



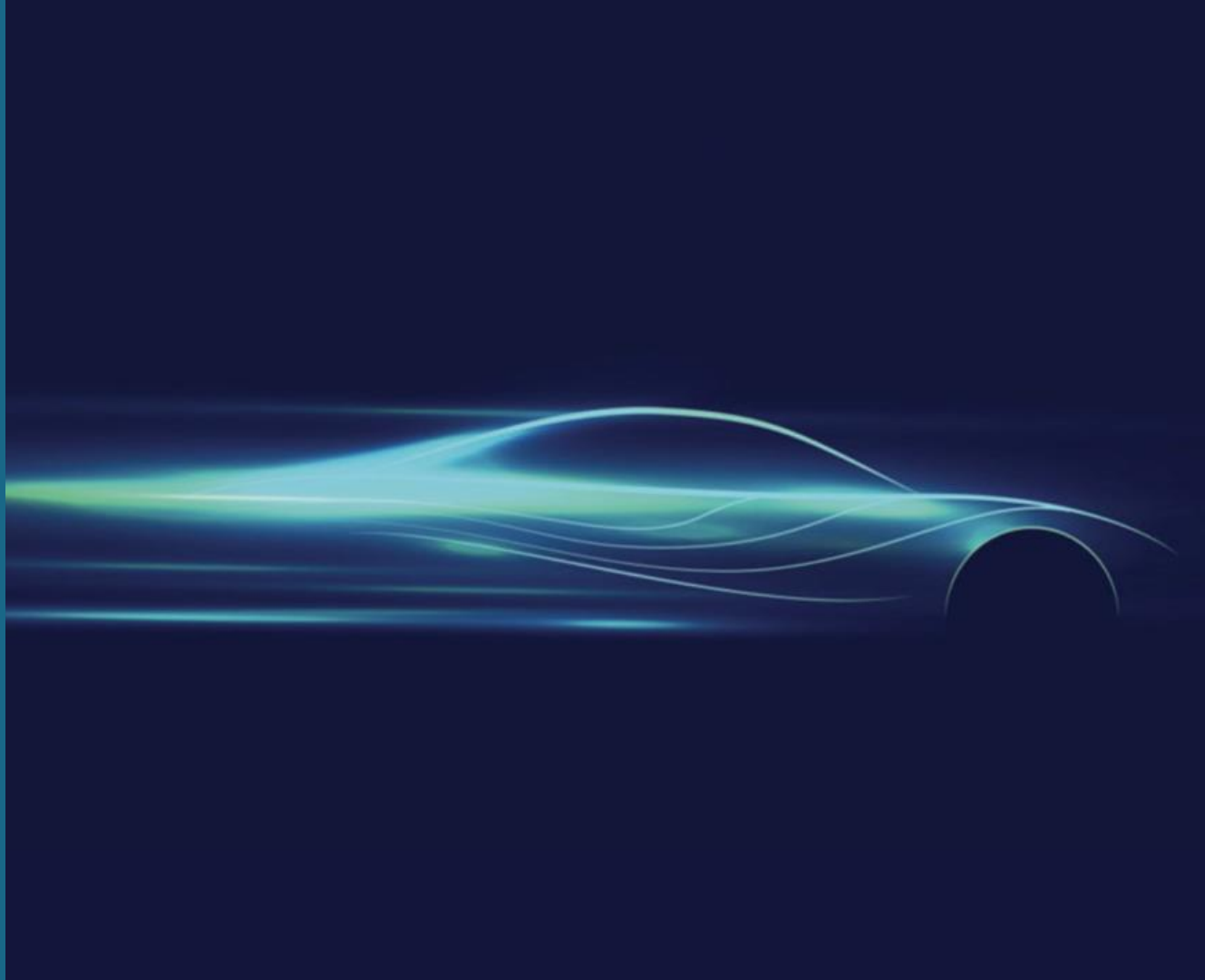
## THIRD QUARTER 2022 UPDATE

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Poised to support Europe's  
Energy Transition

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August 15, 2022





## Forward-Looking Statements and Risks Notice

Certain statements in this presentation constitute “forward-looking statements” or “forward-looking information” within the meaning of applicable securities laws. Such statements and information involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company, its Project, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as “may”, “would”, “could”, “will”, “intend”, “expect”, “believe”, “plan”, “anticipate”, “estimate”, “scheduled”, “forecast”, “predict” and other similar terminology, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. Readers are cautioned not to place undue reliance on forward-looking information or statements.

