laws. This presentation includes market and industry data obtained from various publicly available sources and other sources believed by the Company to be true. Although the Company believes it to be reliable, the Company has not independently verified any of the data from third party sources referred to in this presentation or analyzed or verified the underlying reports relied upon or referred to by such sources, or ascertained the underlying assumptions relied upon by such sources. The Company does not make any representation as to the accuracy or completeness of such information. This presentation should not be construed as legal, financial or tax advice to any person, as each person's circumstances are different. Readers should consult with their own professional advisors regarding their particular circumstances. Neither the Company, nor any of its shareholders, directors, officers, agents, employees, consultants or advisers give, have given or have authority to give any representations or warranties (express or implied) as to, or in relation to, the accuracy, reliability, completeness or suitability of the information in this presentation or any other written or oral information made or to be made available to the interested party or its advisors. This presentation does not constitute, and should not be construed as, an offer, invitation, solicitation or recommendation to buy or sell any of the securities of the Company nor will there be any sale of the Company's securities in any jurisdiction in which such offer, solicitation or sale would be unlawful. In making an investment decision, investors must rely on their own examination of the Company, including the merits and risks involved. The Company's securities have not been approved or disapproved by the U.S. Securities and Exchange Commission (the "SEC") or by any state securities commission or regulatory authority, nor have any of the foregoing authorities (or any Canadian provincial securities regulator) passed on the accuracy or adequacy of this presentation. Any representation to the contrary is a criminal offense. Unless otherwise stated, all references to "dollars" or "$" in this presentation refer to the lawful currency of Canada. This presentation contains information with respect to adjacent or similar mineral properties in respect of which the Company has no interest or rights to explore or mine, including, without limitation, the following properties: the Green Tech Metals Claims Seymour Project and the Green Tech Metals Root Lake Project. Readers are cautioned that the Company has no interest in or right to acquire any interest in any such properties, and that mineral deposits, and the results of any mining thereof, on adjacent or similar properties are not indicative of mineral deposits on the Company's properties or any potential exploitation thereof.

Under the terms of NI 43-101, Andrew Tims, P.Geo., is Volta's Qualified Person. Mr. Tims has 30 years experience working in all aspects of mine discoveries and, mine development, and he has reviewed and approved the technical information contained in this presentation.

VOLTA METALS - HIGHLIGHTS

Volta Metals is exploring for Lithium, Cesium and Tantalum (LCT) in Northwestern Ontario, Canada.

Experienced leadership team with track record of creating shareholder value.

Large, 138 km^2 property position, strategically positioned in two emerging Lithium districts – Seymour-Falcon and Allison-Root Lithium Corridors

Discovery drilling highlights of 6 spodumene pegmatites – 1.50% Li_2O at 5.2m and 1.24% Li_2O at 15.6m

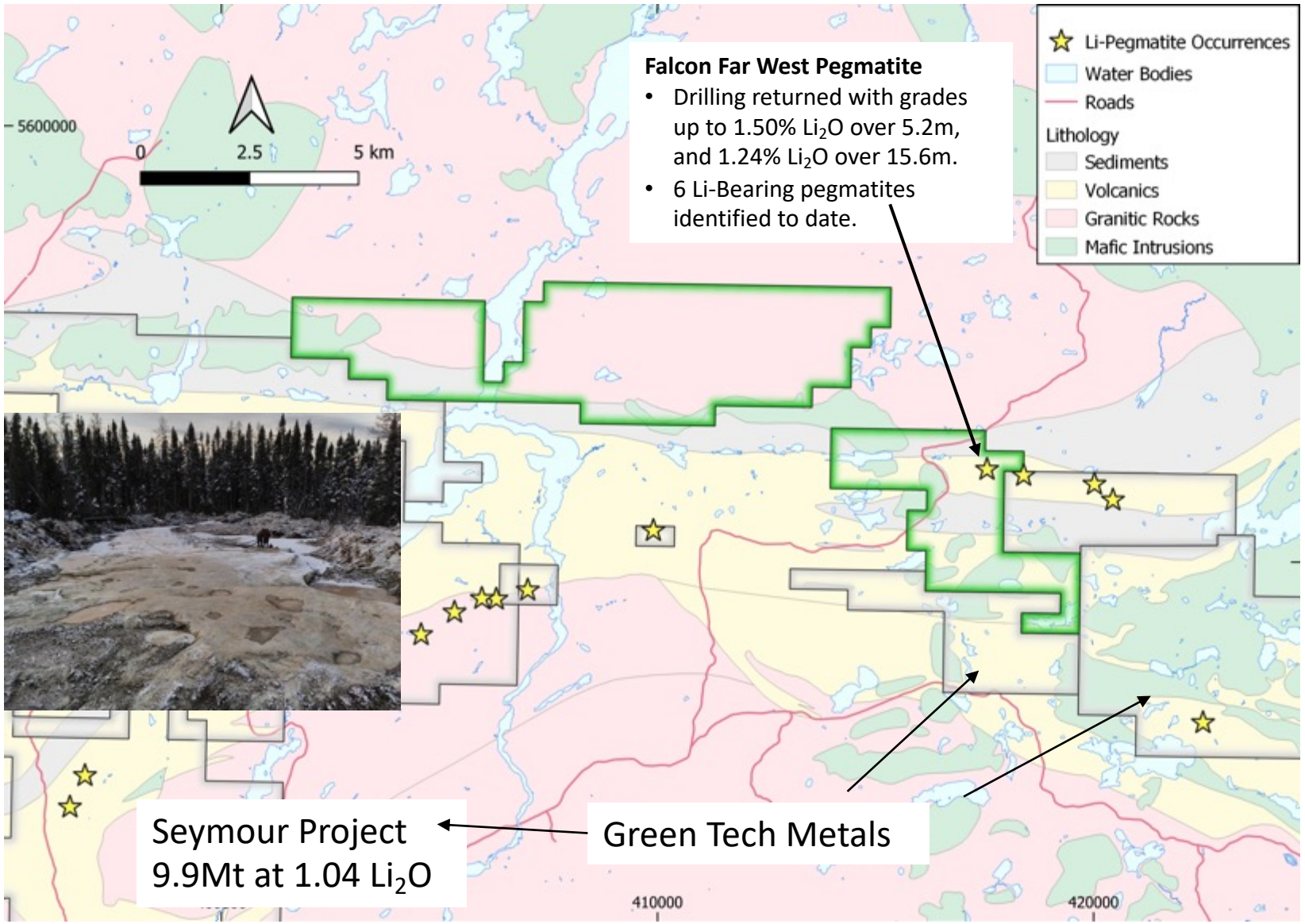
Road accessible, proximity to expanding North American electric vehicle supply chain.

Strategic Position in Emerging Lithium Districts in NW ONTARIO

Projects located in 2 emerging pegmatite fields – Seymour-Falcon host to Green Tech Metals (ASX:GT1) – Seymour and Allison-Root, host to Root deposits (**24.9Mt @1.13% Li_2O JORC Resource)**.

- New discovery of Spodumene Pegmatite swarm Fall 2023.
- Channel sampling returned up to **1.59% Li_2O** over **8.6m.**
- Inagural drilling returned up **to 1.24% Li_2O over 15.6m**
- Permits and FN Agreements in place.

FLAGSHIP PROJECT: FALCON WEST



- 45 km^2 land package within the emerging Seymour, Crescent / Falcon Pegmatite fields.
- Newly discovered Li pegmatites define a 300m x 500m mineralized fairway – remains open for expansion.
- Pegmatites are the albite-spodumene-subtype (typically associated with large deposits e.g. Foote Mine, Kings Mountain, NC) and have the highest reported tantalum values in Ontario returning values up to 306 ppm Ta_2O_5.
- First swarm of spodumene pegmatites, more targets to follow up

Readers are cautioned that VOLTA has no interest in or right to acquire any interest in the Green Tech Metals Seymour Project, and that mineral deposits, and the results of any mining thereof (including any revenues derived from such mining), on adjacent or similar properties are not indicative of mineral deposits on VOLTA's properties or any potential exploitation thereof.

