manganese
X Energy Corp

MINING
THE FUTURE

OUR MISSION:

To become the first publicly traded mining company in Canada and the US to commercialize high-purity EV-compliant manganese.

TXSV: MN **OTCQB: MNXXF**

FSE: 9SC **TRADEGATE: 9SC**

DISCLAIMER

Certain statements in this presentation are forward-looking statements which may include, but are not limited to, statements with respect to the future financial or operating performance of Manganese X Energy Corp. and its projects, the market conditions, business strategy, corporate plans, objectives and goals, the estimates of the timing, cost, nature and results of corporate plans, the strategy for the development of Manganese X Energy's property and regulatory matters. Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, performance or achievements of Manganese X Energy Corp. to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements address future events and conditions and therefore involve inherent risks and uncertainties. Although Manganese X Energy Corp. believes that such expectations are reasonable, there can be no assurance that such expectations will prove to be correct, and therefore actual results may differ materially from those currently anticipated in such statements. You are cautioned not to place undue reliance on any such forward-looking statements, whether made in this presentation or in any question-and-answer period related to this presentation.

MANGANESE X ENERGY VALUE PROPOSITION

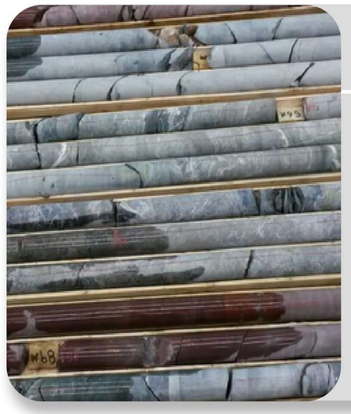
manganese X Energy Corp

Strategically Located

The Battery Hill manganese deposit is strategically located in New Brunswick, Canada, with proximity to North America and Europe's top consumer of manganese.

Simple Metallurgical Process

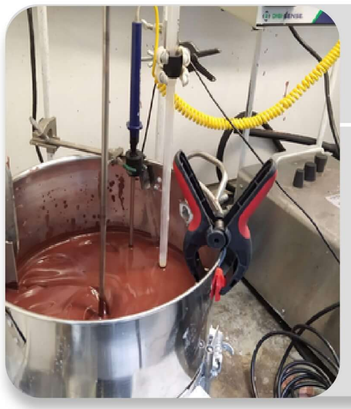
Battery Hill Carbonate ore is easily leachable, allowing for direct production of high-purity battery-grade manganese sulphate.



Potential for Large Resource and Multiple Products

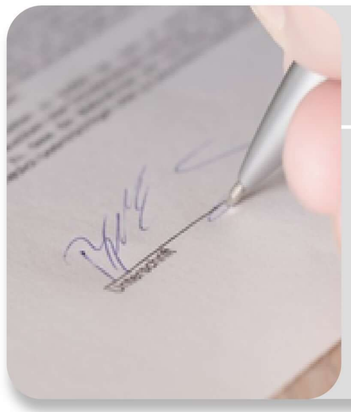
The Battery Hill project's mineral resource estimate consists of 34.86 million tonnes of measured and indicated resources, grading at 6.42% manganese, plus an additional 25.91 million tonnes of inferred resources, grading at 6.66% manganese. It utilizes a 2.5% manganese cut-off grade that reflects total operating costs having reasonable prospects for economical extraction.

Sensitivity analysis of the Battery Hill deposit to cut-off grade indicates 12.25 million tonnes of measured and indicated mineral resources at 8.77% manganese and 10.61 million tonnes of inferred mineral resources at 9.05% manganese, utilizing a 7% cut-off.



Great Upside at Lower Risk

Kemetco's metallurgical research projects have yielded economic results and state-of-the-art technology that has resulted in the advancement of our upcoming PEA.



In Collaboration with Downstream Players

The company has signed a collaboration agreement with a cathode materials producer.

WHY MANGANESE X IS A GOOD INVESTMENT?

manganese X Energy Corp

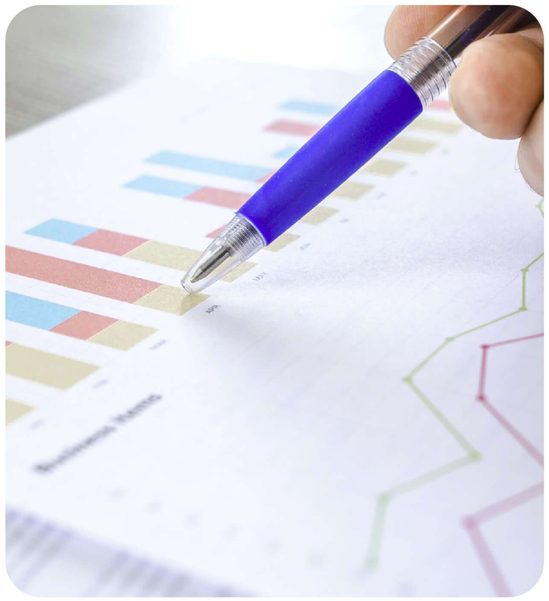
- ✔ **Our MnSO4 is 99.95% pure, contains few impurities and is free of selenium, which is highly toxic to batteries.**
- ✔ **90% of the global capacity for production of high-purity manganese sulphate for EV batteries is located in China.**
- ✔ **There is currently no production of manganese in North America.**
- ✔ The **price of manganese metal has increased** well over **100% in 2021.**
- ✔ Our Manganese is a carbonate ore which is **much more environmentally friendly** than a manganese oxide ore.

- ✔ **Strategically located 12 km from the U.S. (Maine) border.**
- ✔ **Our Phase 3 processing and metallurgical work in support of the PEA has been completed.**
- ✔ TESLA, VW, Ford, GM plan to build new electric vehicles or gigafactories in Canada.
- ✔ We also have a **Cobalt, Copper, Nickel Property** in North America.
- ✔ We have HVAC tech, for which we will seek regulatory approval.

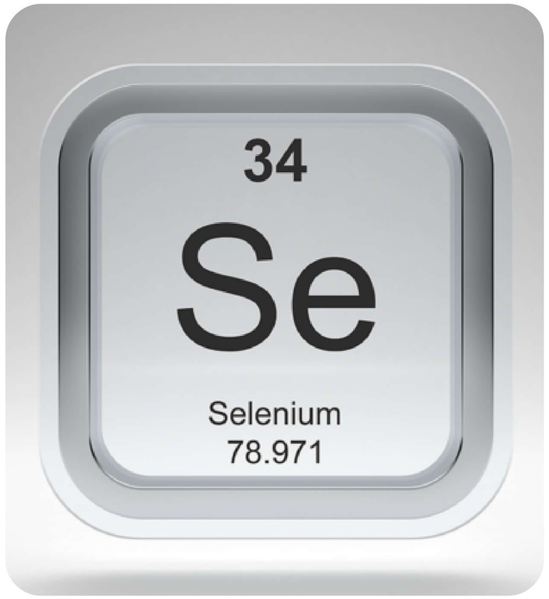
WHAT MAKES US SO SPECIAL?

manganese X Energy Corp

- The cathode is the energy source of the lithium-ion battery. It has the greatest impact on battery performance, safety and price.
  Our high-purity manganese sulphate monohydrate (HPMSM) is a key constituent to the cathode and does not contain selenium. 98% of all high-purity manganese sulphate monohydrate contains selenium.