Results of the Feasibility Study constitutes forward-looking information or statements, including but not limited to estimates of internal rates of return (including any pre-tax and after-tax internal rates of return), payback periods, net present values, future production, assumed prices for HPMSM and HPEMM, proposed extraction plans and methods, operating life estimates, cash flow forecasts, metal recoveries and estimates of capital and operating costs. Such forward-looking information or statements also include, but are not limited to, statements regarding the Company’s intentions regarding the Project in the Czech Republic, the development of the Project, the ability to source green power and other requirements for the Project, the completion and submission of an environmental and social impact assessment, statements regarding the ability of the Company to obtain remaining surface rights, the benefits of remediating the historic tailings areas, the growth and development of the high purity manganese products market, the desirability of the Company’s products, the growth of the EV industry, the use of manganese in batteries, and the Company’s ability to obtain financing for the Project.

Factors that could cause actual results or events to differ materially from current expectations include, among other things: the ability to develop adequate processing capacity; the availability of equipment, facilities, and suppliers necessary to complete development; the cost of consumables and extraction and processing equipment; risks and uncertainties related to the ability to obtain, amend, or maintain necessary licenses, or permits, risks related to acquisition of surface rights; risks and uncertainties related to expected production rates; risks and uncertainties related to the accuracy of mineral resource and reserve estimates, the price of HPEMM and HPMSM, power supply sources and price, reagent supply resources and prices, future cash flow, total costs of production; risks related to global epidemics or pandemics and other health crises; risks and uncertainties related to interruptions in production; unforeseen technological and engineering problems; the adequacy of infrastructure; risks related to Project working conditions, accidents or labour disputes; social unrest or war; risks relating to variations in the mineral content and grade within resources from that predicted; variations in rates of recovery and extraction; developments in EV battery markets and chemistries; and risks related to fluctuations in currency exchange rates, changes in laws or regulations; and regulation by various governmental agencies. For a further discussion of risks relevant to The Company, see “Risk Factors” in the Company’s annual information form for the year ended September 30, 2021, available on the Company’s SEDAR profile at [www.sedar.com](http://www.sedar.com).

All forward-looking statements are made based on the Company’s current beliefs as well as various assumptions made by the Company and information currently available to the Company. Generally, these assumptions include, among others: the presence of and continuity of manganese at the Project at estimated grades; the ability of the Company to obtain all necessary land access rights; the availability of personnel, machinery, and equipment at estimated prices and within estimated delivery times; currency exchange rates; manganese sales prices and exchange rates assumed; growth in the manganese market; appropriate discount rates; tax rates and royalty rates applicable to the proposed operations; the availability of acceptable Project financing; anticipated extraction losses and dilution; and success in realizing proposed operations. Although the forward-looking statements contained in this presentation are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this presentation and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this presentation.



# Agenda & Speakers

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## Agenda

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1. Overview
2. Quarterly Highlights
3. Financial Position
4. Feasibility Study Results
5. Project Finance
6. Life Cycle Assessment Results
7. Next Steps / 2022 Catalysts
8. Outlook
9. EMN Value Proposition

## Speakers

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**Dr. Matthew James**  
President & CEO



**Martina Blahova**  
CFO





# Battery materials company poised to be a leading high-purity manganese producer



Set to become Europe's primary producer of high-purity manganese products



Strategically located in heart of world's fastest-growing EV battery market



Positioned to support the shift to a circular, low-carbon economy



Well-funded; project backed by EU institutions (EBRD, EIT InnoEnergy)



Aim to have best-in-class environmental & social performance



Experienced team with deep high-purity manganese experience



First step in building a multi-asset manganese platform



Chvaletice Processing Plant 3D Model



### Delivered several significant milestones; remaining 2022 catalysts on-track

#### ❖ Released positive Feasibility Study

- Robust base case economics validate feasibility of the Project.
- Further potential upside outlined in sensitivity analysis.
- High purity manganese market forecasted to increase significantly.
- Stable, business-friendly jurisdiction with excellent existing infrastructure.

#### ❖ Completed Life Cycle Assessment

- Validates environmental credentials of the Project
- Report critical for discussions with potential customers.

#### ❖ Appointment of project finance advisor

- Stifel Nicolaus Europe Ltd appointed as financial advisor to assist with structuring and securing of project financing.

#### ❖ Arrival of demonstration plant in Europe

- One of two shipments unloaded in Hamburg in early Aug; 2<sup>nd</sup> shipment scheduled to be unloaded later this month.
- Site buildings refurbished and ready for arrival of demo plant.

#### ❖ Joined Global Battery Alliance

- EMN became the first high-purity manganese company to join the GBA, a partnership of leading organizations from across the battery value chain.