FALCON WEST PROJECT– SOIL SAMPLING RESULTS

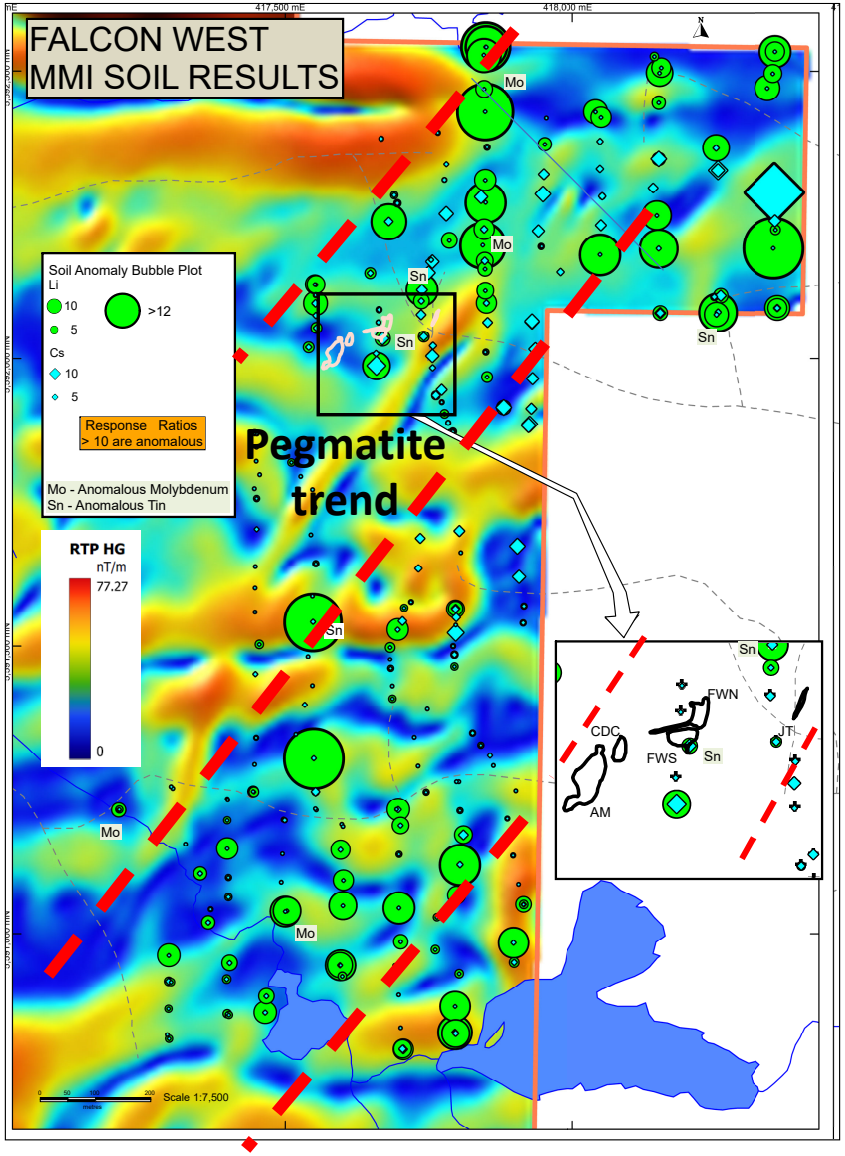


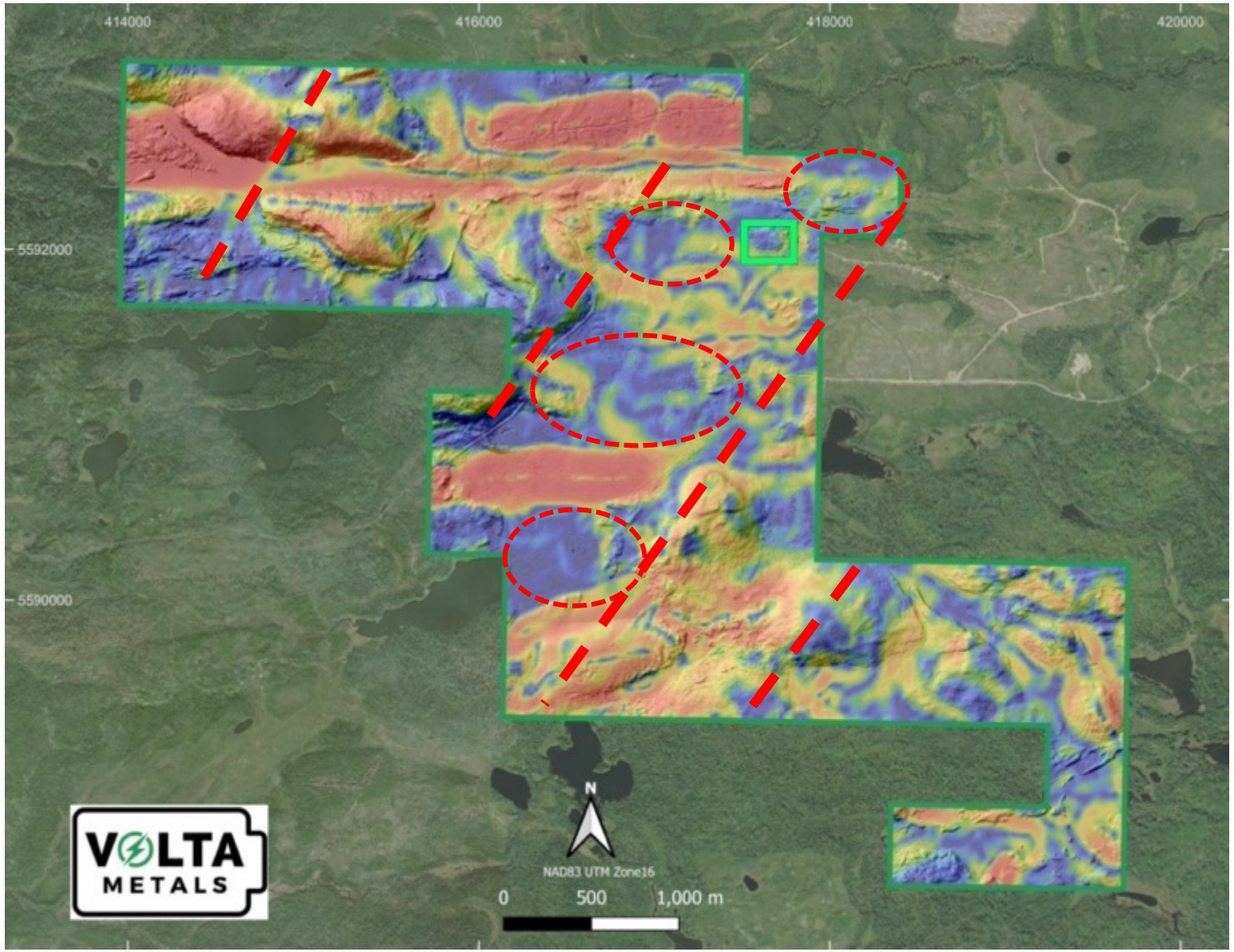
Table 1. Outcrop dimensions after mechanized stripping

Pegmatite Outcrop	Length (m)	Width (m)	Channel sample mean* Li_2O%
AM	40m	10m (Up to 20m)	1.28%
CDC	14m	8m (Up to 10m)	1.20%
Falcon West North	15m	5m (Tabular)	1.47%
Falcon West South	18m	10m (Up to 16m)	1.59%
JT	24m	5m (Tabular)	1.21%

*: See news releases dated October 3, 2023 and October 23, 2023

- Coincident pathfinder soil geochemical anomalies define multiple targets for follow-up.

FALCON WEST PROJECT– MAG SURVEY RESULTS



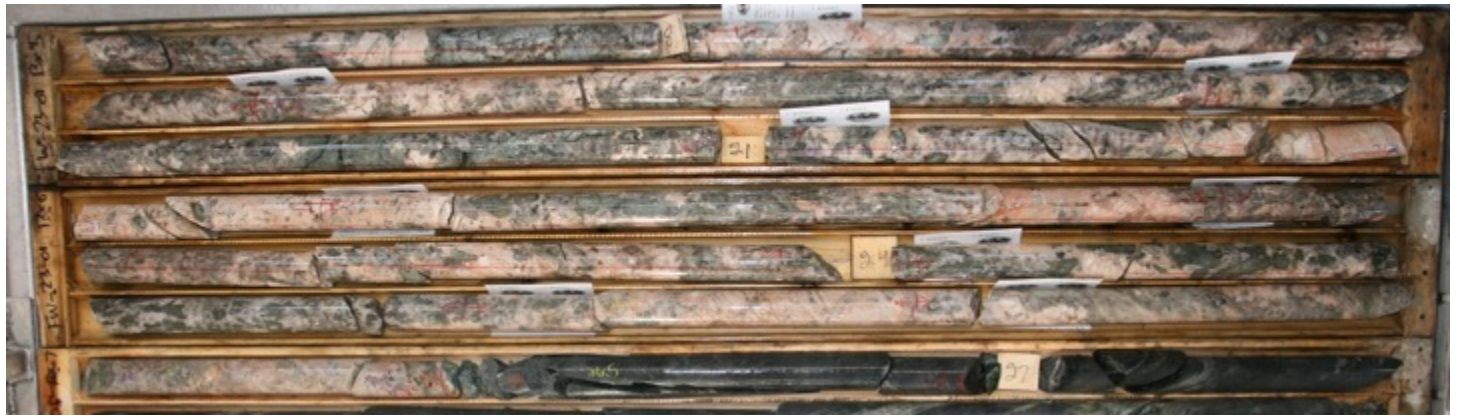
- Spodumene pegmatite swarm was discovered in a very small area of the total project area (marked green)
- Drone magnetics suggest newly discovered pegmatites related to a broad magnetic low.
- Multiple targets identified in relation to magnetic response, combined with soil anomalies

FALCON WEST PROJECT– INAUGURAL DRILLING RESULTS

Table 1. Assay highlights for drill holes completed at Falcon West Project

Hole ID	From (m)	To (m)	Length (m)	Li_2O %	Cs (ppm)	Ta (ppm)	Pegmatite
FW23-01	12.4	19	6.6	1.03	**297.2**	**77.2**	AM
FW23-02	24.9	29.8	4.9	0.04	**169.8**	**91.6**	AM
FW23-03	8.0	11.9	3.9	**1.41**	52.2	43.2	CDC
FW23-04	11.6	21.7	**10.1**	**1.11**	64.0	46.1	CDC
FW23-05	13.7	29.3	**15.6**	**1.24**	**155.5**	55.4	Far West South
FW23-06	30.65	32.45	1.8	0.74	85.6	32.8	Far West South
FW23-07	15.65	20.8	**5.15**	**1.50**	79.8	39.1	Far West North
FW23-08	28.4	37.2	8.8	1.2	72.3	33.1	Far West North
FW23-09	7.5	11.65	**4.15**	**1.20**	98.6	43.3	JT
FW23-10	14.6	21.4	**6.8**	**1.18**	64.1	30.3	JT
FW23-11	12.3	13	0.7	0.77	29.7	62.0	AM

- Inaugural drilling confirmed extension of high-grade channel sample results at depth
- Borehole FW23-07 intersected blind pegmatite at depth



CSE: VLTA

voltametals.ca

NEAR-TERM CATALYSTS

WHAT TO EXPECT

- Initial drill testing of all 5 spodumene-bearing pegmatites discovered to date to confirm channel sample results and expand mineralization to depth, intercepted additional “blind” pegmatite (no surface expression).
- Follow up trenching and stripping of newly generated targets from geophysics and geochemistry.
- Step out drilling, and drilling new targets generated from geochemical, soil and geophysical studies

MANAGEMENT & BOARD

Kerem Usenmez, M.Sc., P.Eng., Director, President and CEO

Kerem is a Geological Engineer with over 24 years of global experience with Inco (MB), and Amec Engineering. Most recently President and CEO of Metallum Resources, founded Atom Bits diamond drilling bit manufacturer. He is a member of the Board of Directors of the PDAC, where he Chairs the Securities and Public Affairs Committees. Kerem is a licensed Geological Engineer in Manitoba and Ontario.

