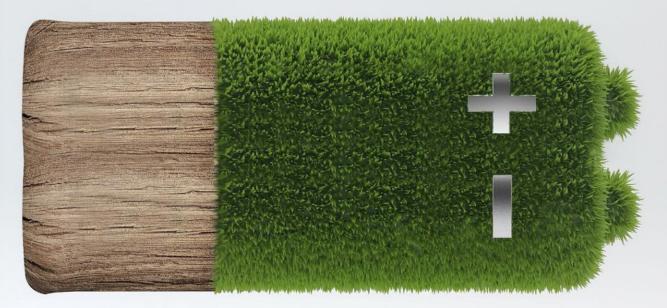


Investor Presentation May 28, 2024

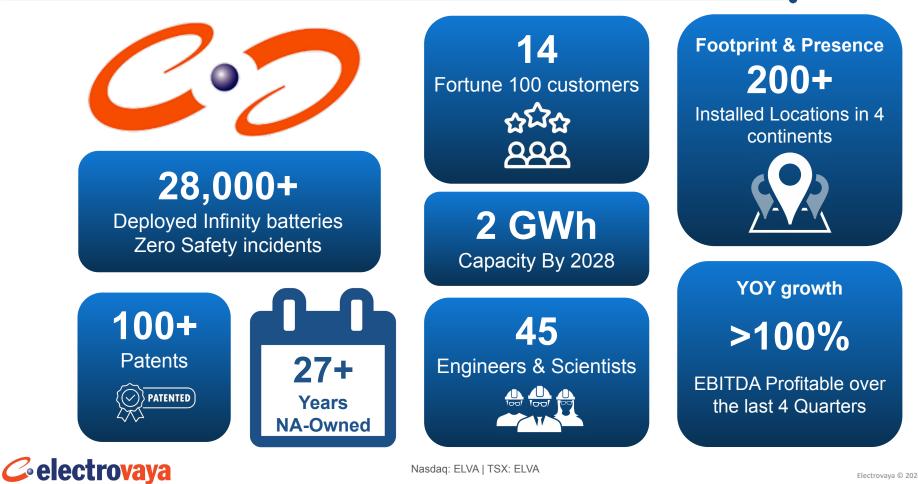


Toronto Stock Exchange (Nasdaq:ELVA) & (TSX:ELVA)

Disclaimer

This presentation contains forward-looking statements, including statements that relate to, among other thinas, the effect of the COVID-19 public health emergency on the Company's operations, its employees and other stakeholders, including on customer demand, supply chain, and delivery schedule, the size of the Company's sales pipeline and the ability to satisfy orders thereunder, the Company's ability to satisfy its ongoing debt obligations, anticipated increased collaboration with OEMs and OEM channels constituting a source of sales growth for the Company, anticipated continued increase in sales momentum in fiscal 2024 through OEMs and directly to large global companies, including Fortune 500 companies, the future direction of the Company's business and products, including E-bus, E-truck and Energy storage applications and additional intellectual property protection, the Company's ability to source supply to satisfy demand for its products and satisfy current order volume, technology development progress, all trademark logos and trademarks are owned by the respective Company's, pre-launch plans, plans for product development, plans for shipment using the Company's technology, production plans, the Company's markets, objectives, goals, strategies, intentions, beliefs, expectations and estimates, and can generally be identified by the use of words such as "may", "will", "could", "should", "would", "likely", "possible", "expect", "intend", "estimate", "anticipate", "believe", "plan", "objective" and "continue" (or the negative thereof) and words and expressions of similar import. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, such statements involve risks and uncertainties, and undue reliance should not be placed on such statements. Certain material factors or assumptions are applied in making forward-looking statements, and actual results may differ materially from those expressed or implied in such statements. Important factors that could cause actual results to differ materially from expectations include but are not limited to: natural disasters, unusually adverse weather, epidemic or pandemic outbreaks, cyber incidents, boycotts and geopolitical events; the COVID-19 outbreak will not have significant further effects on the Company's supply chain or operations; that current customers will continue to make and increase orders for the Company's products, and in accordance with communicated intentions, that the Company's alternate supply chain will be adequate to replace material supply and manufacturing, Additional information about material factors that could cause actual results to differ materially from expectations and about material factors or assumptions applied in making forward-looking statements may be found in the Company's Annual Information Form for the year ended September 30, 2023 under "Risk Factors", and in the Company's most recent annual Management's Discussion and Analysis under "Qualitative And Quantitative Disclosures about Risk and Uncertainties" as well as in other public disclosure documents filed with Canadian securities regulatory authorities. The Company does not undertake any obligation to update publicly or to revise any of the forward-looking statements contained in this document, whether as a result of new information, future events or otherwise, except as required by law. These and other risks and uncertainties related to Electrovaya's business and the assumptions on which the forward-looking information is based are described in greater detail in the sections entitled "Risk Factors" in its Annual Report on Form 40-F filed with the U.S. Securities and Exchange Commission and the Ontario Securities Commission in Canada. Electrovaya assumes no obligation to update or revise any forward-looking statements, except as required by applicable laws. These forward-looking statements should not be relied upon as representing Electrovaya's assessments as of any date subsequent to the date of this presentation.