#### ❖ Preparation of EPCM tender documentation



## Q3 2022 Financial highlights and position

**Fully funded to FID and ~12 months of corporate G&A**

<b>Cash Balance – April 1, 2022</b>		<b>C\$ 32.1 M</b>
Advancing the feasibility study and other operating costs		(C\$ 3.1 M)
Demonstration plant under construction		(C\$ 0.5 M)
Deposits for land acquisitions		(C\$ 0.5 M)
<b>Cash Balance – June 30, 2022</b>		<b>C\$ 28.0 M</b>

### Fully funded to complete:

- Demonstration plant installation, commissioning and 1-year operation
- Environmental and Social Impact Assessment and other permitting
- Certain critical land acquisitions
- EPCM tender process
- Over 12 months corporate (G&A) costs





## Still picture from the Feasibility Study 3D model





## Resources converted to Reserves with 98.4% classified in Proven category

Estimated in accordance with the CIM Definition Standards on Mineral Resources and Mineral Reserves adapted by CIM Council, as amended, which are materially identical to the JORC Code.

Chvalitice Mineral Reserve Statement, Effective Date July 14, 2022\*

Tailings Cell #	Classification	Volume (m <sup>3</sup> )	Tonnage (MT)	Dry In-situ Bulk Density (t/m <sup>3</sup> )	Total Mn (%)
#1	PROVEN	6,651,000	10,132,000	1.51	7.83
	PROBABLE	141,000	208,000	1.52	8.24
#2	PROVEN	7,929,000	12,106,000	1.53	6.91
	PROBABLE	119,000	183,000	1.54	7.35
#3	PROVEN	2,744,000	3,979,000	1.46	7.49
	PROBABLE	25,000	36,000	1.46	7.98
TOTAL	PROVEN	17,325,000	26,217,000	1.50	7.35
	PROBABLE	284,000	427,000	1.51	7.84
COMBINED	PROVEN & PROBABLE	17,609,000	26,644,000	1.51	7.41

\* Probable Reserves have lower confidence than Proven Reserves. Inferred Resources have not been included in the Reserves.

### 2017-2018: 160-hole drilling program findings

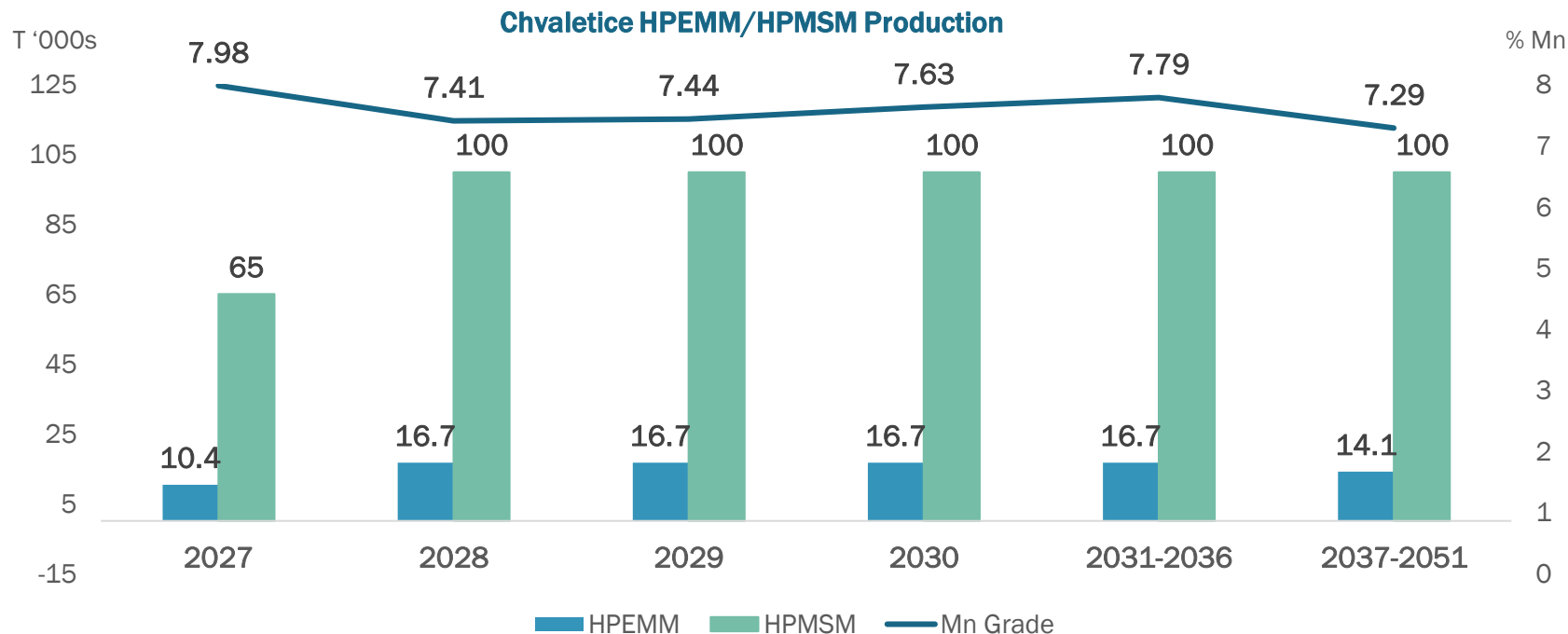
- Manganese is for the most part evenly distributed through the entire tailings deposit
- Finely milled, unconsolidated tailings placed above ground expected to result in very low mining and virtually zero ore dressing costs
- **~80% of manganese is contained in easily leachable manganese carbonate minerals** that require no calcination or chemical reduction prior to leaching, unlike manganese oxide ores