- **Only 2% of the EV production does not contain selenium.** Selenium is very toxic to the environment and the cathode.



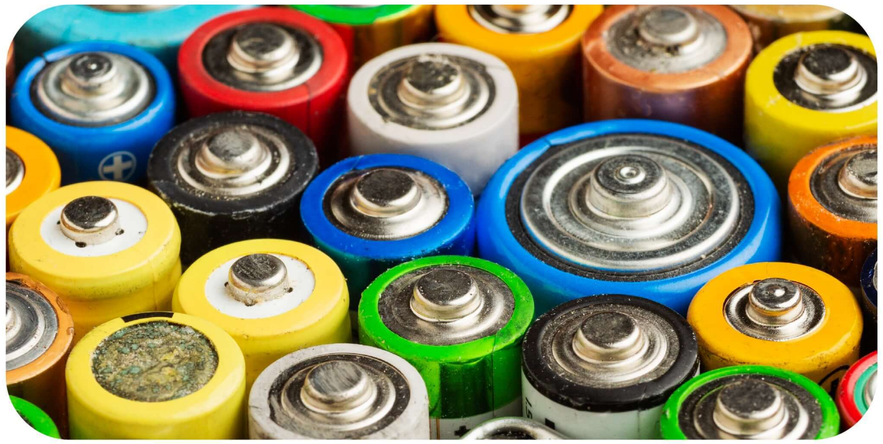
- The global production of the **high-purity manganese sulphate monohydrate (HPMSM)** is currently around **170,000 tons.**

- Predictions are that there will be large future deficits and huge demand for **HPMSMs in the EV sector.**

MANGANESE IS AN ESSENTIAL MATERIAL FOR BATTERIES

manganese
X Energy Corp

- **Electric vehicles (EV)**
  NMC- (Li-Ni-Mn-Co),
  LM FP- (Li-Mn-Fe-P) and
  LMO-type (Li-Mn oxide)
  batteries
- **Household disposable batteries**
  Alkaline Zn-Mn dioxide
- **Grid energy storage**
  NMC (Li-Ni-Mn-Co) and
  LMFP (Li-Mn-Fe-P)
- **Low-voltage battery**
  Zn-Mn dioxide



BATTERY & EV TRENDS

manganese
X Energy Corp

- **Tesla** projected to put into operation 5 new Gigafactories around the world in the next 5 years. The new Tesla 4680 battery contains 33% manganese in the cathode.
- **Volkswagen** intends to build 6 new Gigafactories by 2030.
- **GM** is investing $10 billion in developing 25 EV models.
- **Ford** is forecast to invest $22 billion through 2025 into their Hybrid EV vehicle projects.
- The new **BASF** EV battery uses 70% manganese in the cathode.
- Major EV companies such as Tesla, Volkswagen and Stallantis, the merger of Fiat and Chrysler, are now utilising manganese-nickel chemistries in their batteries.
- By 2030, experts predict 240 worldwide mega-factories utilizing manganese as their prime mineral.

