

# Manganese X Energy Corp. Announces Mineral Resource Estimate for Battery Hill Manganese Project

- 34.86 Million tonnes of Measured and Indicated Resources grading 6.42% Mn; plus

- 25.91 Million tonnes of Inferred Resources grading 6.66% Mn

## Highlights:

- The mineral resource estimate utilizes a 2.5% Mn cut-off grade that reflects total operating costs having "reasonable prospects for economic extraction."
- Operating costs applied in the pit optimization reflect an innovative processing flow sheet designed by Kemetco Research.
- Kemetco will be applying for a Provisional Patent on behalf of the Company to protect this process. The process focuses on production of 99.95 % High-Purity Manganese Sulphate Monohydrate (HPMSM) for the electric vehicle (EV) and back up energy storage sectors. The HPMSM will be devoid of selenium, the bane of some 98% of current producers.
- Based on the large inventory of Measured and Indicated mineral resources defined to date, MXE will move quickly to acquire all information required to bring the project to a Feasibility Study stage.
- Current focus is on the HPMSM market. The Company also anticipates potentially recovering lower grade Mn to produce additional products such as those used in the agricultural industry.

**Montreal, Quebec--(Newsfile Corp. - July 7, 2021) - Manganese X Energy Corp. (TSXV: MN) (FSE: 9SC2) (OTC: MNXXF) ("Manganese" or the "Company")** is pleased to announce the first **Mineral Resource Estimate** for its Battery Hill Manganese Project of 34.86 million tonnes of Measured and Indicated mineral resources grading 6.42% Mn, plus an additional 25.91 million tonnes of Inferred mineral resources grading 6.66% Mn. The mineral resource estimate was prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) and is tabulated in Table 1.

**Table 1: Battery Hill Deposit Mineral Resource Estimate - Effective Date June 18th, 2021**

Cut-off Grade (Mn %)	Category	Rounded Tonnes	Mn %	Fe %
2.5	Measured	11,260,000	6.75	10.96
	Indicated	23,600,000	6.26	10.53
	Measured Plus Indicated	34,860,000	6.42	10.67
	Inferred	25,910,000	6.66	10.92

## Mineral Resource Estimate Notes:

- 1) Mineral resources were prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (MRMR) (2014) and CIM MRMR Best Practice Guidelines (2019).
- 2) Mineral resources are defined within an optimized pit shell with average pit slope angles of 45° and a 3.7:1 strip ratio (waste : mineralized material).
- 3) Pit optimization parameters include: pricing of US\$1500/tonne for High Purity Manganese Sulphate Monohydrate - 32% Mn (HPMSM - 32 %), exchange rate of CDN \$1.30 to US\$ 1.00, mining at CDN \$6.50/t, combined processing and G&A (1000 tpd) at CDN \$86.22/t processed and a process recovery

of Mn to HPMSM of 65%. Fe content was not included in the pit optimization.

4) Mineral resources are reported at a cut-off grade of 2.50 % Mn within the optimized pit shell. This cut-off grade reflects total operating costs used in pit optimization to define reasonable prospects for eventual economic extraction by open pit mining methods.

5) Mineral resources were estimated using Ordinary Kriging methods applied to 3 m downhole assay composites. No grade capping was applied. Model block size is 5 m (x) by 5 m (y) by 5 m (z)

6) Bulk density was applied using a regression curve based on Mn % and Fe % block grades.

7) Mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.

8) Mineral resources are not mineral reserves and do not have demonstrated economic viability.

9) Mineral resource tonnages are rounded to the nearest 10,000.

Martin Kepman, CEO of the Company, states "This is game changing news for the Company, having such a large resource totalling **34.9 million Measured and Indicated tonnes and 25.9 million Inferred tonnes** underwrites the project's long-term potential for supply of manganese. In addition, our ongoing metallurgical testing is making great strides toward achieving an economically optimized extraction process. We look forward now to the completion by Wood Canada Ltd. of a Preliminary Economic Assessment (PEA) for the project that will incorporate this new mineral resource estimate plus the latest metallurgical developments to provide important insight into the economic viability of producing high purity manganese sulphate from our Battery Hill deposit. We are buoyed by the knowledge that, with a positive outcome from the PEA, there appears to be sufficient tonnage of Measured and Indicated mineral resources to potentially sustain long term production while we explore the potential of the other Mn mineralization on our 1228-hectare property. The EV revolution is well underway and innovative battery chemistry is a large part of the disruption. We believe manganese will have a large influence over EV batteries going forward. Our Battery Hill property could potentially have a long-life cycle, estimated at 25 years based on the Measured and Indicated Resource, and potentially service the EV sector for years to come within the North American and European supply chain"

The Company has undertaken several core drilling programs over the past 5 years that support the current mineral resource estimate. These include 53 holes totaling 9,697 metres over a deposit strike length of approximately 2.0 kilometres to arrive at this point. A diamond drilling program is being planned to expand Measured and Indicated mineral resources and to explore other known Mn showings on the 7 kilometer long MXE property.