## Production profile over 25-year project life

Commissioning in 2026; 2027 ramp up leading to stable production over life of project

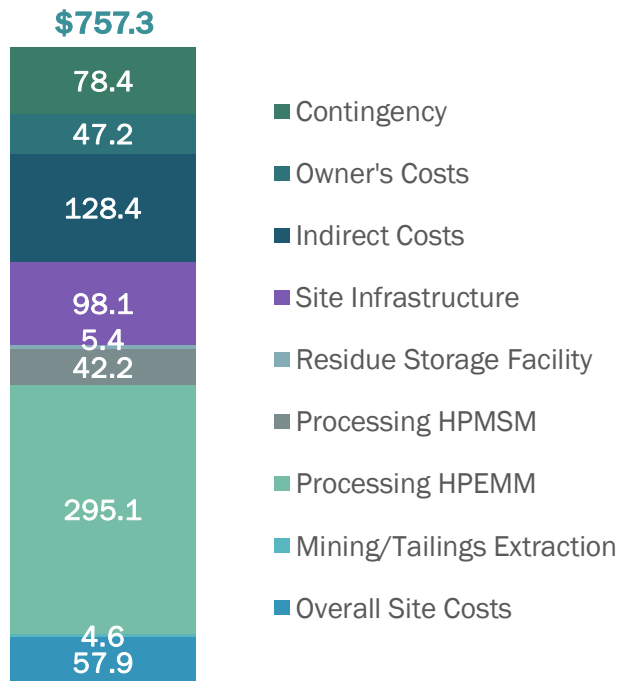




## Project capital costs include a robust contingency

Capex figure reflects post-COVID supply chain environment

### Capital Cost Breakdown (\$M)



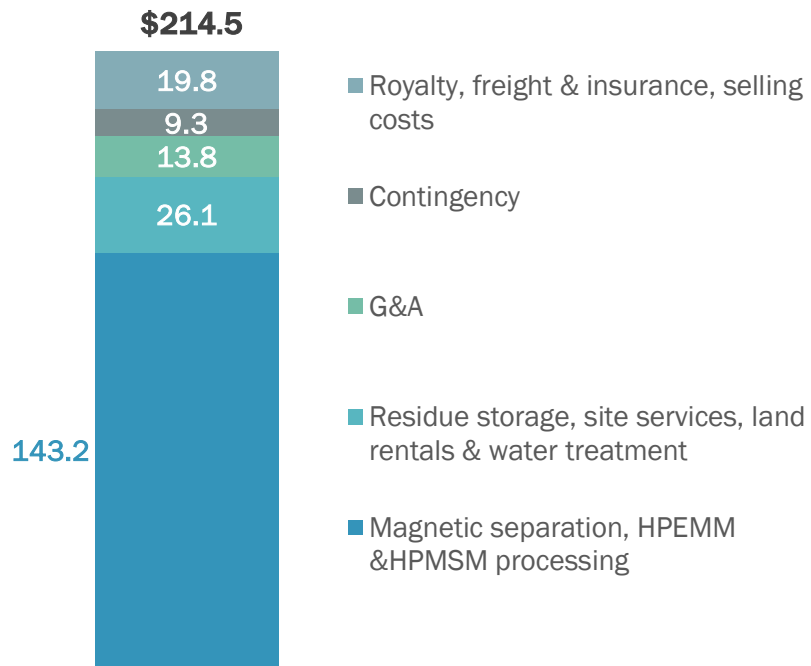
- ❖ Robust +\$100M contingency (includes \$78M contingency and \$25M of growth capital on direct costs).
- ❖ European supply chain environment yet to recover from COVID disruption.
- ❖ Equipment costs reflect list prices from RFQs. Opportunity to reduce via EPCM procurement process.
- ❖ Low infrastructure cost/risk: power connection & rail-yard \$23M, remaining \$75M on civil works, buildings, water distribution and mine infrastructure.
- ❖ Tier 1 EPCM contractors with experience of plant construction in Europe will be used to ensure on-cost, on-time construction.