Brad Boland, CPA, CMA, Chief Financial Officer

Mr. Boland is an experienced mining finance executive with over 25 years of experience, holding positions such as VP Finance for Goldcorp, VP Controller for Kinross, CFO for Consolidated Thompson Iron Mines. He has contributed to securing more than $1 billion of combined equity, debt, and project financing for mining ventures.

Dr. Fred Breaks, Ph.D., Technical Advisor

Dr. Breaks, a lithium expert, discovered the two largest Lithium-rich rare element deposits (Li-Ta-Rb-Cs) in Ontario: Separation Rapids Pegmatite of Avalon Advanced Materials, and Pakeagama Lake Pegmatite of Frontier Lithium. He spent 29 years at the Ontario Geological Survey where he ran Operation Treasure Hunt and headed a regional mapping project predominantly targeting LCT pegmatites. He has 118 publications at the Ontario Geological Survey and numerous external publications.

Dr. Mark Cruise, PGeo, ICD.D, Chair and Director

Mark is a professional geologist with over 25 years of international experience from exploration to production. He has co-founded and/or led several billion dollar TSX-V, TSX and NYSE American listed exploration and mining companies. Mark is an independent director for Velocity Minerals, NiCAN Ltd, Interra Copper and Bunker Hill Mining.

Saga Williams, B.A., LLB, Director

Ms. Williams is Anishinaabe, a member of Curve Lake First Nation. Ms. Williams has been on negotiation teams that have successfully settled over $1 billion in agreements and has worked on Indigenous community engagement and negotiations to support national energy and mining projects. Ms. Williams teaches at Osgoode Hall Law School as an Adjunct Professor.

Mike Hoffman, P.Eng., ICD.D, Director

Mike is a mining executive with over 35 years of experience including engineering, mine operations, corporate development, projects and construction. He is the former CEO of Crowflight Minerals, Kria Resources and Crocodile Gold. Mr. Hoffman is currently Chair and Director at 1911 Gold and NiCAN Ltd. as well as a director of Silver X Mining and Fury Gold.

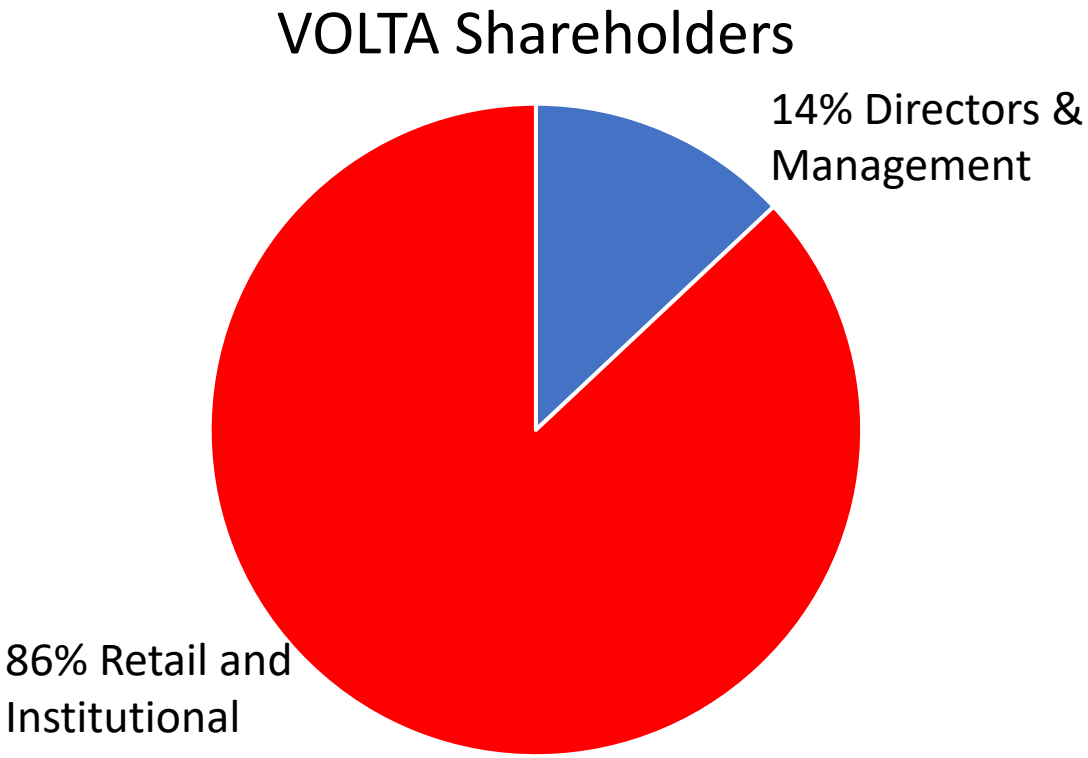
Murray Hinz, CA Director

Chartered Accountant, senior level Executive Financial Advisor and Director. Broad experience supporting executive teams from the initial structuring of start-ups and raising capital to building budgets, financial forecasts and supporting valuations and due diligence analysis for mergers and acquisitions.

Brad Humphrey, Director

Mr. Humphrey has over 25 years of international mining experience. He has worked for Morgan Stanley, Raymond James, CIBC World Markets and Merrill Lynch as the North American Precious Metals Analyst and Managing Director for Research. Mr. Humphrey has held a variety of mining industry roles from underground contract miner to CEO. Mr. Humphrey is currently President and CEO of NiCAN Ltd., sits on the board of Black Swan Graphene, and was the CEO of QMX Gold, which was acquired by Eldorado Gold.

OWNERSHIP



First day trading: May 31, 2023

VOLTA Shares outstanding: 41,913,112

Cash: $200K*

Market Cap (Feb 5, 2024): $3.4M

** Feb 5, 2024 balance, not considering additional $170k OJEP funding, or ~$175k HST refund Jan-Dec 2023*

PEER COMPARATIVES

	VOLTA METALS	FRONTIER LITHIUM	RockTech Lithium	GREEN TECHNOLOGY Metals	Battery Age Minerals	CriticalElements
Exchange	**CSE**	**TSXV**	**TSXV**	ASX	ASX	TSXV
Market Cap	**$3.4M**	**$140M**	**$155M**	**$37M**	**$13M**	**$153M**
52 week Share Price[4]	**$0.06 - $0.25**	$0.95 - $3.62	$1.60 – $3.73	$0.11 - $0.90	$0.14 - $0.73	$0.55 - $3.03
Lithium Grade[3]	**1.5%[1]**	2%	1.01%	1.09%	1.48%	1%
Tonnage	**N/A**	41.9 Mt	6.6 Mt	4.8	N/A	57.8 Mt
Contained[2] Li_2O		0.65 Mt	0.07 Mt	0.06 Mt	N/A	0.55 Mt
Claim Area	**13,800 Ha**	27,000 Ha	1,042 Ha	40,000 Ha	5,600 Ha	105,000 Ha
Location	**NW ON**	NW ON	NW ON	NW ON	NW ON	QC
				Neighboring claims	Neighboring claims	

[1]: 2024 Drill core high grade over 15.6m
[2]: Estimated
[3]:Peer grades were taken from their press releases with respect to drill results from their main assets
[4]: Feb 6, 2024