The associated mineral resources now defined form the basis of the PEA being prepared by Wood Canada Ltd. The PEA will characterize and assess **Commercialization and Economic Viability Potential** for a future mining and processing operation at the Battery Hill Property.

The Battery Hill Deposit is comprised of the Moody Hill, Sharpe Farm, and Iron Ore Hill Zones. On a contained tonnage basis the Moody Hill, Sharpe Farm, and Iron Ore Hill Zones comprise approximately 56%, 29%, 15%, respectively, of the Battery Hill Deposit mineral resource. The Moody Hill and Sharpe Farm Zones, just a few hundred meters apart (see Map, Figure 1), contain all of the Measured and Indicated mineral resources for the Battery Hill Deposit. The grade/tonnage sensitivity analysis that appears in Table 2 provides insight into the character of Mn mineralization present within the Battery Hill Deposit over the cut-off grade range of 2.5% Mn to 7% Mn. Although iron (Fe) content has also been estimated and is currently reported for the deposit, only manganese content was used in the pit optimization process. The Company will further assess Fe by-product opportunities through future metallurgical studies.

**Table 2: Tonnage/Grade Sensitivity Details (Pit Shell Constrained) for the Battery Hill Mn Deposit**

Cut-off Grade (Mn %)	Category	Rounded Tonnes	Mn %	Fe %
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<b>2.5</b>	<b>Measured</b>	<b>11,260,000</b>	<b>6.75</b>	<b>10.96</b>
	<b>Indicated</b>	<b>23,600,000</b>	<b>6.26</b>	<b>10.53</b>
	<b>Inferred</b>	<b>25,910,000</b>	<b>6.66</b>	<b>10.92</b>
5	Measured	8,680,000	7.52	11.73
	Indicated	15,930,000	7.26	11.65
	Inferred	18,630,000	7.71	11.92
6	Measured	6,250,000	8.32	12.44
	Indicated	11,680,000	7.91	12.35
	Inferred	14,130,000	8.41	12.64
7	Measured	4,460,000	9.06	13.11
	Indicated	7,790,000	8.61	12.95
	Inferred	10,610,000	9.05	13.30

Note: This table shows sensitivity of the June 15, 2021 Battery Hill deposit mineral resource estimate to cut-off grade. The base case at a cut-off value of 2.5% Mn is bolded above for reference. The data presented is a summary of the Mercator Geological Services Battery Hill Deposit Mineral Resource Estimate. A complete version will be posted to [www.sedar.com](http://www.sedar.com) within 45 days.

### **Qualified Persons**

Mr. Harrington, P. Geo., of Mercator Geological Services Limited (Mercator) is responsible for technical disclosure in this press release regarding the Battery Hill Deposit Mineral Resource Estimate. Mr. Harrington is a qualified person ("QP") as defined under NI 43-101 and both he and Mercator are fully independent of Manganese X Energy Corp., as also defined under NI 43-101.

This News Release has been reviewed and approved by Perry MacKinnon, P. Geo, Vice President of Exploration with Manganese X Energy and a "Qualified Person" as defined under National Instrument 43-101 Standards of Disclosure for Mineral Projects.

### **Manganese X Energy Corp. at Emerging Growth Conference July 7, 2021 : 9:30 AM Eastern time**

Manganese X Energy Corp., Martin Kepman CEO and Perry Mackinnon VP Exploration, will be presenting their Companies latest milestone at the Emerging Growth Conference July 7, 2021 : 9:30 AM Eastern time Please register here to ensure you are able to attend the conference and receive any updates that are released.

[https://goto.webcasts.com/starthere.jsp?ei=1477114&tp\\_key=6d2d562bcc&sti=mnxxf](https://goto.webcasts.com/starthere.jsp?ei=1477114&tp_key=6d2d562bcc&sti=mnxxf)

### **About Manganese X Energy Corp.**

Manganese X's mission is to advance our Battery Hill project into production, with the intent of supplying value added materials to the lithium ion battery and other alternative energy industries, as well as achieving new carbon-friendly, more efficient methodologies, while processing manganese at a lower competitive cost. We are the only company in North America moving toward commercialization utilizing the novel Kemetco process.

Subsidiary Disruptive Battery Corp.'s mission is to develop an HVAC air purification delivery system for cleaner and healthier air, aiming to mitigate Covid-19 and other contaminants on surfaces and in the air.