## Project operational costs based on current cost environment

Energy and reagents constitute ~68% of operational costs

### Operational Costs (\$/t of Plant Feed)



- ❖ Reagents and energy account for ~30% and ~38% of opex respectively.
- ❖ Power pricing based on long-term renewable power purchase agreement MoU discussions.
- ❖ Competitive labour costs.
- ❖ Opportunities for reduction:
  - Inclusion of contingency
  - Supply chain normalization for reagents
  - Power cost normalization
  - Build own sulfuric acid plant at later stage



## Key highlights: strong cashflow and margins for years to come (\$ in USD)

Base Case*			Upside Case (CPM Group Price Forecast)		
NPV <sub>8%</sub>	IRR	Mn Production	NPV <sub>8%</sub>	IRR	Mn Production
<b>\$1.34B</b> <i>Net Present Value post tax</i>	<b>22%</b> <i>Ung geared, post tax</i>	<b>48ktpa</b> <i>(100Kt HPMSM + 15Kt HPEMM)</i>	<b>\$1.79B</b> <i>Net Present Value post tax</i>	<b>24%</b> <i>Ung geared, post tax</i>	<b>48ktpa</b> <i>(100Kt HPMSM + 15Kt HPEMM)</i>
Revenue	Opex	Margin	Revenue	Opex	Margin
<b>\$554M</b> <i>Average per year</i>	<b>\$229M</b> <i>Average per year</i>	<b>59%</b> <i>EBITDA margin</i>	<b>\$625M</b> <i>Average per year</i>	<b>\$229M</b> <i>Average per year</i>	<b>63%</b> <i>EBITDA margin</i>
Capital	Payback	Life of Project	Capital	Payback	Life of Project
<b>\$757M</b> <i>To initial production</i>	<b>4.1</b> <i>years</i>	<b>25</b> <i>Years</i>	<b>\$757M</b> <i>To initial production</i>	<b>4.1</b> <i>years</i>	<b>25</b> <i>Years</i>

\* Base case project economics are based on Tetra Tech Canada Inc.'s adoption of a risk-adjusted short-term price forecast.



## Project is attractive for a variety of potential financial partners

Together with Stifel, EMN is exploring multiple pools of debt capital

### European Institutions

**EBRD** – one of EMN's largest shareholders. Interested in participating in next round of development funding.

**EIB** – align funding with EU policy; mandate to support energy transition & localization of EV supply chain. Recycling and remediation plus ESG credentials. Interested in participating in next round of development funding.

### Commercial Banks

Inbound expressions of interest received from pre-marketing announcement re: project financing.

### ESG Funds

Strong ESG credentials of the project expected to be of interest to these sources of debt funding.

### Export Credit Agencies

Potential pool of debt financing being explored.

EPCM tender process will request firms show how they intend to maximize potential for ECA support.

### Customers/OEMs

Potential for various forms of funding by purchasers beyond standard offtake contracts (i.e. loans, prepayments, equity support).



## Project of strategic importance to Europe with exceptional ESG benefits

**Project delivers wide-ranging benefits for all stakeholders**

- ❖ **Uniquely positioned to provide secure, traceable and responsibly produced supply of high-purity manganese products**
  - Chvaletice orebody is the only sizable reserve of manganese in the EU
  - Located in stable and business-friendly jurisdiction
  - Brownfield asset with significant support from local communities and governments
- ❖ **Use of Best Available Technologies for Low Carbon Footprint**
  - Renewable electricity sources
  - Recycled water – no fresh water, use of industrial water
  - Best practice tailings management (filtered, dry-stacked)
  - Net positive environmental benefits from remediation of historic tailings
- ❖ **Value creation for local communities and Czech government**
  - ~ 400 jobs created during operation
  - US\$1.5 billion in corporate taxes and royalties over life of project







## Life Cycle Assessment confirms benefits of remediating historic tailings site

**Using 100% renewable electricity reduces the Project's carbon footprint by 50%**

	Target Scenario: Renewable Electricity		Baseline Scenario: Czech Electrical Grid Mix	
Impact Category	HPEMM (kg CO <sub>2</sub> eq.per kg)	HPMSM (kg CO <sub>2</sub> eq.per kg)	HPEMM (kg CO <sub>2</sub> eq.per kg)	HPMSM (kg CO <sub>2</sub> eq.per kg)
Scope 1	1.2	0.4	1.2	0.4
Scope 2	2.1	0.7	9.5	3.3
Scope 3	3.3	1.2	3.3	1.2
<b>Total</b>	<b>6.6</b>	<b>2.3</b>	<b>13.9</b>	<b>4.8</b>