Electrovaya at a Glance



Nasdag: ELVA | TSX: ELVA

Investment Highlights

Electrovaya is a pure play, North American lithium-ion battery technology and manufacturing company on track for rapid growth



Industry Leader

Providing the safest¹ & longest lasting² lithium ion battery technology

1 Proprietary ceramic separator tech

2 Longevity or cycle life 4X typical tech



Reshoring production to US improves capacity, security and gross margins





Premium Product Performance and NextGen Technology

Infinity Technology Significant competitive advantages provide pricing power and higher gross margins

Top-tier Customer Base

More than 12 Fortune 100 end customers and the largest OEM partner in the material handling industry



Large Addressable Heavy Duty Market

\$18 Billion market with rapid growth¹

1 Data obtained through MarketWatch



Unparalleled Experience

25+ years of experience 100+ patents



High Growth with Clear Path to Profitability 100% Organic CAGR over 2 Years FY2023 revenue up 171%



Route to Profitability Inflection Point: Trailing 12 months with \$5.8M in EBITDA

Solid State

Battery technology

developments will

be game-changing

Key Market Challenge: A multi-billion dollar opportunity

Our technology is the ONLY high-performance battery technology that is a true fit for fast growing, mission critical heavy-duty equipment market



Industry Challenge

- Safety and longevity challenges with legacy lithium ion tech; not working for heavy duty applications!
- High profile recalls due to safety: Volvo bus & truck, Proterra, Nikola and others
- LFP energy density is too low for many applications and highly dependent on Chinese technology & supply chains

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Our Solution

- Longer Lifetime: Our Infinity Technology offers the highest cycle with over 4X the life of typical batteries of the same chemistry
- **Improved Safety:** Electrovaya batteries use a proprietary ceramic separator membrane that significantly improves safety.
- Heavy Duty Applications: Mission critical applications incl. Material handling, mining, trucks and buses

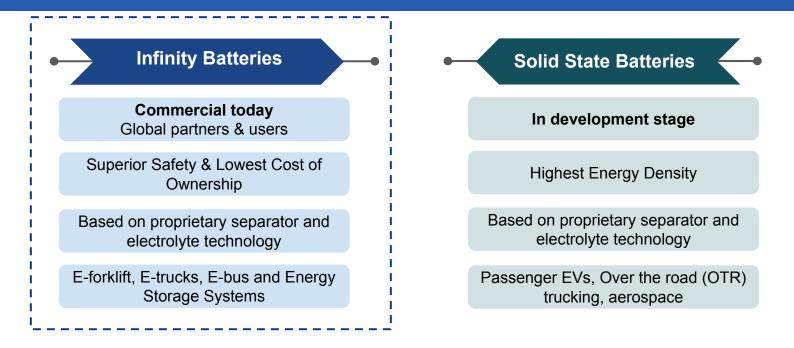


Proven Execution

- Scaled: Deliveries of battery systems increasing more than 100% year over year
- **Proven:** Proven technology and manufacturability >5 years of field data with major customers
- **Reliable:** Operating in mission critical 24/7 warehouse operations at the largest companies in the world (>12 Fortune 100 end users)

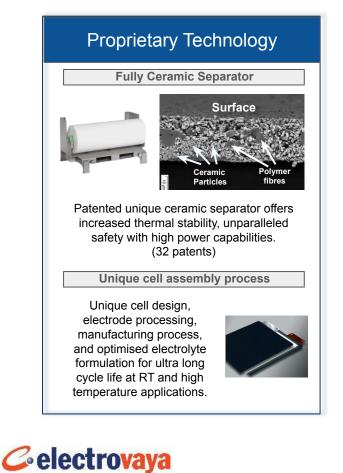
Our Products: Complementary Technology Solutions

Complementary technologies targeting a number of EV applications Infinity Batteries provide industry leading longevity and SSBs provide industry leading energy density



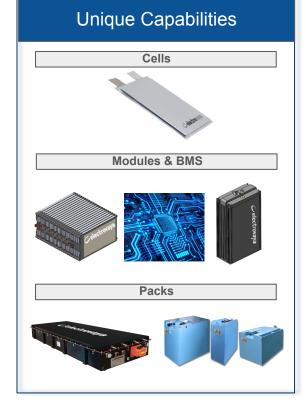


Technology Portfolio



applications NMC Lithium - Ultra long cycle life Nickel-Manganese-Balanced Power-Energy Cobalt Oxide - Superior safety (NMC) - Elexible form factor LFP - Ultra long cycle life Lithium - High Power Ferrophosphate - Superior safety (LiFePO4) Lower cost

