

Forward Looking Statements

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Timelines used in this presentation are for the purpose of aiding management in the planning and implementation of the projects and are not based on a detailed assessment of project requirements.

Consequently, the timelines are subject to material revision as subsequent technical reports and assessments are completed. Future phases of the project are contingent upon completion of preceding phases. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

Mark Trevisiol, P.Eng. and Dan Pace are Qualified Persons as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Project ("NI 43-101") and both are employed by Electra. They have reviewed and approved the technical content in this presentation.

NASDAQ: ELBM | TSX.V: ELBM



Today's presenters



Trent Mell CEO



Peter Park CFO



Mark Trevisiol VP Project Development



Q2 & recent developments

- Raised \$21.5M in gross proceeds with concurrent financings
- Released updated economics for cobalt refinery and black mass recycling
- Progressed with first plant-scale recycling of black mass in North America
- Signed MOU with Three Fires for battery waste recycling in Ontario
- Extended and expanded terms of cobalt sulfate agreement with LG Energy Solution
- Made first customer shipment of MHP product from black mass trial

Strengthened liquidity will sustain momentum in H2



Q2 liquidity position

- Liquidity in Q2 impacted by capital costs against refinery project
- Implemented cost-cutting measures to preserve liquidity
- Q2's liquidity excludes C\$5.1M of expected government funding and \$21.5M of gross proceeds from private placement
- Electra now has positive working capital with gross proceeds from financings



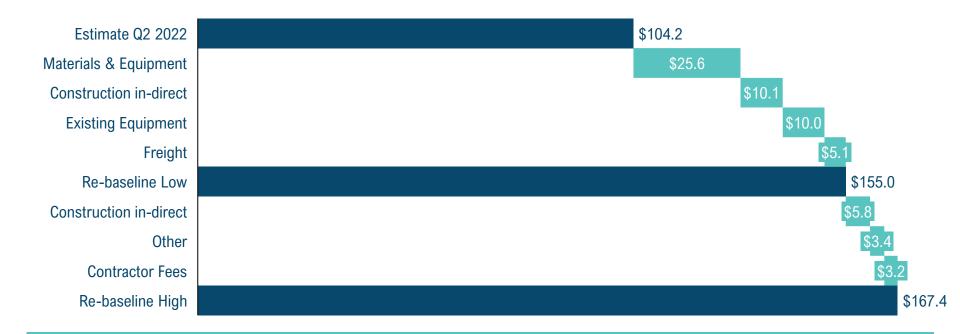
Strengthening Electra's balance sheet key was a key focus of Q2



Refinery project economics



Updated capital costs*



Increases driven by scope expansion, inflation and supply chain disruptions



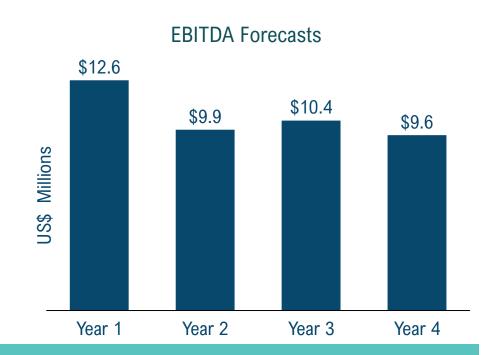
Highlights of black mass scoping study

o Capital spend: C\$8.1M

Internal rate of return: 127%

Payback: 1 to 2 years

2,500 tonnes of processed material /YR



Low capital intensity with a high rate of return





Black mass update

Plant scale recycling trial is ongoing

- Large plant scale trial is underway at refinery complex
- Using proprietary hydromet process previously tested
- Objective is to recover high value metals for resale
 - ---> Nickel, cobalt, lithium, manganese and graphite
- Critical success factors for trial
 - ---> Effectiveness of process
 - → Recovery rates



Success will pave the way for commercialization



Trial results have exceeded expectations

Recovery rates are at or superior to results achieve in lab setting

- First recovery of nickel-cobalt MHP via hydromet process
- Lithium-carbonate production is a potential game changer
- First customer shipment of nickel-cobalt MHP
- Strong interest in trial results from various stakeholders
- Catalyst to form JV with Three Fires



Results and compelling economics pave the way to re-prioritize focus



Source: Electra Battery Materials NASDAQ: ELBM | TSX.V: EL

Next steps with black mass trial

- Ongoing optimization of hydromet process
- Optimize flow sheet
 - ---> Metsim (material balance)
 - ---> Process flow diagrams
 - ---> Early process engineering
- Identify long-lead delivery items
- Update scoping study
- Develop summary report
- Determine path to commercialization



Build on successes achieved to date



Strategic developments & outlook



Enhanced agreement with LG Energy Solution



- 5-year strategic supply agreement
- 19,000 tonnes of battery grade cobalt
- Deliveries to start in 2025
- Represents 80% of refinery output during term
- Value of agreement is approximately US\$617M*

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Battery waste recycling with First Nations group

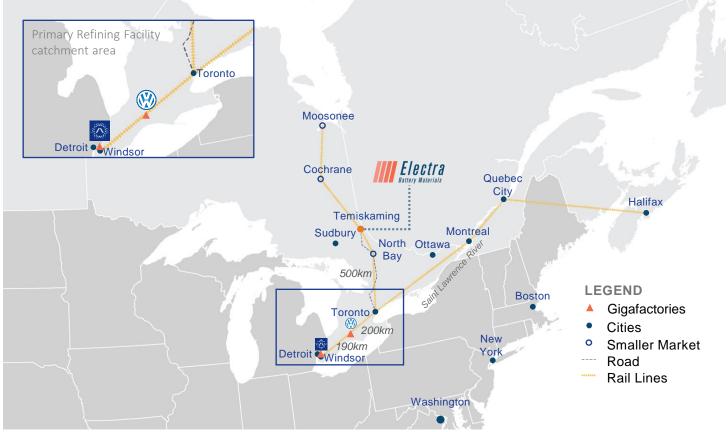
- Three Fires is a First Nations owned investment group focused on generating wealth for its members
- Announced plans to form JV with Electra in May
- Committed to strategic investment in Electra
- Planned Stellantis and VW battery plants sit on Three Fires traditional lands
- Launched 'north-south' business alliance to create linkage between raw materials in Northern Ontario and EV manufacturers in the south



Key driver in accelerating battery recycling strategy



Area of focus for joint venture with Three Fires





Outlook



Near-term milestones

- Q3 Summary report of black mass trial
- Q3 Delivery of key equipment to refinery
- H2 2023 Government funding decisions expected
- H1 2024 Bécancour prefeasibility study



Multiple catalysts for value creation



Questions?

Electra Battery Materials

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Joe Racanelli, VP Investor Relations info@ElectraBMC.com 416.900.3891