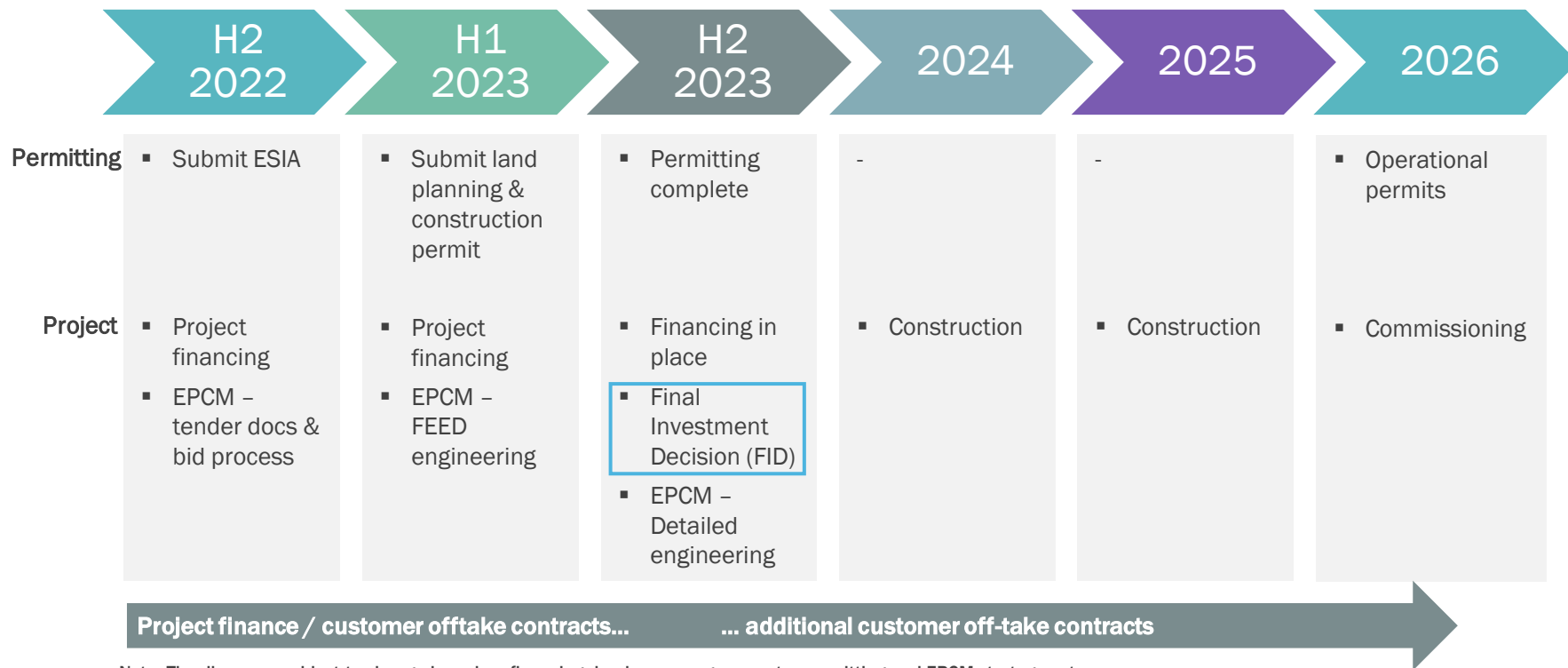
Note: Totals may not add exactly due to rounding. HPEMM and HPMSM are not additive.

- ❖ Validates environmental credentials of the Project
- ❖ Net positive impact on soil and water
- ❖ LCA critical for potential customer discussions as well as supporting ESG credentials with financiers
- ❖ Benchmarking exercise underway to compare Project's carbon footprint against similar high-purity manganese producing operations.



## Permitting & next steps

On track to deliver final investment decision by H2 2023



Note: Timelines are subject to change based on financing, land access agreements, permitting and EPCM strategy outcomes.