PEER COMPARATIVES

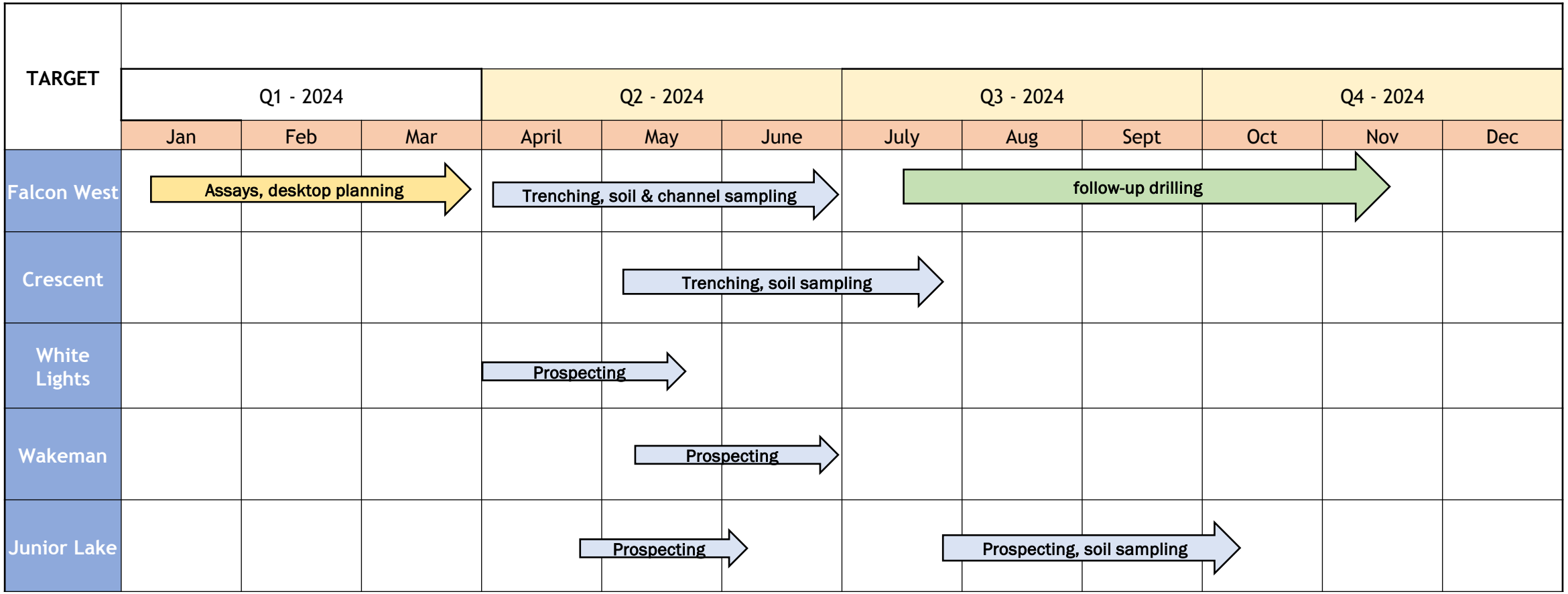
	VOLTA METALS	PATRIOT BATTERY METALS	SNOW LAKE LITHIUM	IMAGINE LITHIUM	AVALON ADVANCED MATERIALS INC.	PIEDMONT LITHIUM
Exchange	**CSE**	**TSXV**	**NASDAQ**	**TSXV**	**TSXV**	**NASDAQ / ASX**
Market Cap	**$3.4M**	**$788M**	**$20M**	**$10M**	**$51M**	**$400M**
52 week Share Price	**$0.06 - $0.25**	$5.77 - $17.74	$0.41 – $3.15	$0.03 - $0.15	$0.09 - $0.18	$13.7 – $76.78
Lithium Grade[3]	**1.5%[1]**	0.93%	1%	1.15%	1.35%	1.1%
Tonnage	**N/A**	N/A	11.1 Mt	N/A	8.2 Mt	163.2 Mt
Contained[2] Li_2O	**N/A**	N/A	0.11 Mt	N/A	0.11 Mt	1.73 Mt
Claim Area	**13,800 Ha**	20,000 Ha	22,386 Ha	18,800 Ha	3,910 Ha	?
Location	**NW ON**	James Bay, QC	Snow Lake, MB	Kenora, ON	Kenora, ON	QC and Ghana

[1]: 2024 Drill core high grade over 15.6m
[2]: Estimated
[3]:Peer grades were taken from their press releases with respect to drill results from their main assets

VOLTA PROJECTS

Aggressive exploration program to drive shareholder value

Exploration – 2023 / 2024 Exploration Timeline



VOLTA METALS

CSE: VLTA

For further information contact:

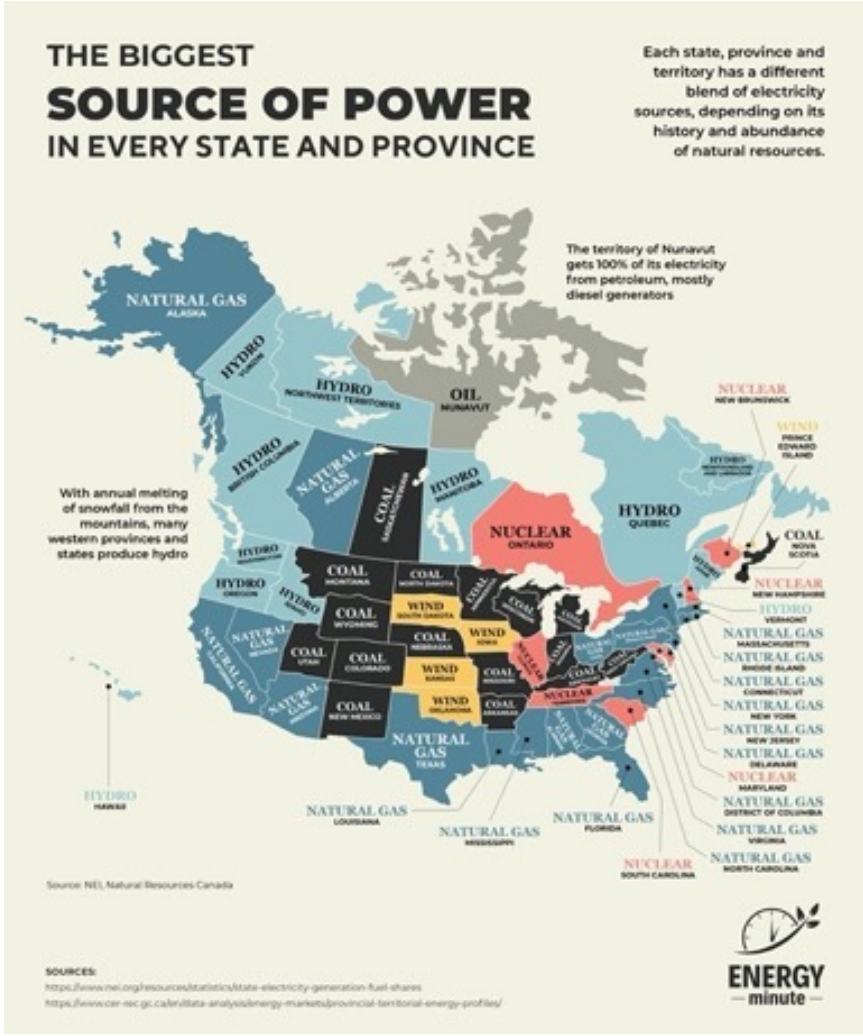
Kerem Usenmez, M.Sc., P.Eng.
President & CEO

kusenmez@voltametals.ca
(416) 919-9060

VOLTA Metals Ltd.
390 Bay Street, Suite 700a
Toronto, Ontario
Canada M5H 2Y2

ONTARIO – EV CAPITAL OF NORTH AMERICA

- Clean Energy – 94% Emission-Free Electricity
- Volkswagen announced **$6B** investment for Ontario battery cell plant, along with Ontario's **$13B** investment.
- Umicore announced a **$1.5B** investment to build an industrial scale cathode and precursor materials plant in Ontario.
- GM announced to launch Canada's first commercial EV hub.
- LG Energy Solutions Ltd. and Stellantis N.V. are constructing Ontario's first large scale EV battery plant in Windsor.



CSE: VLTA

voltametals.ca

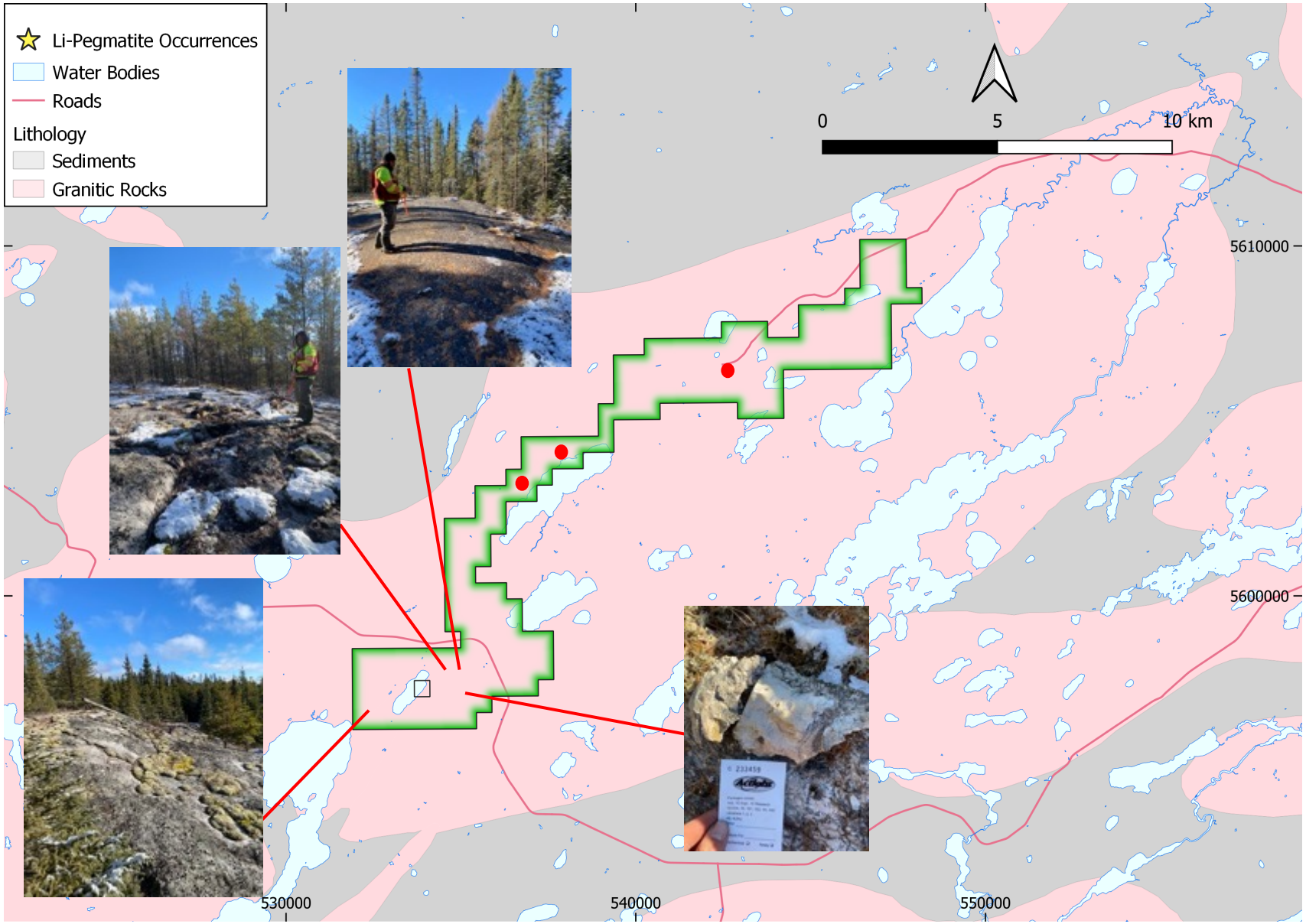
ONTARIO, CANADA – TIER 1 JURISDICTION

Canada's Critical Mineral Strategy

- $1.5B in funding to support critical mineral projects
- 30% Critical Mineral Exploration Credit
- $40M to support northern regulatory processes in reviewing and permitting critical mineral projects
- $6M government investment 2023-2025 in the Ontario Junior Exploration Program (OJEP) to companies exploring for critical minerals in Ontario