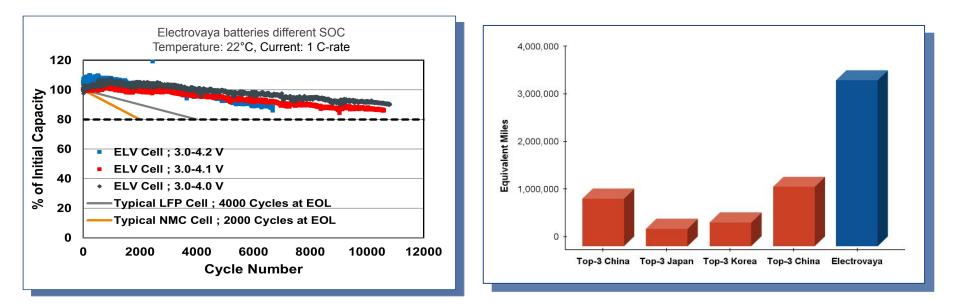
Cell Chemistries for various



Multi-Million-Mile Batteries- Performance Advantage

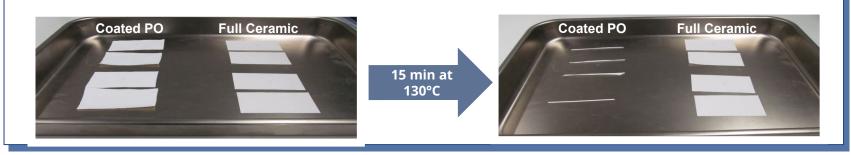


*Cycle equivalent: 14,000 cycles is equivalent to 3,500,000 miles for 250-mile range car



Product Differentiation: Ceramic Separators

Full Ceramic vs Coated PO Separator Thermal Stability



Ceramic-Coated PO Separator (Competitors)



Nail Penetration test



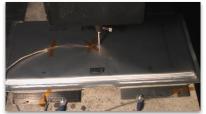
*C*electrovaya



Fully Embedded Ceramic Separator (Electrovaya)



Nail Penetration test



Market Opportunity: Infinity Batteries

Take-away message? A multi-billion dollar addressable market for batteries that are safe, efficient, have a long useful life and low cost of ownership?

			1
APPLICATION		USAGE	MARKET SIZE
	E-Buses E-Delivery Trucks	12-20 hrs/day	~ \$9.6 Billion Addressable Market*
	E-Forklifts/ Warehousing	20-24 hrs/day	~ \$4.5 Billion Addressable Market*
	Stationary energy storage	12-20 hrs/day	~ \$4.2 Billion Addressable Market*
			`~



Battery Requirements: Efficiency, Lifetime, Safety & Cost of Ownership

*Data Numbers Obtained Through MarketWatch

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Electrovaya Batteries Powering ...



Nasdaq: ELVA | TSX: ELVA

Our Customers: Infinity Batteries (MHEV)

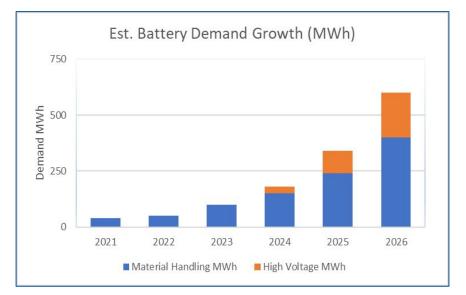


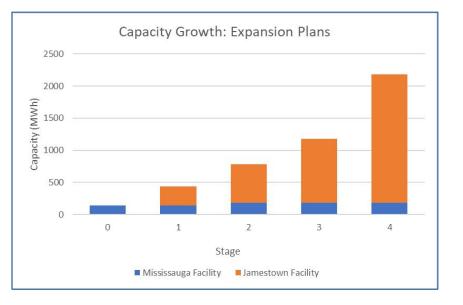
Market Demand: Near-term Exponential Growth for MHEV

Expanding our capacity to scale our business and meet anticipated growth in demand

Demand is expected to grow rapidly over the next 3 Years

We are executing plans to **expand our manufacturing capacity** to ~500MWh in 2025 and >2GWh by 2029