## 2022 Key Catalysts; on schedule to deliver

Catalyst	Status
<b>Feasibility Study and EPCM</b>	
▪ Publication of Feasibility Study Highlights	✓ Complete
▪ Filing of Feasibility Study on SEDAR & ASX	Expected Q3
▪ Commencement of EPCM tender process	Expected Q3
<b>Pilot Plant and Demonstration Plant</b>	
▪ Pilot plant 2nd run	✓ Complete
▪ Demonstration plant shipped and arrived in Europe	✓ Complete
▪ Demonstration plant installation & commissioning	Expected Q3
▪ First demonstration plant shipments to customers	Expected Q4
<b>Land Access and Permitting</b>	
▪ Land access agreements	3 of 5 land access agreements complete, 2 on-going
▪ Land rezoning for mining use	85% complete; 100% expected by year-end
▪ Submission of final Environment & Social Impact Assessment	Expected Q3



## 2022 Key Catalysts continued

### Catalyst

### Status

#### Financing and Offtake Contracts

- | Catalyst                                    | Status                                       |
|---|--|
| ▪ Appointment of project financial advisor  | ✓ Complete                                   |
| ▪ Negotiation of customer offtake contracts | Ongoing, initial contracts anticipated in Q4 |

#### Environmental, Social & Governance





- |  |                      |
|--|----------------------|
| ▪ Publication of Minviro Life Cycle Assessment   | ✓ Complete           |
| ▪ Publication of Minviro Benchmarking Assessment | Expected Q3          |
| ▪ Publication of inaugural Sustainability Report | Expected by year-end |



# High-purity Mn at an inflection point; EMN well-positioned to benefit

## Macro factors aligning to drive demand for high-purity manganese & inbound interest in EMN's products

### 1. Development of manganese-rich chemistries, driven by cathode cost reduction

Company	Chemistry	Mn Content	Stage
	NMx	30%	Commercial
	LMFP	40-60%	Commercial (2023)
	NMC 370	70%	Scaling up
	LNMO	40%	Scaling Up

### 2. EU & US regulation supports localization of EU supply-chains

#### Europe

- Import tariffs on battery raw materials (BRM) suspended until end of 2025
- Establishment of Battery Passport and green battery supply chain including responsible sourcing and minimum levels of recycled content.

#### US

- Reform to \$7,500 EV tax credit outlined in proposed Inflation Reduction Act requires:
  - 40% battery raw materials (BRM) sourced from US or country with US FTA in 2024
  - Rises 10%/year to 80% BRM US or US FTA sourced by 2027

### 3. Continued growth of global EV market

- High-purity Mn production needs to increase more than 10-fold to meet forecasted demand in 2030\*
- Europe could account for 25% of global HP Mn demand projected by 2030
- >1,400 GWh planned battery capacity by 2030 in Europe (56 cell factories)

\*CPM Group; does not include LMFPs.



## Euro Manganese's Value Proposition

Western provider of fully-traceable, responsibly-produced, low-carbon high-purity mn products for the EV industry

### Privileged Assets

- Location (near customers, low geopolitical risk)
- Ore type (carbonate)
- Traceability of product
- Low-carbon footprint; net positive impacts
- Only EU source of HPMn

### Core Competencies

- Processing of HPMn
- Tailings reprocessing & rehabilitation
- European savvy: partners, regulation, funding, EV market

### Potential for Growth

- Western-focused
- Partner of choice (excellent ESG profile)
- First-mover advantage
- Premium product = premium pricing & valuation

### Strategic Relationships

- Customers
- Partners
- Investors
- Host governments
- Local communities

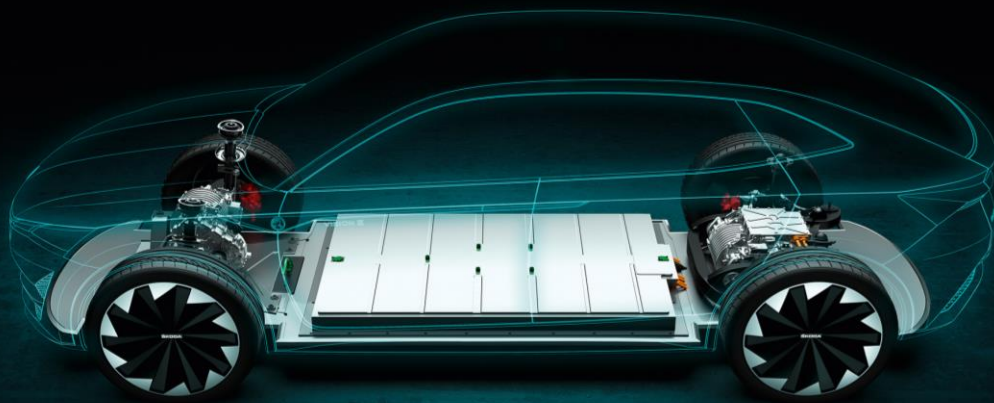




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## Notes to Mineral Reserve Statement

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1. Estimated in accordance with the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council, as amended, which are materially identical to the JORC Code.
2. The Mineral Resource is inclusive of the Mineral Reserves.
3. Probable Reserves have lower confidence than Proven Reserves. Inferred Resources have not been included in the Reserves.
4. A break-even grade of 2.18% total Mn has been estimated for the Chvaletice deposit based on preliminary pre-concentration operating costs of \$6.47/t feed, leaching and refining operating cost estimates of \$188/t feed, total recovery to HPEMM and HPMSM of approximately 60.5% and 58.9% respectively and product prices of US\$9.60 kg/t for HPEMM and US\$3.72 kg/t for HPMSM (CPM Group Report, June 2022). The actual commodity price for these products may vary.
5. Grade capping has not been applied.
6. Numbers may not add exactly due to rounding.
7. Minimal dilution and losses of <1% are expected to occur at the interface between the lower bounds of the tailings cells and original ground as the surface is uneven.