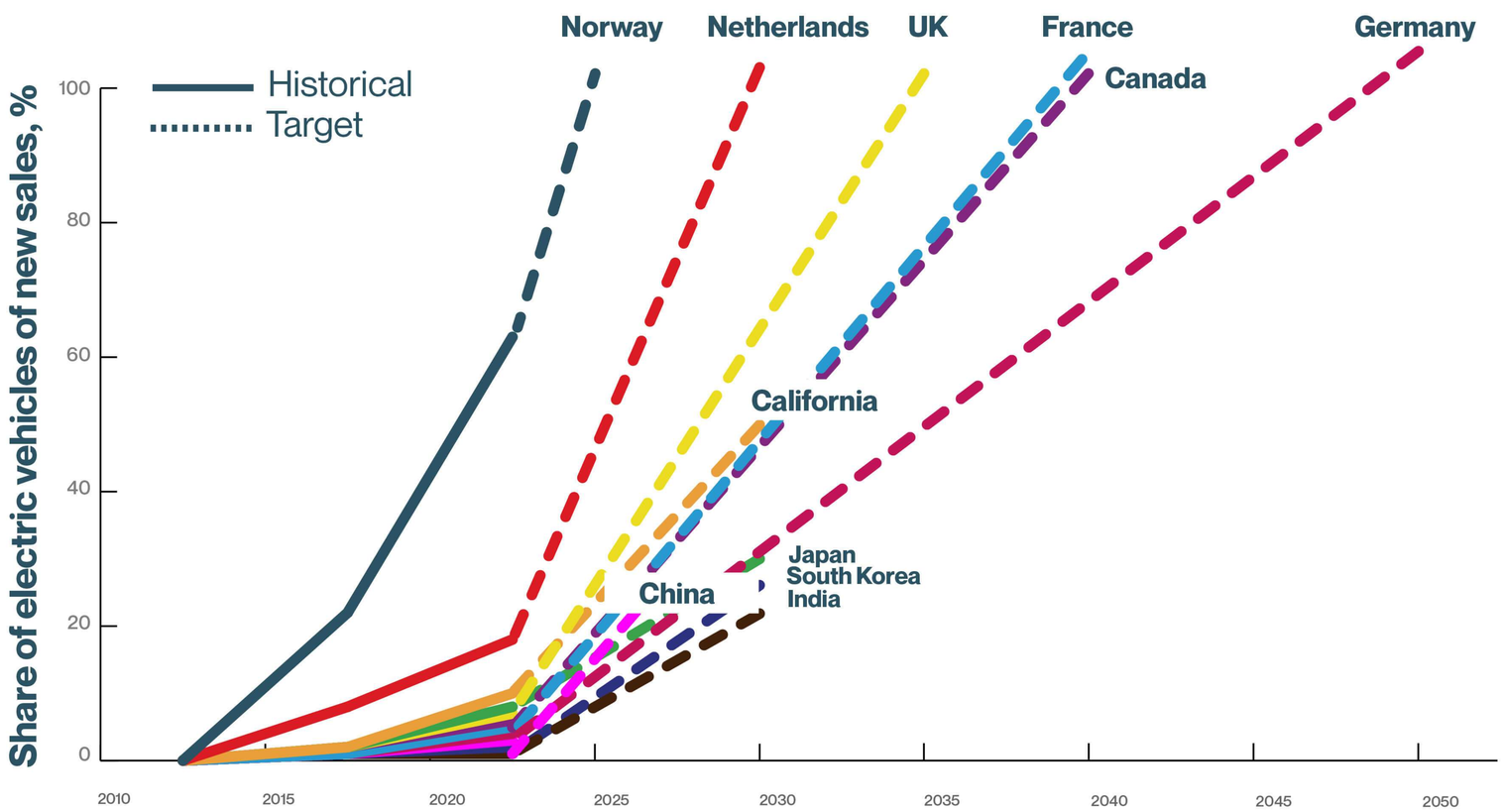
EV MARKET TRENDS

manganese X Energy Corp

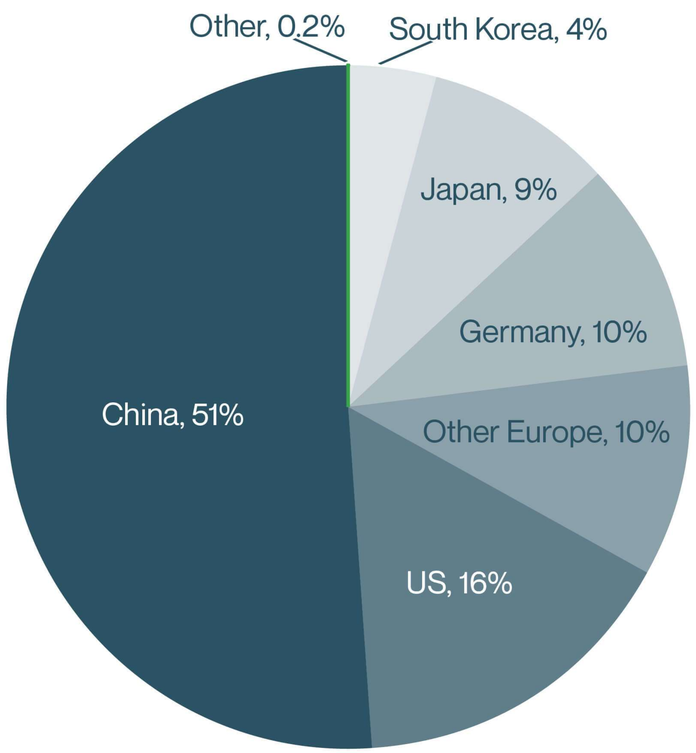
Less than 2.5% of the total 91.6 million passenger vehicles sold in 2019 were electric.

Major European countries, as well as India and China, among other nations, are planning to phase out internal combustion engines within the next 20 years.

Historical and target electric shares of new passenger vehicle sales by market



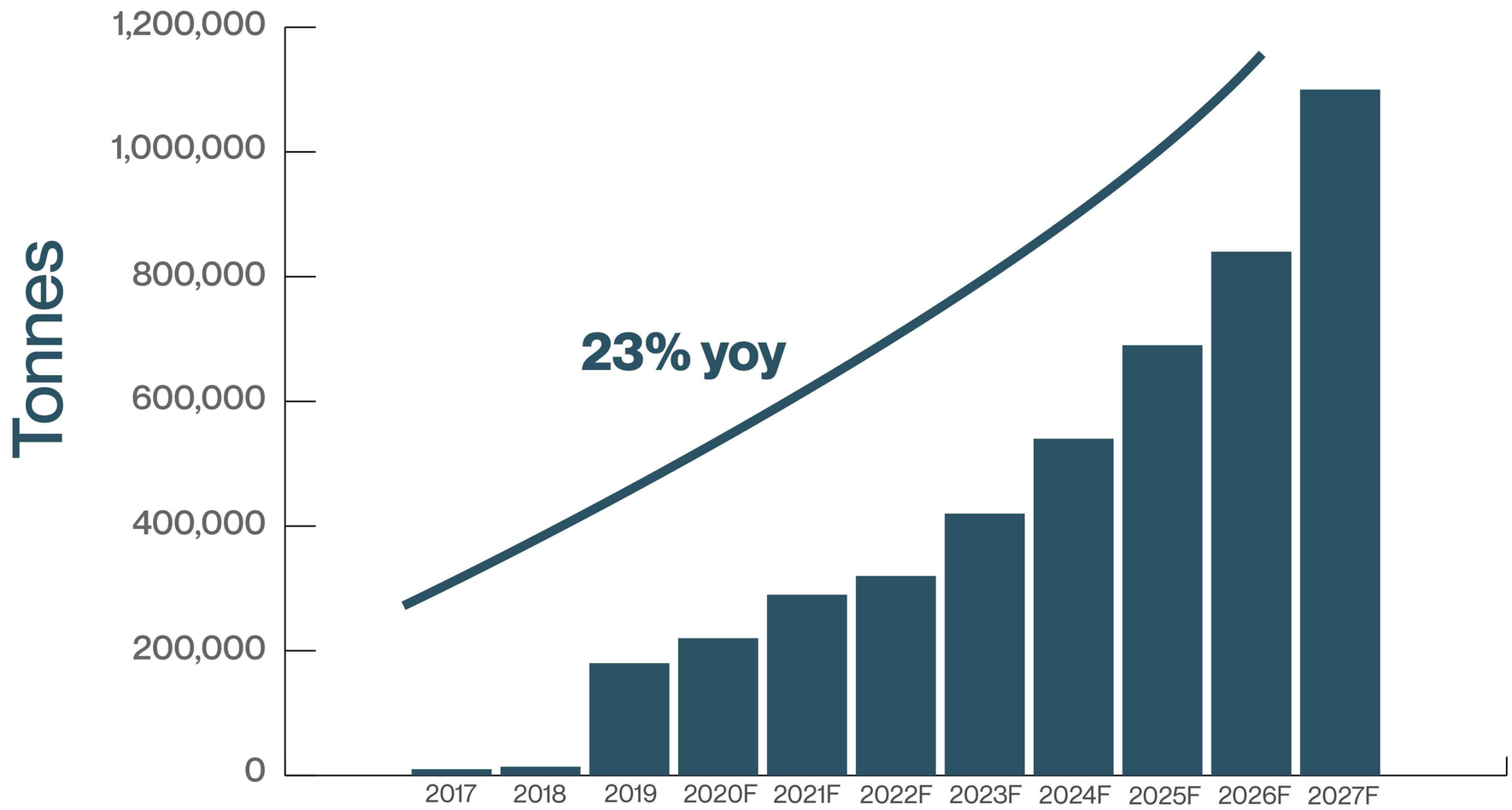
Share of electric vehicle sales per country (2019)



EXPECTED INCREASE IN EV SALES TO DRIVE BATTERY MATERIALS DEMAND

manganese
X Energy Corp

Manganese for Batteries Demand Forecast



Manganese demand, just from lithium-ion batteries, expected to grow at a compound annual rate of 23% to 2027. – Roskill, 2019

WHY MANGANESE IS A BETTER CHOICE THAN COBALT

manganese
X Energy Corp

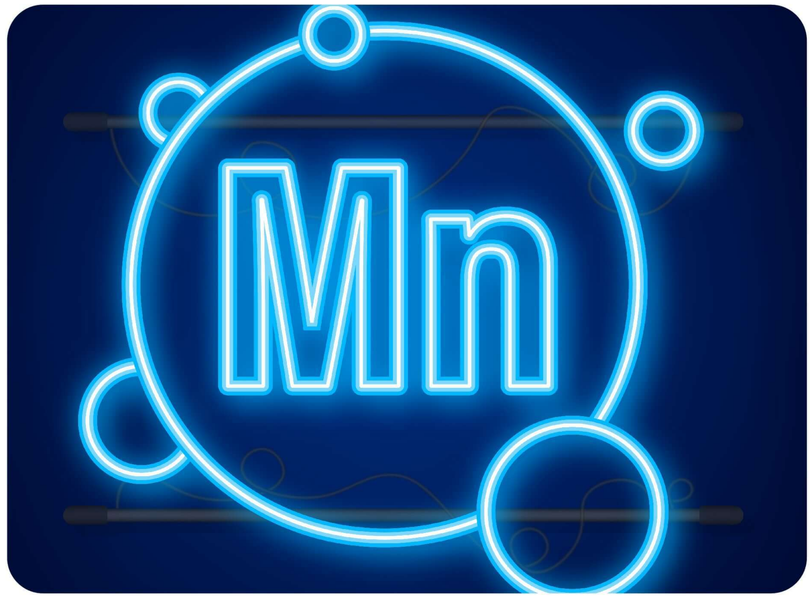
Manganese is vastly more affordable.