WHITE LIGHTS PROJECT

APPENDICES

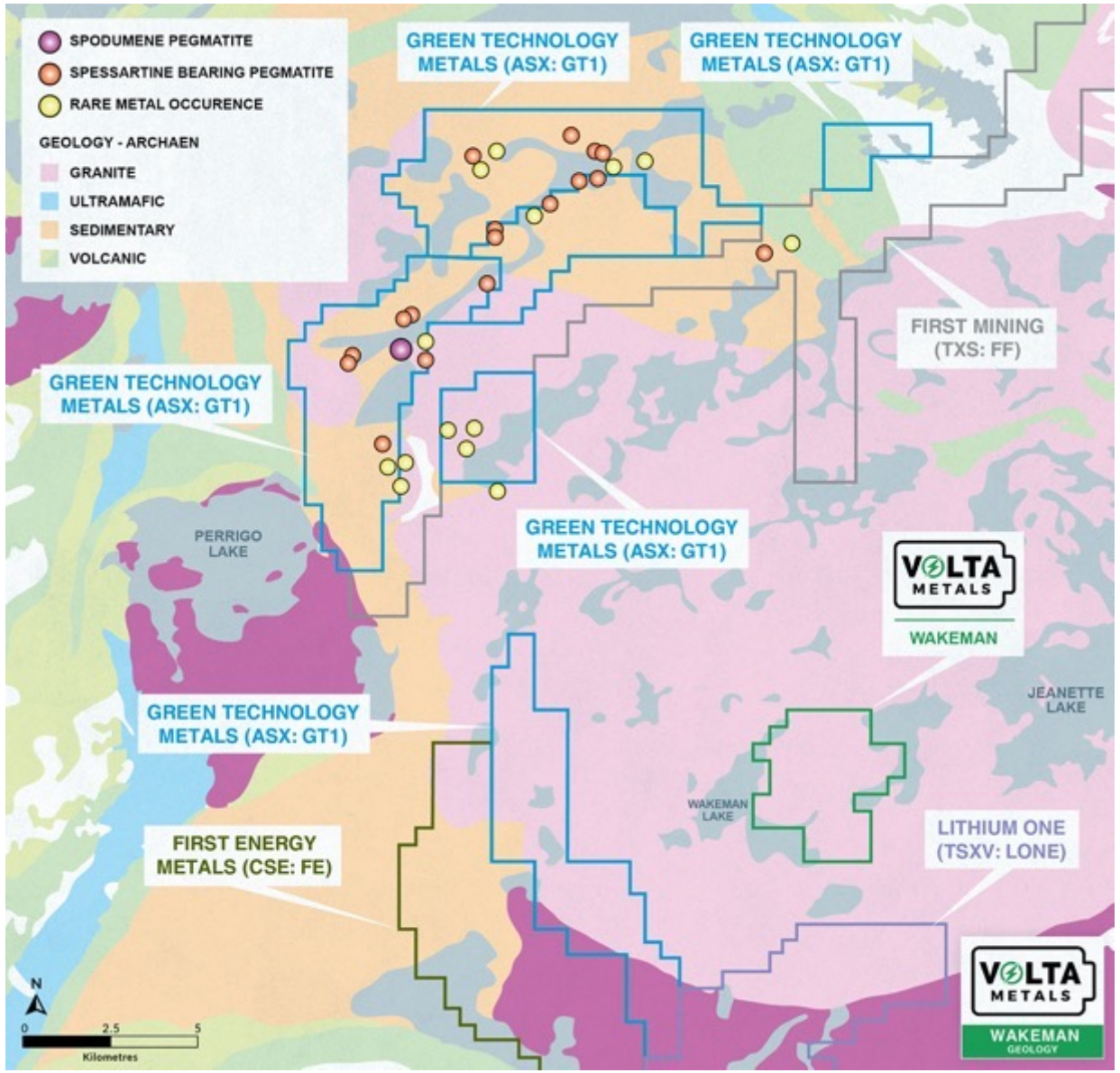


Large 4,000 Ha property containing exposed, untested, LCT-Pegmatites in Fertile S-Type Granites.

Excellent infrastructure – road access through claims.

Pegmatites remain open at strike and depth.

WAKEMAN LAKE PROJECT



1,438 Ha property in the fertile Allison Lake Batholith.

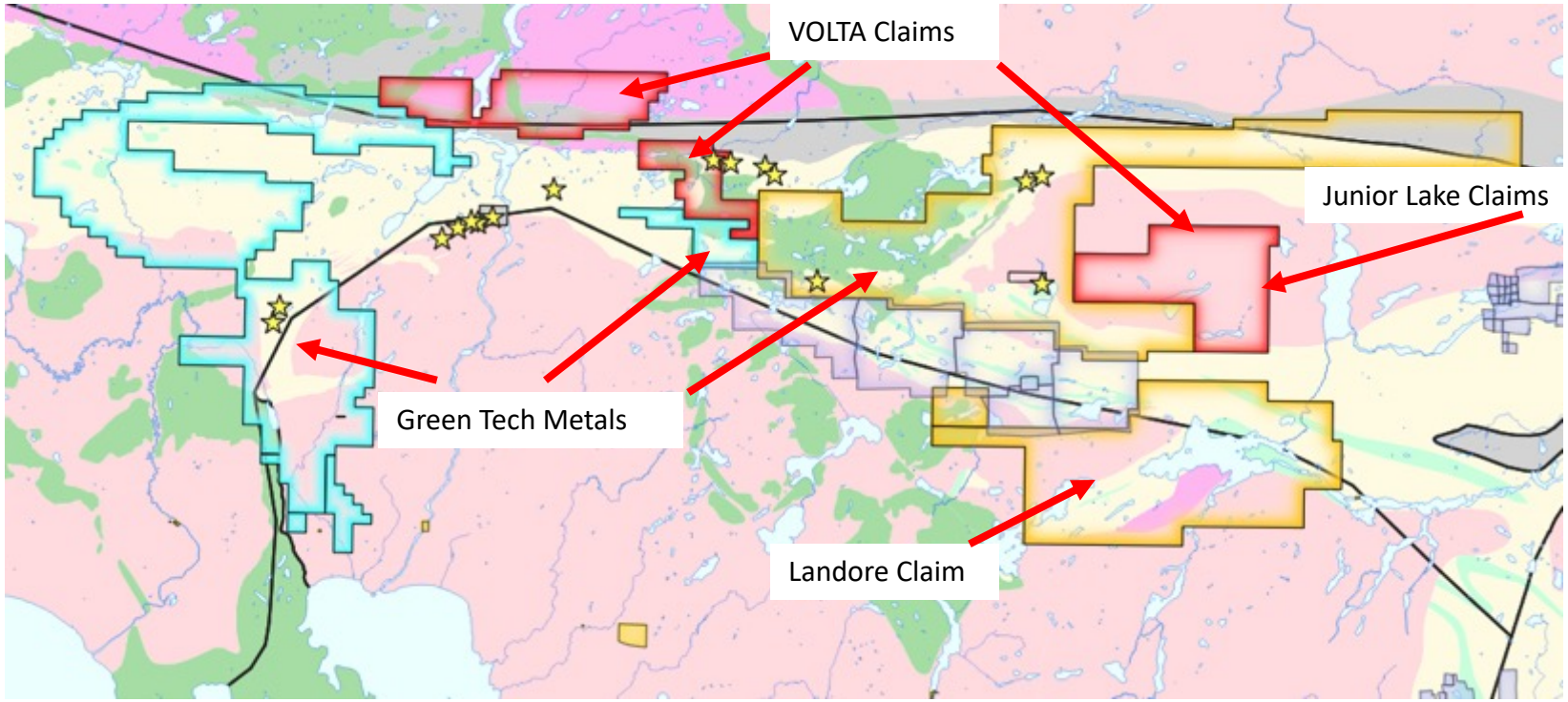
Anomalous Li, Rb, and Cs, with indicator minerals of advanced pegmatite revolution suggesting permissive for Li pegmatite generation.

Rare element (Li, Cs, Rb, Ti, Be, Ta, Nb, Ga and Ge) pegmatite mineralization associated with S-Type, peraluminous granite pluton .

Network of logging roads for easy access.

JUNIOR LAKE PROJECT

- 100% owned 3,820 Ha property in The Summit Lake Batholith.
- 1km east of Swole Lake Lithium occurrence – limited minor exploration.
- Molybdenum showing within the property with anomalous REE including Lithium – open for exploration.