On Behalf of the Board of Directors  
Of **Manganese X Energy Corp**  
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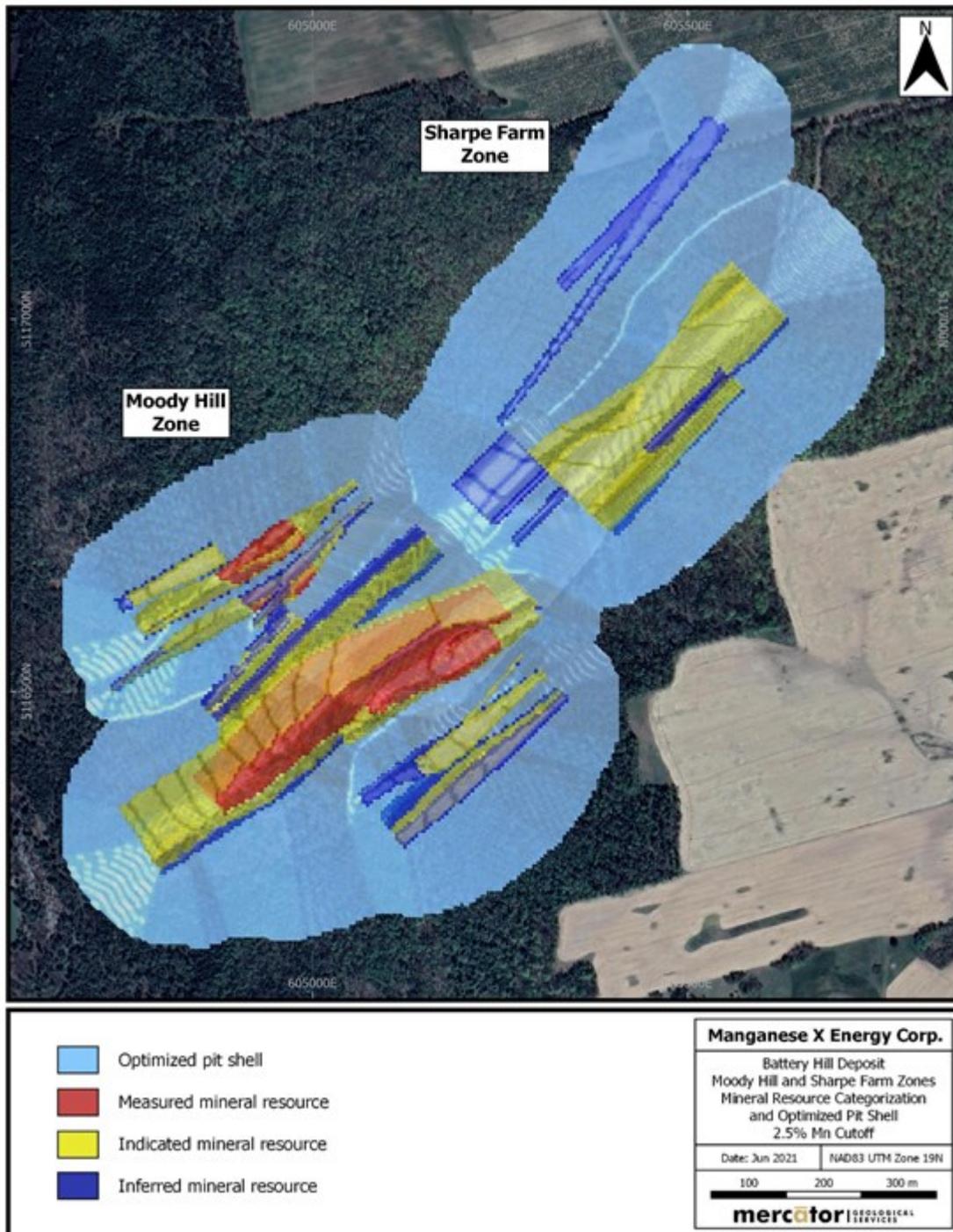
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### **Cautionary Note Regarding Forward-Looking Statements**

Certain statements contained in this news release, including statements which may contain words such as "expects", "anticipates", "intends", "plans", "believes", "estimates", or similar expressions, and statements related to matters which are not historical facts are forward-looking information within the meaning of applicable securities laws. Such forward-looking statements, which reflect management's expectations regarding Company's future growth, results of operations, performance, and business prospects and opportunities, are based on certain factors and assumptions and involve known and unknown risks and uncertainties which may cause the actual results, performance, or achievements to be materially different from future results, performance, or achievements expressed or implied by such forward-looking statements.

These factors should be considered carefully, and readers should not place undue reliance on the Company's forward-looking statements. The Company believes that the expectations reflected in the forward-looking statements contained in this news release and the documents incorporated by reference herein are reasonable, but no assurance can be given that these expectations will prove to be correct. In addition, 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 not to be as anticipated, estimated, or intended. The Company undertakes no obligation to publicly release any future revisions to forward-looking statements to reflect events or circumstances after the date of this news or to reflect the occurrence of unanticipated events, except as expressly required by law.

### **Figure 1: Plan Map - Moody Hill and Sharpe Farm Zones**



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