With a trading value of **$1,400 US per tonne**, versus cobalt's **$61,000+ US per tonne**.

* Data from Korea Mineral Resource Information Service

Manganese can be mined **ethically.**

Manganese-based batteries are **safer than cobalt-based batteries.**



Manganese batteries are **more stable, less toxic, more robust, denser, have quicker charging power** as well as **longer distance performance** and are much **more economical.**

BATTERY MINERALS AND TECHNOLOGY ASSETS

manganese X Energy Corp

Manganese

Flagship Asset –
Battery Hill Manganese Deposit

Other Assets

- Peter Lake Nickel-Cobalt Project
- Disruptive Battery Corp.

BATTERY HILL
Responsible and Ethical Source of Manganese

manganese X Energy Corp

- The Battery Hill project consists of 55 claims totaling 1228 hectares located in New Brunswick.
- It encompasses all or part of five Manganese zones, Iron Ore Hill, Moody Hill, Sharpe Farm, Maple Hill and Wakefield.
- The deposits have excellent location, being approximately 5 km northwest of the town of Woodstock and are easily accessible from the Trans-Canada highway via all-weather roads.
- It is strategically situated 12 kilometers from the US (Maine) border, near existing power transmission lines, railway and road access that provide suitable transport to major shipping lanes on the Atlantic Ocean and Saint Lawrence Seaway.

BATTERY HILL
Responsible and Ethical Source of Manganese

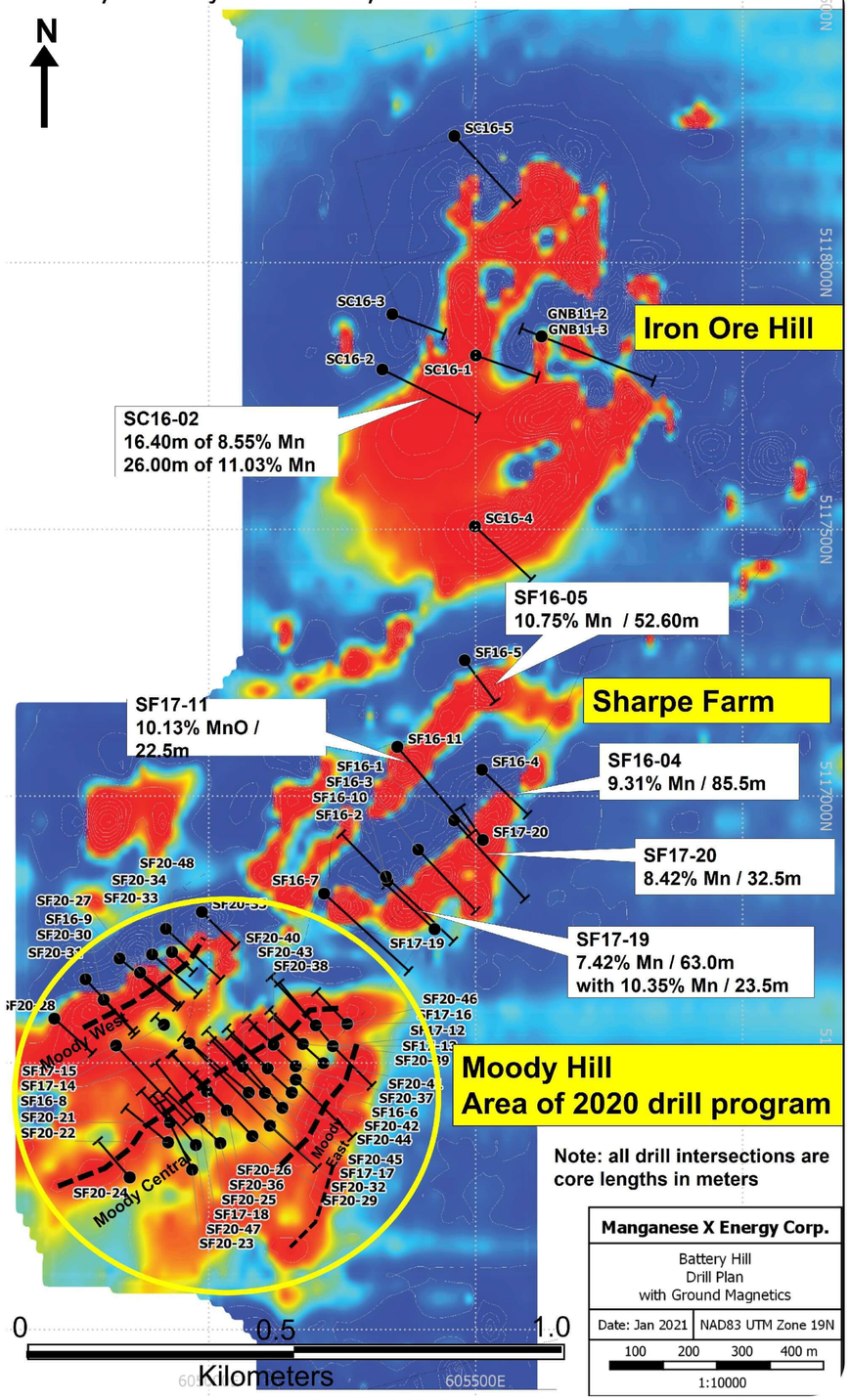
manganese X Energy Corp

- In 2021, we received an NI 43-101-compliant resource estimate Technical Report on our Battery Hill property. Sensitivity analysis of the Battery Hill deposit to cut-off grade shows 12.25 million tonnes of measured and indicated mineral resources at 8.77% manganese and 10.61 million tonnes of inferred mineral resources grading at 9.05% manganese with a cut-off of 7%.

- Mineralization remains open in most directions (depth and strike) for significant expansion. Metallurgical and drilling programs to determine a compliant resource are complete. Current focus is on near-surface, higher-grade areas at the Moody Hill zones.

- Our PEA (Preliminary Economic Assessment) to determine our economic and commercial viability is near completion. There is reason to be optimistic. Early indications from Kemetco Research Inc.`s metallurgy flowsheet are very encouraging, as they have drastically improved and upgraded our technology and economics, which is an integralpart of our PEA.