LITHIUM FACTS

- Lithium is the lightest and least dense solid element in the periodic table.
- In its metallic form, lithium is a soft silvery-grey metal with good heat and electric conductivity enabling it to store and transmit energy.
- Lithium has high electrode potential. Due to its low atomic mass, it has a high charge and power-to-weight ratio, making it well suited for rechargeable batteries.
- The soft drink 7-Up started life as Bib-Label Lithiated Lemon - Lime Soda when it was launched in 1929. The drink's creator Charles Leiper Grigg claimed the soda, which contained lithium citrate, had the power to improve the mood of the imbiber. The United States Food and Drug Administration banned the use of lithium citrate in beverages in 1948

An early advertisement for the soft drink 7-Up

LITHIUM FACTS

- Lithium grease was invented around 1940 and was found to be superior to existing sodium and calcium-based greases. It found widespread industrial use in aircraft engines during the 1940s and is still widely used today.
- Industrial applications include the use of lithium as an additive in aluminum smelting and in the manufacture of high-strength glass-ceramic products including the induction cook tops in many kitchens, tough glass, fiberglass, ceramic frits, and even ceramic dentures. Other uses include air conditioning and polymer catalysts.
- Lithium first entered the modern era when, during the 1970s oil crisis, the English chemist Stanley Whittingham developed a rechargeable battery using lithium and titanium.
- Key breakthrough in lithium battery technology came in 1985 when Akira Yoshino, a Japanese chemist, developed carbon-based anodes and a non-aqueous electrolyte, leading to a stable, reliable and high-powered lithium-ion battery (LIB), which Sony then commercialized.
- A LIB is a rechargeable battery in which lithium ions move from the negative electrode (anode) to the positive electrode (cathode) during discharge, and back when charging. LIBs have good energy-to-weight ratios, high open circuit voltage, low self-discharge rate, no memory effect and a slow loss of charge when not in use. In addition to consumer electronics, LIBs are used in military and electric vehicles and aerospace applications due to their high energy density.
- As the world moves toward net zero around 85% of lithium extracted today is used in LIBs, including to power electric vehicles and for renewable energy grid storage solutions.

Lithium greases are widely used today

LITHIUM DEPOSITS

There are two primary sources for Lithium - brine and hard rock:

- Brine deposits are accumulations of saline groundwater that are enriched in dissolved lithium. Although abundant in nature, only select regions in the world contain economic brines, mainly in arid regions where lithium salts can be extracted and processed into lithium carbonate.

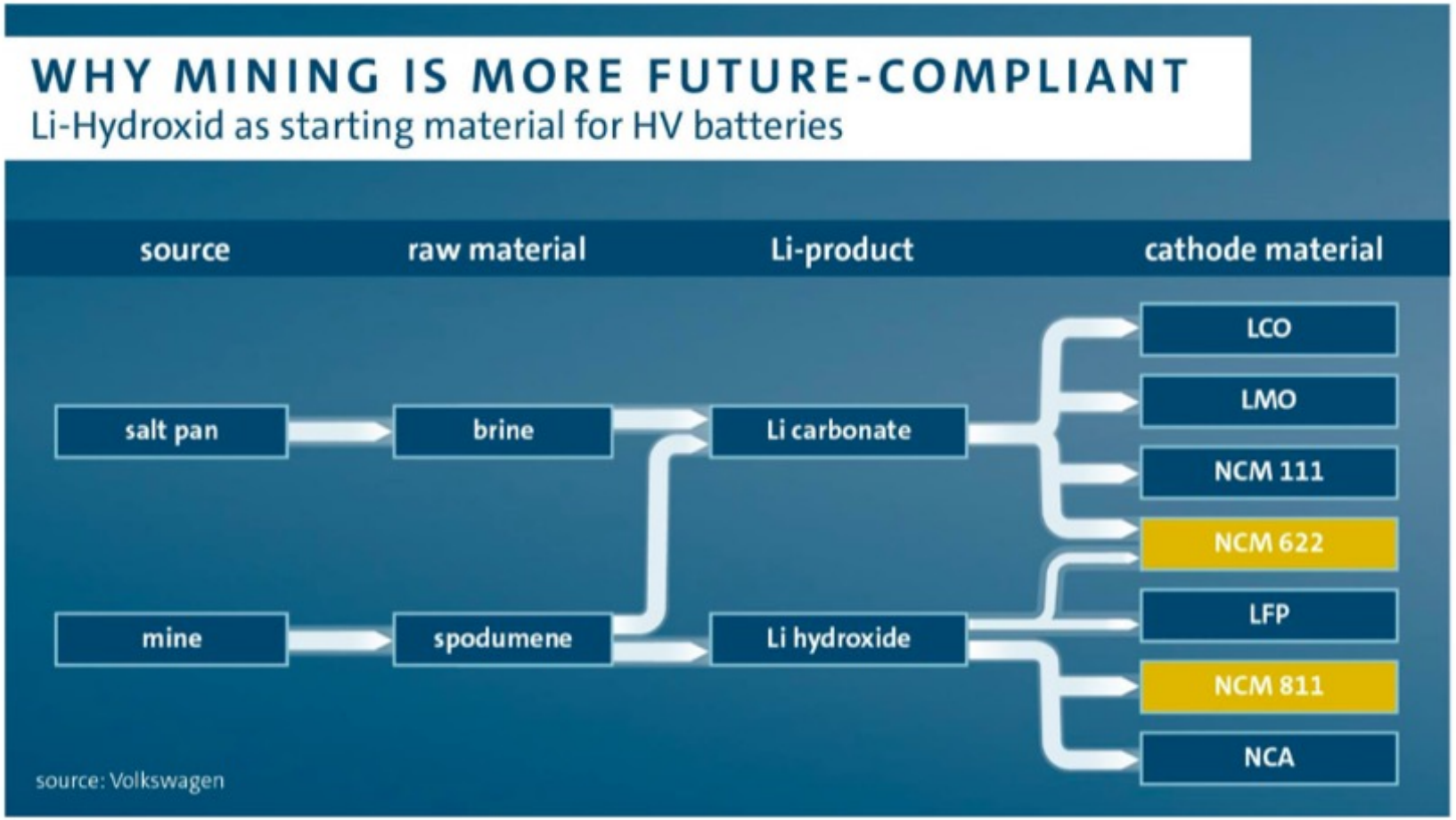
- Lithium 'hard rock' deposits are hosted in pegmatites as the mineral spodumene. Spodumene can be processed into lithium carbonate or lithium hydroxide, the latter of which is becoming more desirable by battery producers.

<u>Advantages of Hard Rock vs Brine:</u>

- Environmental impact: Hard-rock lithium has less environmental impact , using significantly less water and energy in production.
- More flexibility: The lithium hosted in spodumene can be processed into either lithium hydroxide or lithium carbonate. Brines initially can only be processed into carbonate, and then can be further processed into hydroxide however at an additional cost.
- Faster processing: Brines can take a lot longer to process due to the evaporation required making for an inconsistent process compared to spodumene.
- Higher quality: Spodumene contains a higher lithium content in comparison to brines.