# Compliance Statements

## Competent and Qualified Persons Statement

All production targets for the Chvalteice Manganese Project referred to in this presentation are underpinned by estimated Proven and Probable Reserves prepared by competent persons and qualified persons in accordance with the requirements of the Joint Ore Reserves Committee Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition ("JORC Code") and National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101"), respectively. The NI-43-101 report, including the results of the Feasibility Study and be filed on SEDAR at [www.sedar.com](http://www.sedar.com) within 45 days of the release of the Company's announcement dated 27 July 2022, and be made available on the Company's website. The JORC Technical Report is expected to be lodged with the ASX within the same time period. The scientific and technical information included in this presentation is based upon information prepared and approved by Mr. James Barr, P. Geo, Senior Geologist, Mr. Jianhui (John) Huang, Ph.D., P. Eng., Senior Metallurgical Engineer, Mr. Hassan Ghaffari, P.Eng, M.A.Sc., Senior Process Engineer, Mr. Chris Johns, P.Eng, Senior Geotechnical Engineer, Davood Hasanloo, P.Eng, M.A.Sc., Senior Hydrotechnical Engineer, and Mrs. Maurie Marks, P.Eng, Senior Mining, all with Tetra Tech Canada Inc. ("Tetra Tech"), and Ms. Andrea Zaradic, P. Eng., Vice President Operations for Euro Manganese. Mr. Barr, Mrs. Marks, Mr. Ghaffari, Mr. Johns, Mr. Hasanloo and Mr. Huang are consultants to, and independent of, EMN within the meaning of NI 43-101, and have sufficient experience in the field of activity being reported to qualify as Competent Persons as defined in the JORC Code, and are Qualified Persons, as defined in NI 43-101. Messrs. Barr, Huang, Ghaffari, Johns, Hasanloo and Mrs. Marks have no economic or financial interest in the Company and consent to the inclusion in this presentation of the matters based on their information in the form and context in which it appears. In addition, technical information concerning the Chvalteice Manganese Project is reviewed by Ms. Andrea Zaradic, P. Eng, VP Operations for Euro Manganese, and a Qualified Person under NI 43-101. Ms. Zaradic has reviewed and approved the information in this presentation for which she is responsible and has consented to the inclusion of the matters in this presentation based on the information in the form and context in which it appears.

## References to ASX and TSX-V Market Announcements

This presentation contains information extracted from certain of the Company's ASX and TSX-V market announcements, as shown below, including estimates of Proven and Probable Reserves, and production targets as reported in accordance with the JORC Code and NI 43-101 standards:

- i. The Feasibility Study and results of the Feasibility Study as reported on pages 5 and 12 of this presentation was reported in the TSX-V and ASX market announcement dated 27 July 2022.
- ii. The results of the Life Cycle Assessment as reported on pages 5, 14 & 15 of this presentation was reported in the TSX-V and ASX market announcement dated 2 August 2022.
- iii. The Reserve Statement reported on page 8 of this presentation was reported in the TSX-V and ASX market announcement dated 27 July 2022.
- iv. The expected annual production as reported on page 9 of this presentation was reported in the TSX-V and ASX market announcement dated 27 July 2022.
- v. Information on the initial capital expenditures for the Project as reported on page 10 of this presentation was reported in the TSX-V and ASX market announcement dated 27 July 2022.
- vi. Information on the operational expenditures for the Project as reported on page 11 of this presentation was reported in the TSX-V and ASX market announcement dated 27 July 2022.
- vii. Information about the European Bank for Reconstruction and Development's investment in Euro Manganese referred to on page 13 of this presentation was reported in a TSX-V and ASX market announcement dated 4 January 2022.
- viii. The Company is not aware of any new information or data that materially affects the information contained in the above-referenced market announcements. The Company also confirms that all material assumptions and technical parameters underpinning the estimates of Proven and Probable Reserves as provided in the relevant market announcements, as well as all material assumptions underpinning the production targets and financial forecast information, continue to apply and have not materially changed, and that the form and context in which the Competent Persons' findings are presented have not been materially modified.