Battery Hill Project – Moody Hill to Iron Ore Hill Sector



SIMPLE PROCESSING STEPS

manganese X Energy Corp

Mining → Crushing → Leaching

↓

Solid-Liquid Separation

↓

Multi-stage Purification

↓

Crystallization

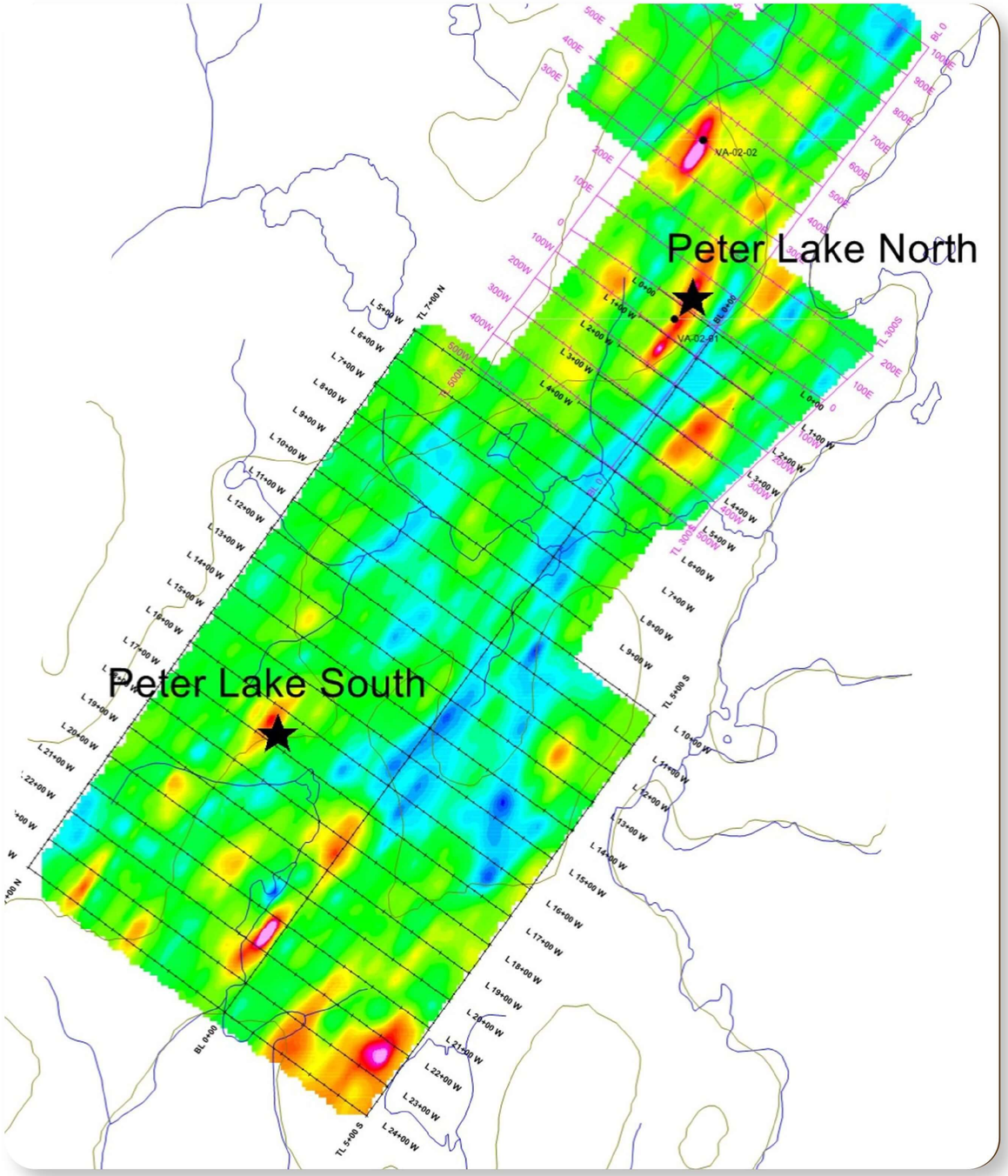
↓

High-Purity MnSO4

PETER LAKE Ni-Cu-Co PROPERTY

manganese
X Energy Corp

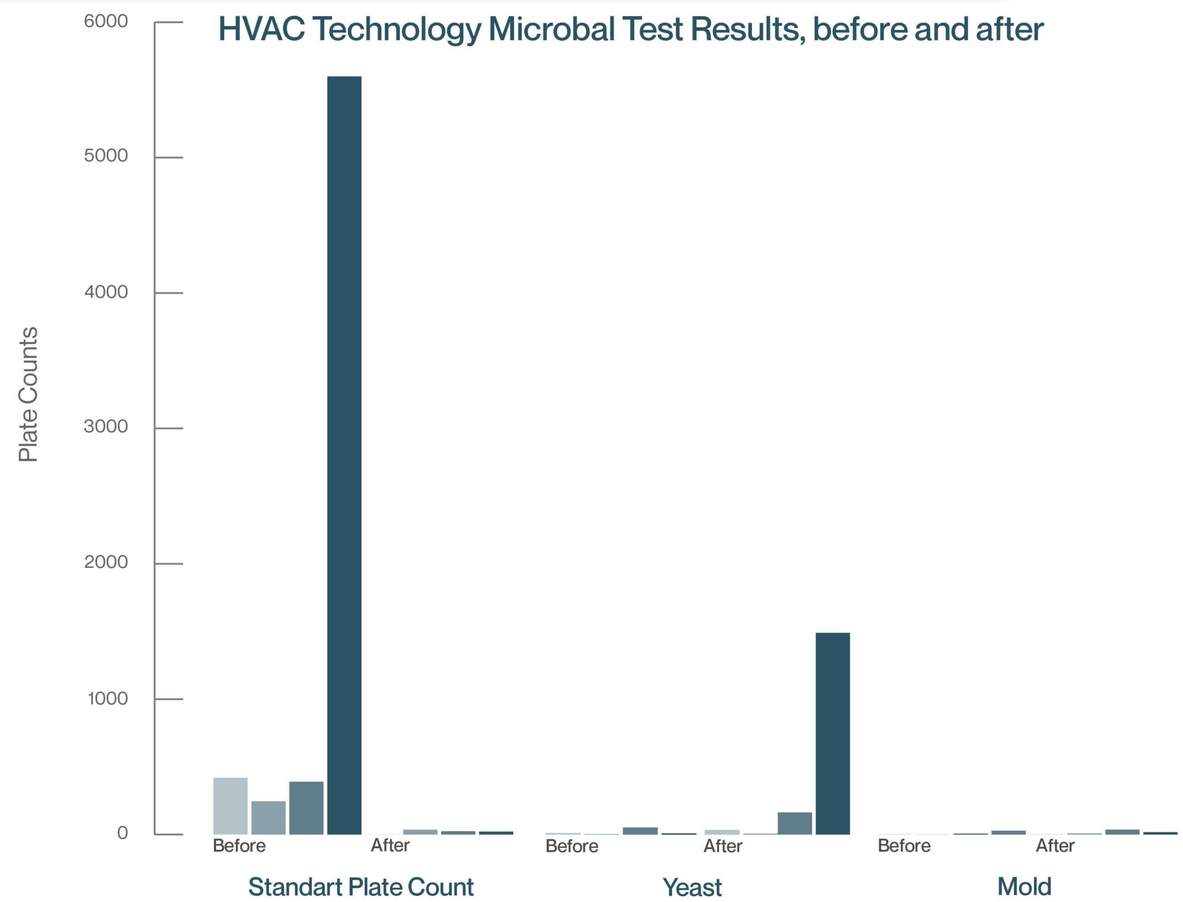
- Two Copper-Nickel-Cobalt occurrences known as Peter Lake North and Peter Lake South are included within the property. Previous grab sampling returned values ranging from 0.4% to 22.8% copper, 0.14% to 0.73% nickel, 500 ppm to 0.266% cobalt, as well as elevated gold and silver.
- The mineralization is associated with mafic intrusions of the Serpent Suite and has been traced intermittently on the surface for more than 2 kilometers.
- The property has received very limited exploration to date with only 2 shallow diamond drill holes completed in 2002. The Peter Lake South occurrence, discovered in 2012, has not been tested via drilling.