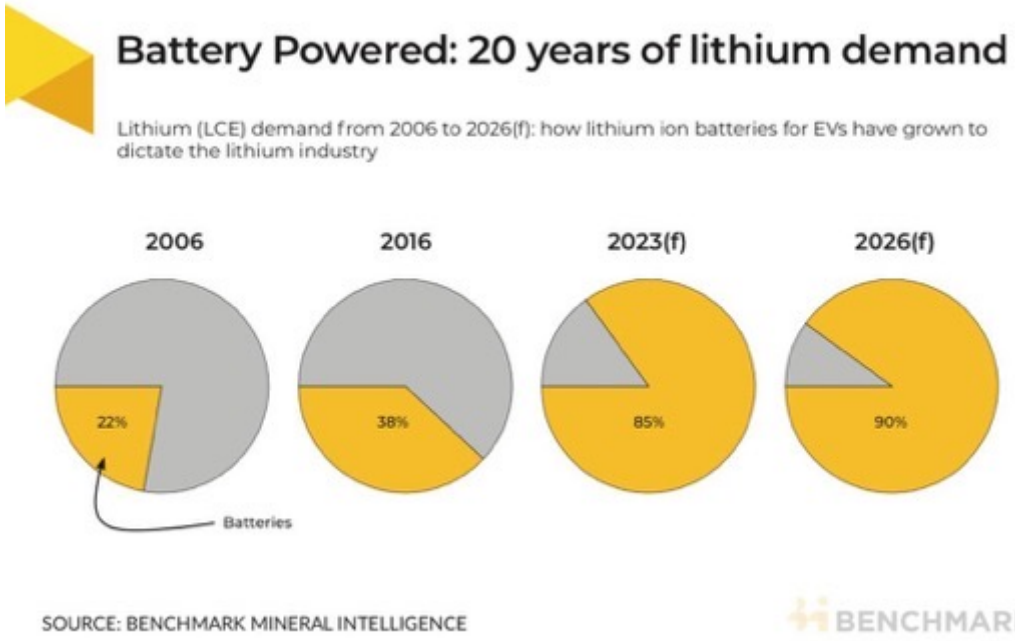
LITHIUM PRODUCTION TYPES

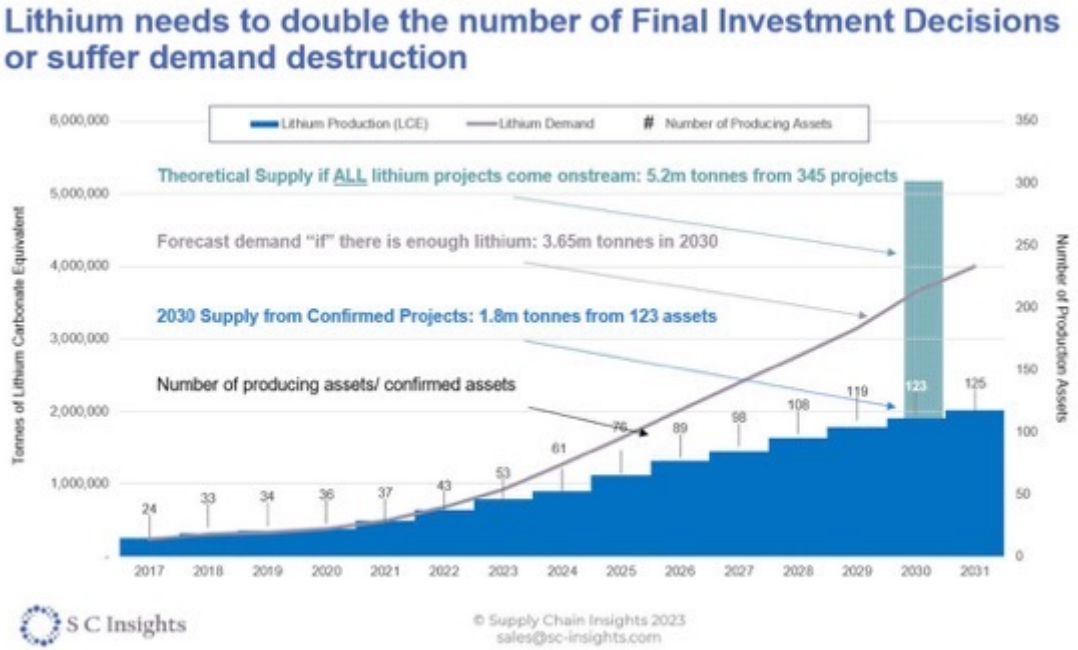
- Lithium hosted in spodumene (Pegmatite) can be sustainably processed into either Lithium Hydroxide or Lithium Carbonate.
- Lithium Hydroxide is better for the production of EV batteries with NCM 811 cathodes compared to Lithium Carbonate produced from brines.
- Spodumene also contains a higher lithium content in comparison to brines and is produced in a more sustainable manner.



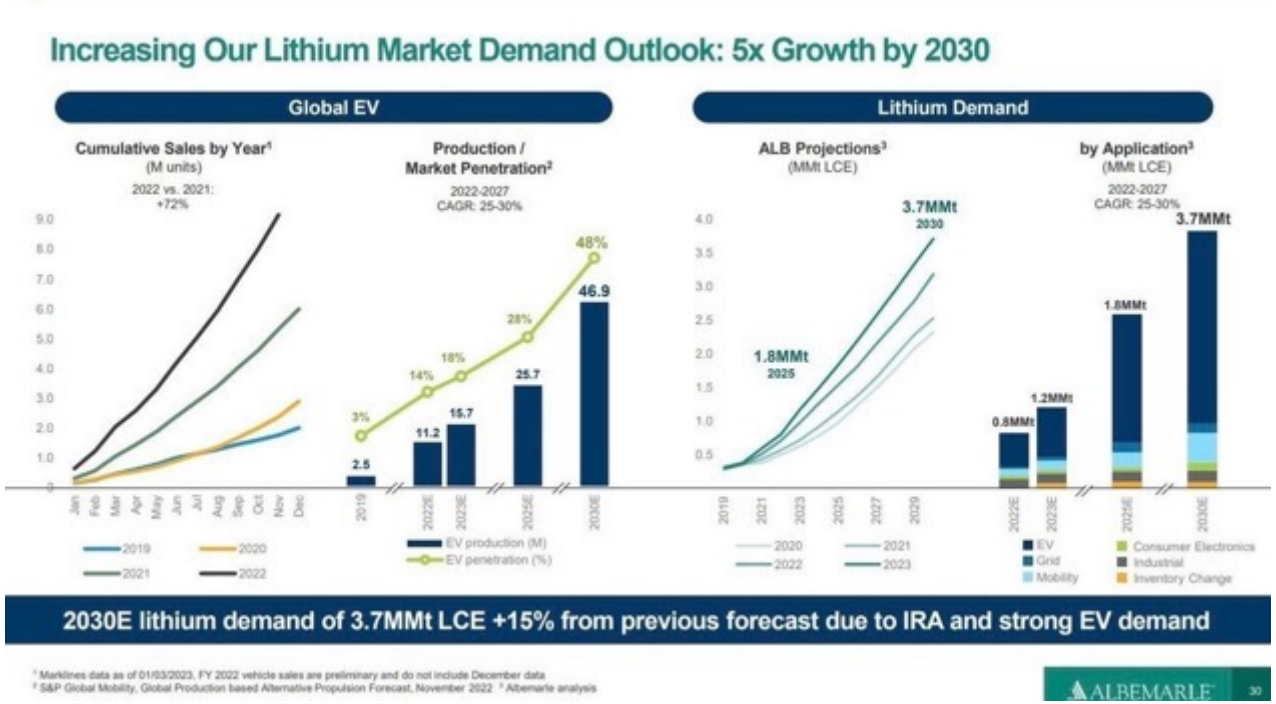
STRONG LITHIUM DEMAND

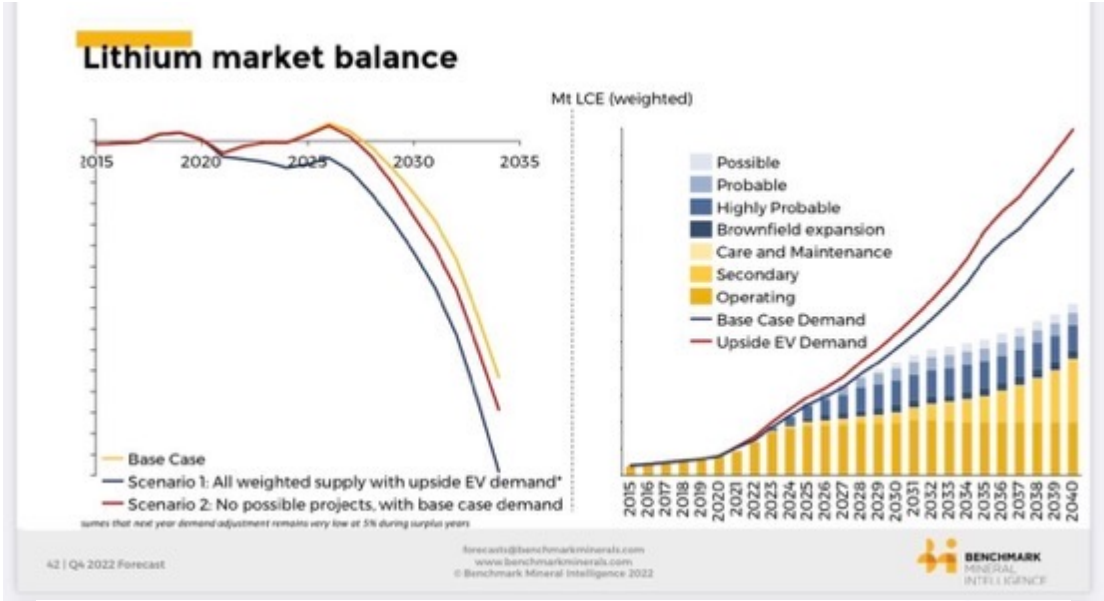
- Inflation Reduction Act has turbo charged battery supply chain initiatives and EV plans in North America.
- Climate change represents one of the greatest challenges and investment opportunities of our time. IEA World Energy outlook highlights Lithium, Copper and Nickel as key energy metals facing high demand growth under Net Zero ambitions.





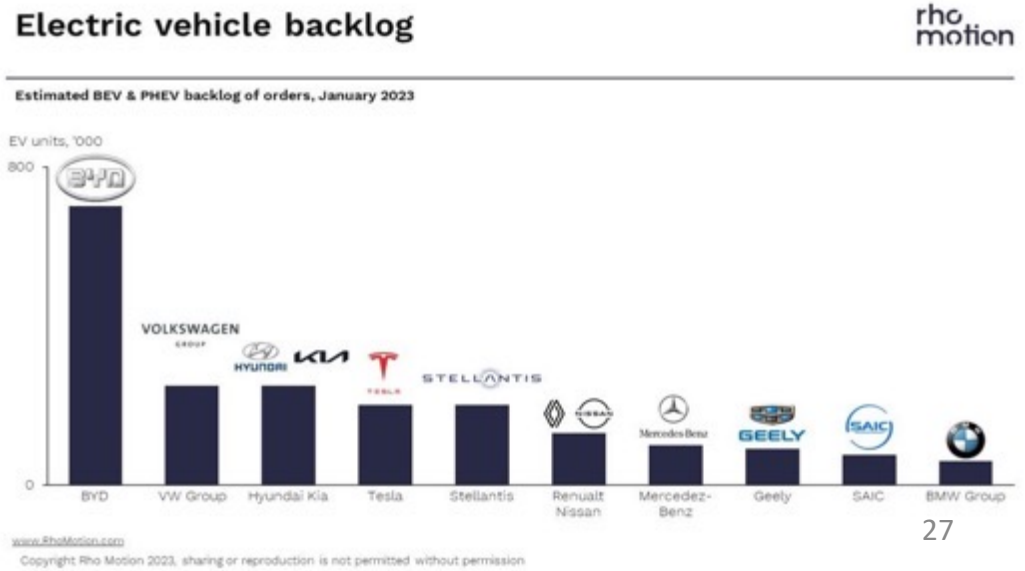
STRONG LITHIUM DEMAND





Benchmark has a base lithium supply forecast of 2.1 tonnes, 12% lower than their base demand.