In order to take advantage of this new patented technology, the Company then formulated our 50% joint venture with PureBiotic AIR® Corporation, which already had a base of both innovative air systems plus, most importantly, a misting technology that has been highly proven in field testing as well as university, hospital and other studies. These systems have been documented to be an ideal and much-needed addition to all types and sizes of commercial and residential HVACs, for all installations old and new – no matter how old.

DBC has seized a great opportunity in the air purification sector when the Company was able to acquire a high-technology patent that represents an efficient addition to air purification tech overall – motivated, in part, by the current once-in-a-century virus pandemic.

Furthermore, our new JV is, serendipitously, currently finalizing additional development of the Company's technology. The JV AIR Corp.'s new breakthrough tech will serve to stabilize the required liquid solutions long-term. It is also being prepared for further patent applications.

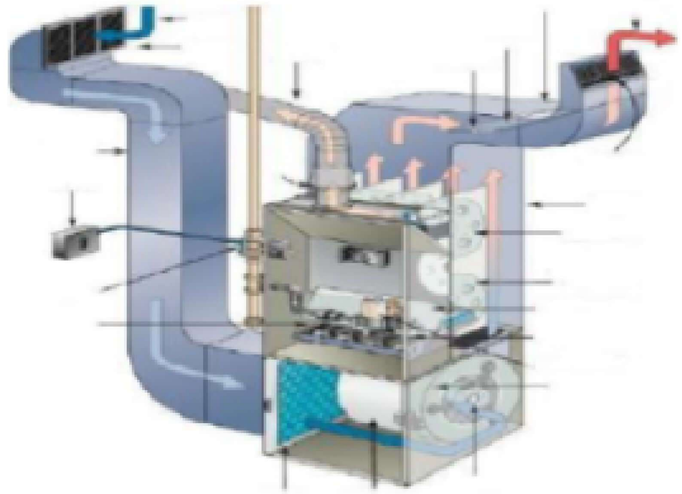


	Standart Plate Count		Yeast		Mold	
Series 1	420	34	1	2	12	2
Series 2	246	7	36	1	4	9
Series 3	390	164	25	7	52	37
Series 4	5600	1490	22	29	9	18

DISRUPTIVE BATTERY CORP.

manganese
X Energy Corp

In conjunction with this final development, Virginia State University ("VSU") will continue its research and testing of the US-patented HVAC Delivery System for mitigation of Covid-19 and other contaminants.



PureBiotics AIR® Systems (*) are designed to work both as additions to any and all types and sizes of HVAC systems as well as fully functioning stand-alone units. This offers the potential for global scalability. These unique systems are capable of reducing unwanted microbes, allergens and other contaminants and odor factors in building interiors by vaporizing microscopic PureBiotic Mist® particles to produce an antimicrobial mist entraining the vaporized air in all airstreams.

VSU research and testing laboratories also work with the Company in collaboration with additional top-rated specialized hazard materials labs for a wide range of pathogen testing, especially including coronavirus effectiveness research, in order to stay well in compliance with the requirements of the Centers for Disease Control and Prevention ("CDC") and other agencies.

Overall, VSU studies will ensure that all of the data from all parties involved in the range of testing is properly structured and documented.

(*) It is important to note that the Company is currently working on filing for regulatory approval.

KEY MILESTONES

manganese
X Energy Corp

	Manganese	HVAC
2022	• PEA (First Quarter) • Mini Pilot Project • Pre-feasibility Study/ Feasibility Study	• Seek important regulatory approval. • File additional patent registrations. • Finalize the Company's new AIR Unit design. • Set up pilot plant to produce patented Air Dispersion Units with the MADE IN THE USA label on them for, at first, the US and Canadian markets and then world-wide.
2023	• Pilot Project • Demonstration Plant • Obtaining environmental and respective mining permits	• Acquire additional certifications. • Expansion of the product lines as well as production facilities. • Complete VSU-based testing of all new products as well as additional uses of older products. • Pursue worldwide distributors. • Build filling facilities for the Company's liquid solutions in the Middle East, Latin America and other key locations to have better local market access and save on transport costs.
2024	• Producing high-purity materials in preparation for mining.	• Continuously grow and extend into more commercial, consumer, and healthcare applications.

MANGANESE X ENERGY 2022 STRATEGIES AND GOALS

manganese X Energy Corp

- ✓ **Successfully complete the Battery Hill project PEA and fast-track directly into pre-feasibility or feasibility study.**

- ✓ **Pursue negotiations with a multi-national company to explore future development and sales of our value-added manganese materials to the North American markets.**

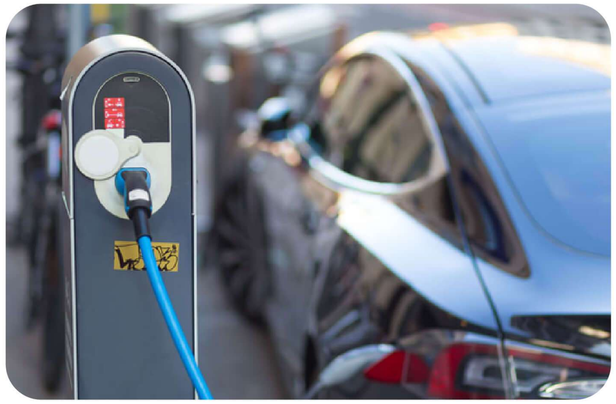
- ✓ **Continue to aggressively advance the development of our Battery Hill manganese property and the innovative, cost-effective metallurgical process developed to produce high-purity manganese products to the fast-growing North American lithium-ion battery market.**

- ✓ **JV partner PureBiotics AIR® Systems is currently preparing its application for its first FDA Certification of products. The development of additional products from the Company's core technology will become a significant growth factor after the initial plant is fully functioning, along with a wide range of upgrades to the Company's Air Systems.**

CORPORATE STRATEGY

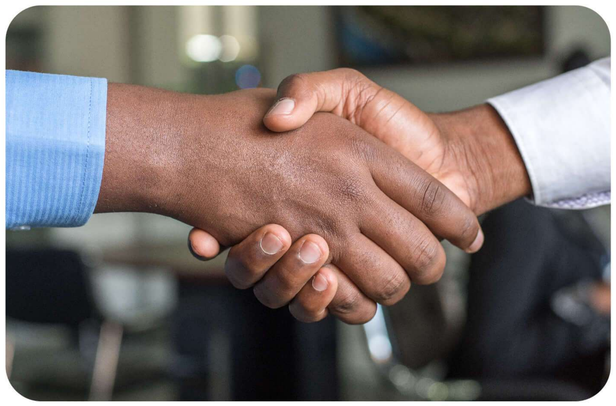
manganese
X Energy Corp

- Focus on metallurgy from the start to de-risk project



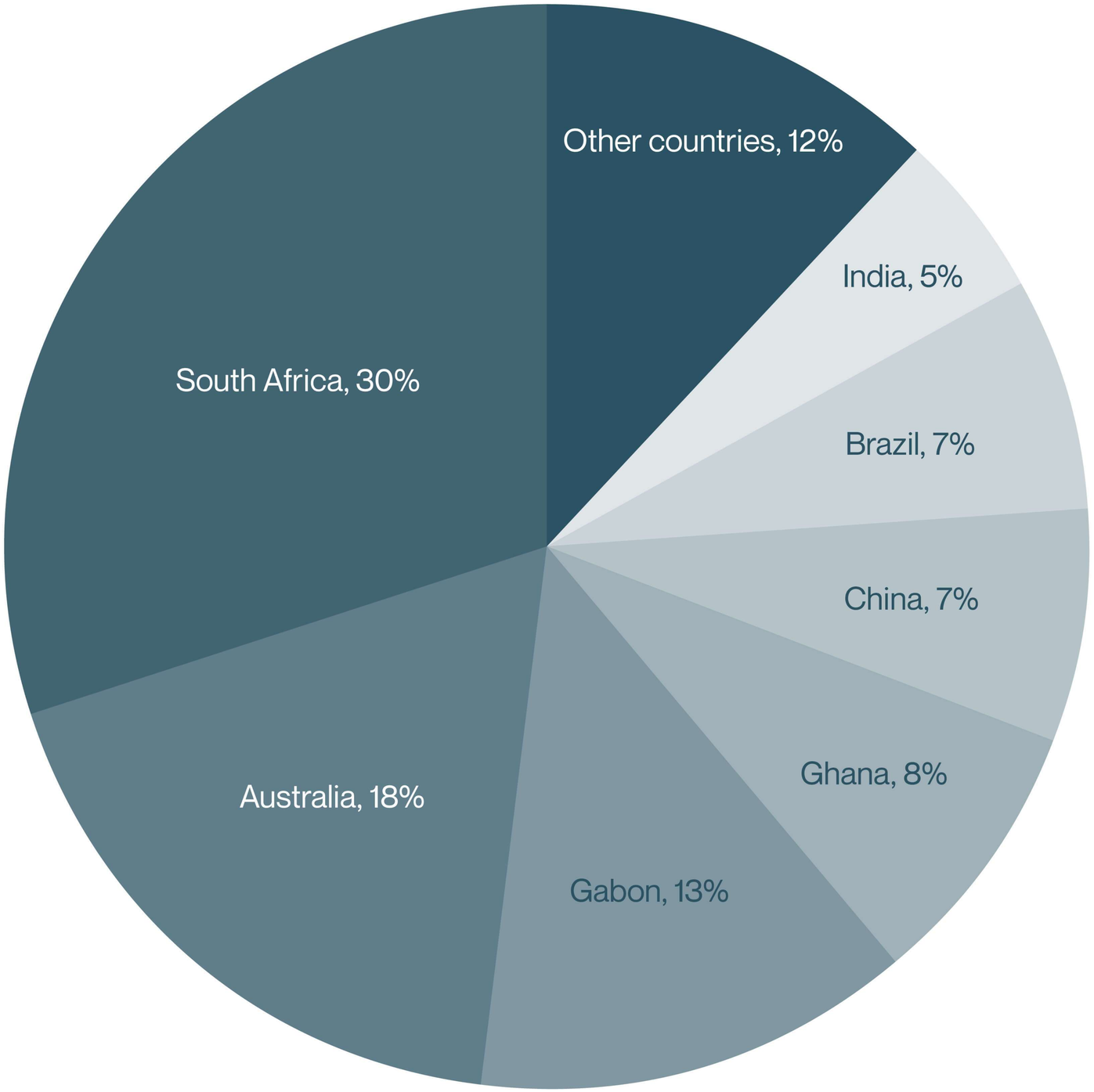
- Target a key strategic product – high-grade manganese sulphate for electric vehicles and stationary battery systems

- Invest in research and development of downstream products



- Partnership with downstream players

NORTH AMERICA IS DEPENDENT ON MANGANESE IMPORTS



Presently, there is no manganese mining production in the United States or Canada.

Manganese X Energy has the potential to become **North America's most significant supplier of manganese** products for the North American and European markets.

MANGANESE USES

manganese
X Energy Corp

Manganese is an important mineral that is used in steel production.

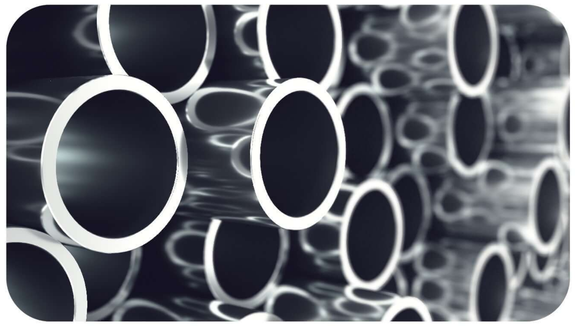
Other uses include:

Batteries

EV and stationary energy storage batteries

Chemicals

- Agriculture (fertilizer, animal feed, fungicide)
- Water purification
- Pigments
- Manganese ferrite (used in ceramics, cement, coatings, etc.)



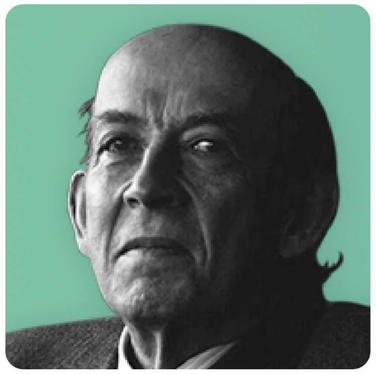
MANAGEMENT TEAM

Martin Kepman, Chief Executive Officer & Director

Martin Kepman and Associates Inc, founded in 1982, is a business development and management consulting firm owned and operated by its President Martin Kepman. Martin, in his 34 years of consulting experience, has consulted on a wide range of projects, in multiple industries ranging from software, soft goods, printing and food to mining.

Roger Dahn, Chairman of the Board & Director

Since June, 2016, Mr. Dahn has served as Vice-President of Exploration and significantly advanced the company's Battery Hill project, right from its grassroots start to where it is now awaiting a preliminary economic assessment. In addition to managing and providing leadership to the board of directors, Mr. Dahn (with the full participation and support of the board) will continue to provide guidance and direction to management in advancing Manganese X's Battery Hill project. He will act as a direct liaison between the board and the company's management, through its chief executive officer, Mr. Dahn has over 38 years experience in the mining and exploration industry. His experience includes over 16 years with Noranda Inc. and Hemlo Gold Mines Inc. Mr. Dahn is a registered professional geologist and a qualified person as defined by National Instrument 43-101.