- Unconstrained Demand (Dream) 3-4m tonnes lithium by 2030.
- Base Demand (Reality) 2-3m tonnes lithium by 2030.
- Supply or where supply and demand intersect – 1.8-2.8m tonnes lithium by 2030.



CSE: VLTA

voltametals.ca

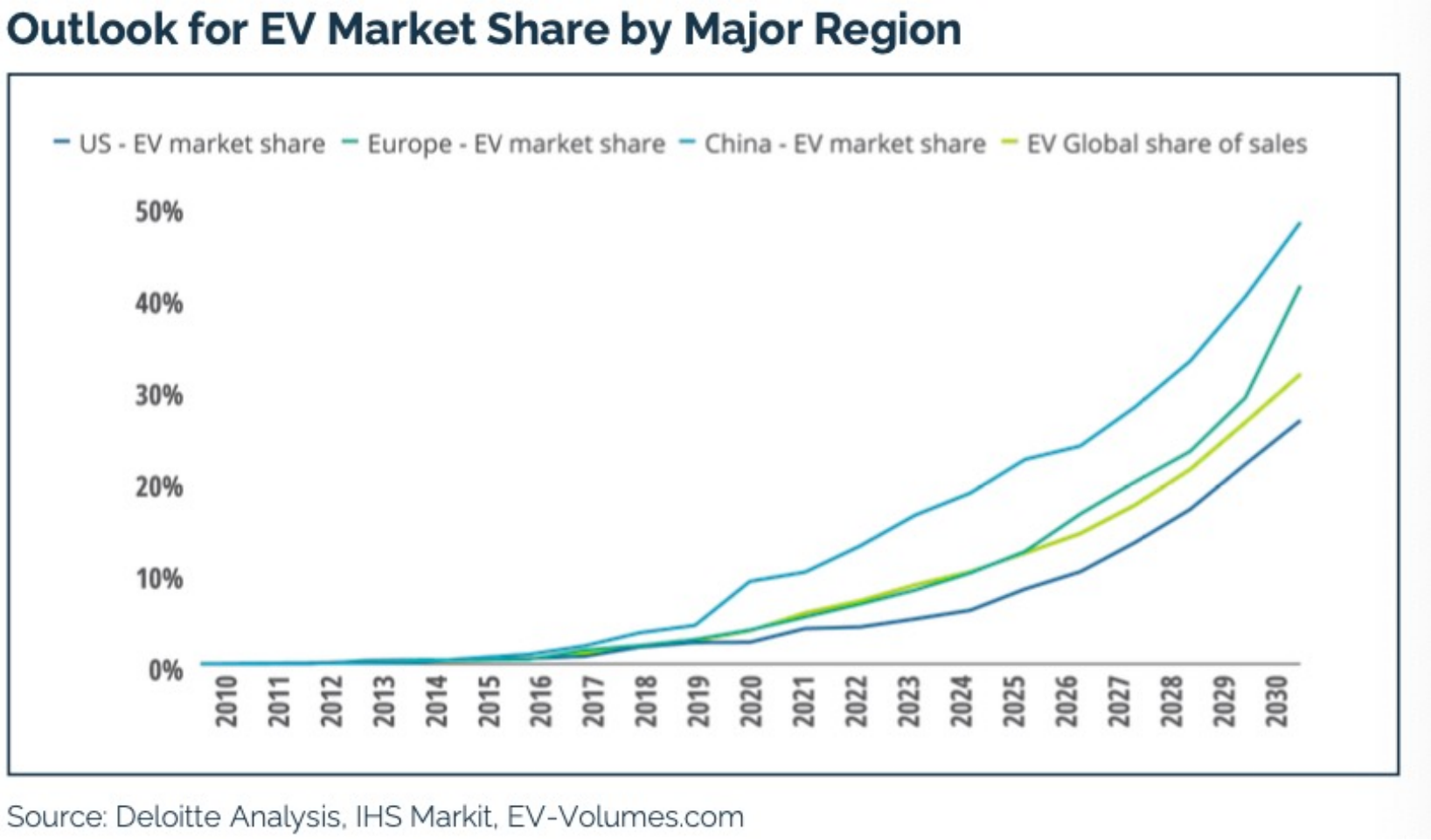
ELECTRIC VEHICLE PRODUCTION – MAIN DRIVER FOR LITHIUM DEMAND

Recent report from Benchmark Minerals Intelligence:
"Lithium has to scale 20X by 2050 as Automakers face generational Challenge"

- Estimated Global EV Sales:
  - 2.5 million in 2020
  - 11.2 million in 2025
  - 31.1 million by 2030

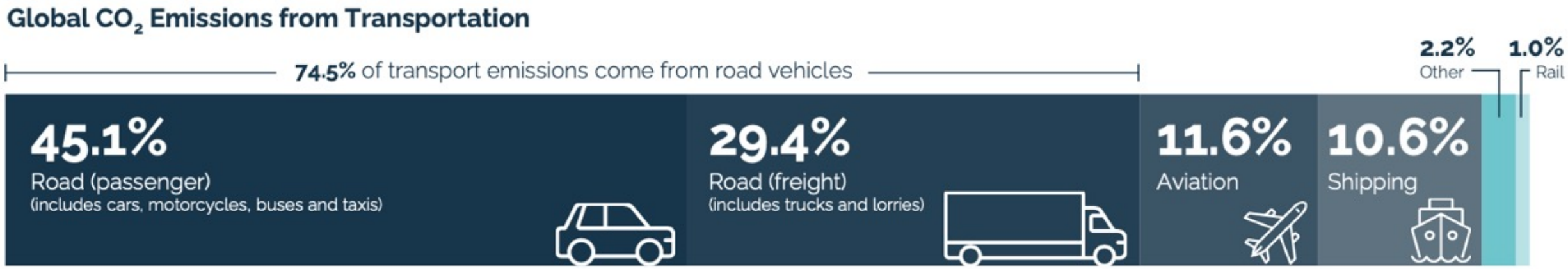
- EVs estimated to represent 32% of new car sales by 2030.

- Demand for EVs driven by decarbonization in attempt to meet Global Climate goals.



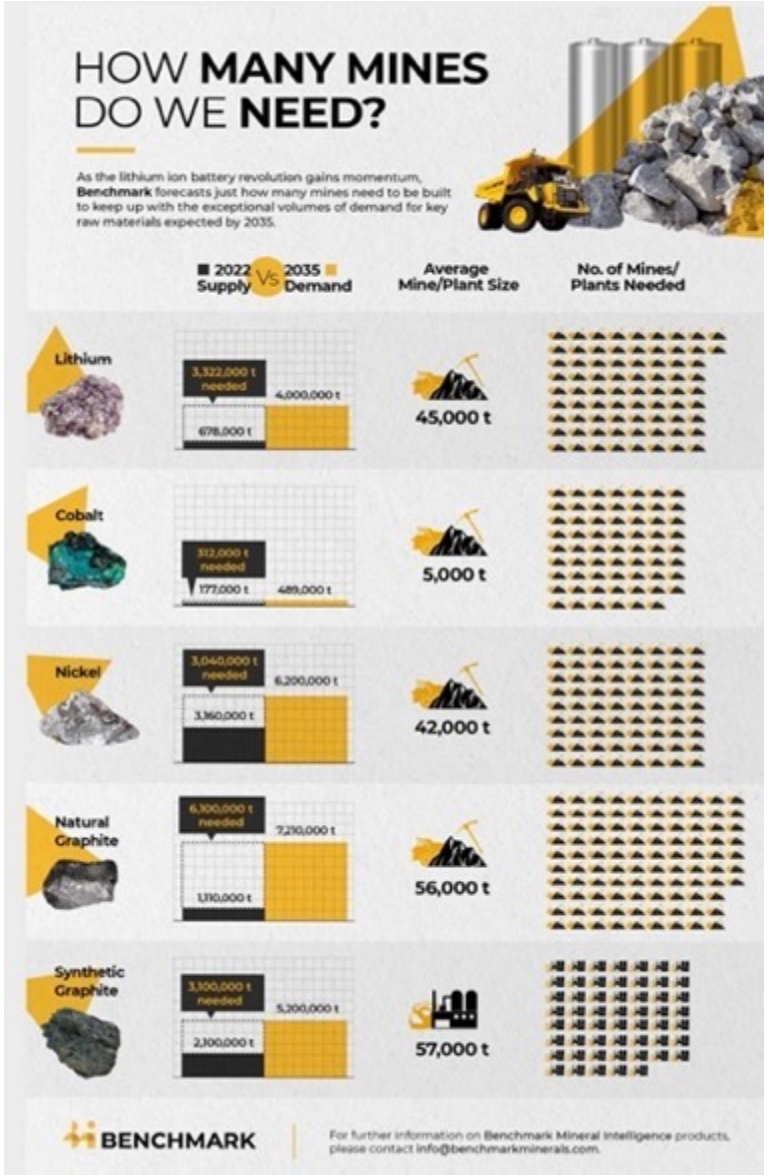
Source: Deloitte Analysis, IHS Markit, EV-Volumes.com

TRANSPORTATION - A MAJOR CONTRIBUTOR TO CLIMATE CHANGE



- Transportation accounts for around 20% of global CO_2 emissions.
- Unlike sectors such as marine transportation and aviation, light passenger vehicles have a clear technological path to net-zero emissions by 2050: electrification.
- Many countries have announced 100% zero-emission vehicle targets, or the phase-out of internal combustion engine vehicles by 2050 or earlier.
- It is expected that the other transportation sectors (freight, aviation, etc.) will follow vehicle electrification.

LITHIUM MARKET CONDITIONS



1.5B cars in the World

290M cars in the US
35M cars in Canada.

8kg Li in each EV

5% of these cars to be EV each year, means ~1.5M tons of Lithium.

In 2022 100k tons of Li was produced (as of Nov).