Jay Richardson, Chief Financial Officer & Director

Jay Richardson is a Canadian Chartered Accountant (CA CPA), a Singapore Certified Public Accountant (CPA) and a Fellow of the Insolvency Practitioners' Association of the United Kingdom (FIPA). He has practiced as a Partner at Ernst & Young (Canada and Singapore) and KPMG (UK) prior to establishing his own practice as a company doctor in Toronto, Canada in 1993. He has served as the CEO or Chairman of ten listed public companies and as CFO of numerous others. He has extensive public company governance experience from over one and a half dozen Board memberships including having served as Interim Chairman of the Argus Corporation.

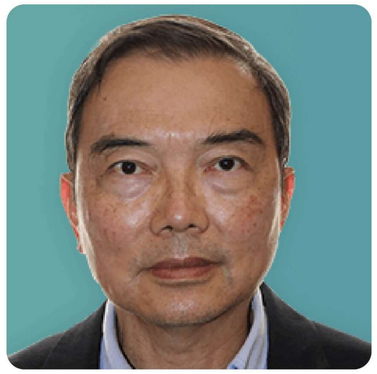
Perry MacKinnon, Vice-President of Exploration

Perry MacKinnon, PGeo, graduated in 1982 from Acadia University in Wolfville, N.S. (BSc, geology), and is an accredited professional geologist with the respective professional associations in Nova Scotia and New Brunswick. Mr. MacKinnon has over 30 years experience in the mining industry, having worked continent-wide on a variety of projects including the Alaskan Cordillera, the greenstone belts of Northern Manitoba and Quebec, and an array of mineralizing environments in Atlantic Canada, as well as porphyry-style projects in Mexico. He has worked as an independent consultant since 2005, with a significant focus on Canada's east coast. Mr. MacKinnon is a registered professional geologist and a qualified person as defined by National Instrument 43-101.

BOARD OF DIRECTORS

Luisa Moreno, Ph.D., Director

Dr. Moreno possesses unparalleled expertise in strategic minerals and related processes. She is currently Founder and Managing Director at Tahuti Global. Prior to this, she spent 7 years as a Financial and Senior Equity Analyst at Canadian financial research and investment banking firms. She now serves as CEO of Graphano Energy Ltd. ("GEL"), the significant, separately listed graphite recent (Sept. 2021) spin-out from MN.



Robert Tjandra, Director

Mr. Tjandra brings with him a unique blend of professional management, leadership, and entrepreneurial skills, and has over 25 years of combined experience, working, consulting, and developing businesses in construction, trading, oil and gas, fintech, and cleantech. He is passionate about the development of EV and energy storage, including sustainable mining development.
Mr. Tjandra has served on various listed companies. He served as the President, Chief Operating Officer, and director of Canbud Distribution Corporation (CSE: CBDX). He currently serves as a Director of Florence Wealth Management Inc. (a registered Exempt Market Dealer in Canada), and as CEO and Chairman of Mineto Power Corp., a private company in EV materials and Tech space.

Shimmy Posen, Corporate Secretary

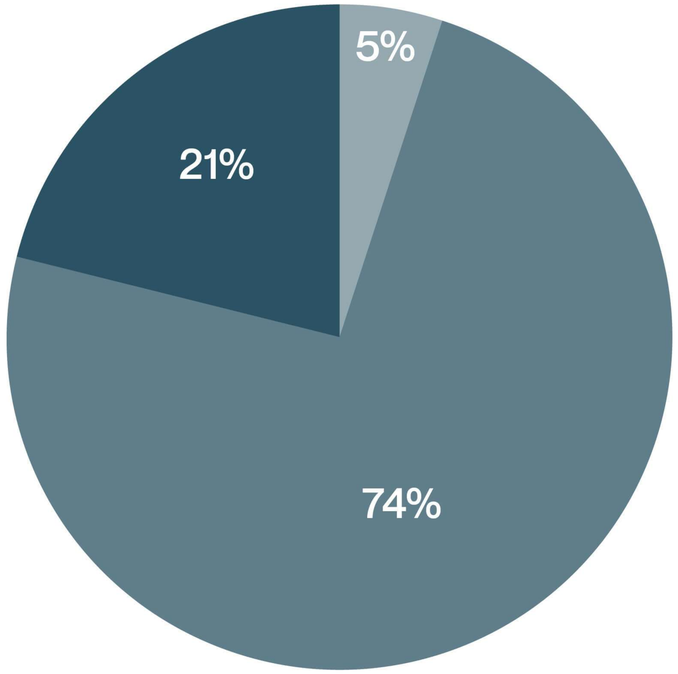
Mr. Posen is a lawyer and Partner at Garfinkle Biderman LLP, where he focuses on corporate finance, M&A and securities law. He acts for public and private companies, securities dealers and financial institutions on a number of public and private financings and commercial transactions.

FINANCIAL DETAILS

Warrants	Exercise	Expiry
13,275,940	$0.150	Sep 2023
6,000,000	$0.400	Oct 2022
5,047,552	$0.440	Feb 2023

Options	Exercise	Expiry
300,000	0.12	September 2024
1,500,000	0.20	September 2023
700,000	0.86	September 2023
800,000	0.25	December 2023
2,600,000	0.25	February 2026
300,000	0.50	April 2026

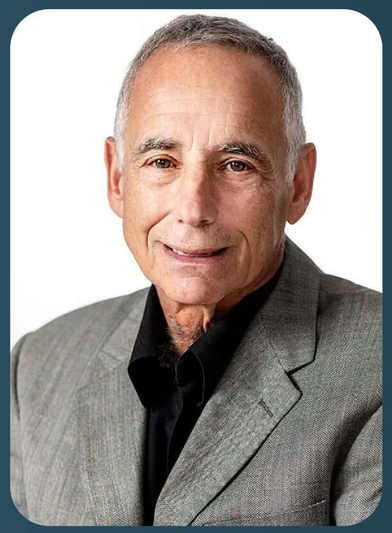
Number of Shares	124.534.907
Options	6.2 million
Warrants	24.223 million
Shares fully diluted	155.058.399
Market cap (07.01.2022)	C$ 37.4 million



Ownership

- Management & Insiders
- HWI (high worth investors)
- Retailers
- Institutions, 0%

manganese
X Energy Corp



"It is a realistic goal of the Company to become the first publicly traded manganese company in Canada and the U.S. to pursue commercialization of a manganese deposit.

We are currently completing a PEA feasibility study as well as the due diligence to document it. Upon conclusion and confirmation of the economic viability of our Battery Hill Project, we will move to the next phase and start commercialization.

The EV revolution is underway, and the innovative and new battery chemistry will become a major reason that disrupts the current system. We believe that moving forward, manganese will have a big influence over EV batteries. We are very optimistic about the future, because the early results are proving positive, positioning Manganese X to benefit and take advantage of the growing demand for EV batteries."

Martin Kepman, CEO of Manganese X Energy Corp.

FOR FURTHER INFORMATION
PLEASE CONTACT:

MARTIN@KEPMAN.COM
+1-514-802-1814

THANK YOU