*Demand data from lift truck OEM



Expansion Plan- Jamestown Factory



Industrial facility



Low energy cost

100% Renewable Energy

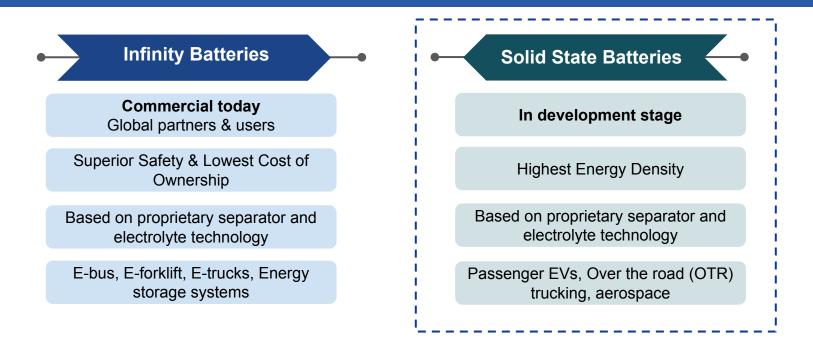
3 Hours

Distance to HQ and Key Customers



Our Products: Technology Solutions

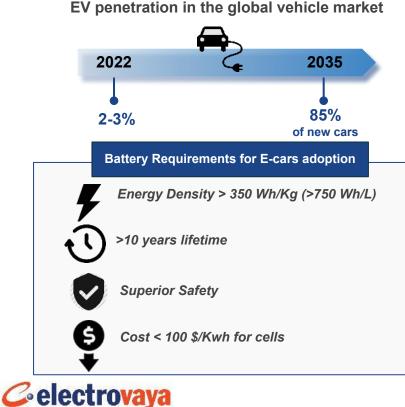
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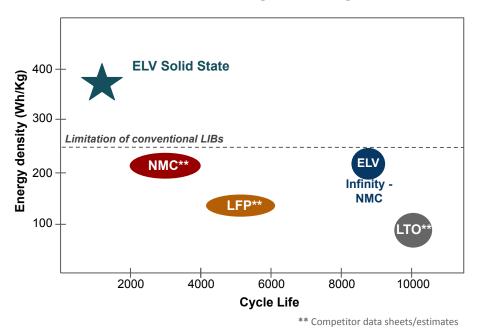


Our Products: Next Gen-Solid State Batteries (SSB)

Solid State Promises Much Higher Energy Density = More Range, Less Weight, Less Cost



Solid State Batteries offer 2X Energy Density over conventional lithium ion batteries= more range, less weight, less cost



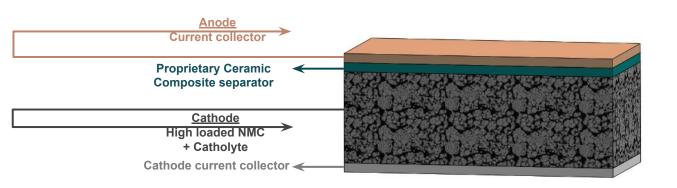
Nasdaq: ELVA | TSX: ELVA

Our Products: Our Approach with SSB

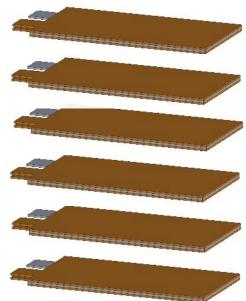
Our SSB platform incorporates versatile, proprietary technology



Single layer Pouch stack



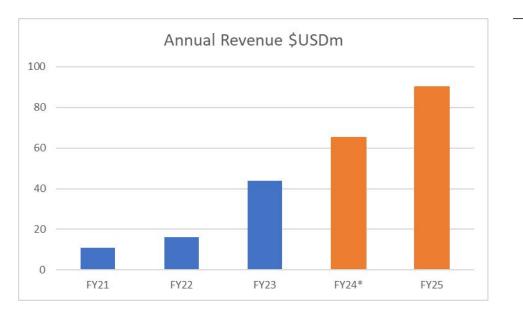
Multi-layer Pouch stack





Financial Performance: 100% CAGR over 2 Years

Market demand provides STRONG TAILWIND for accelerating revenue growth



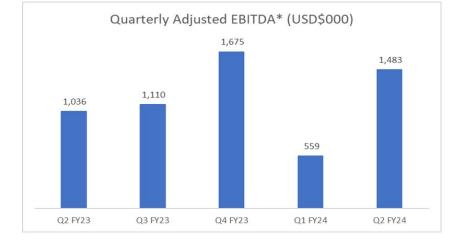
Key Revenue and Margin Drivers

- FY 2023 revenue more than doubled due to increased orders driven by strong market demand
- Expanding capacity provides opportunity to further accelerate revenue growth
- Breakeven ~\$50 million/annum with incremental revenue contributing to net profits
- Margins have improved steadily with Q2FY2024 margins at 35%
- Trailing 12 month adjusted EBITDA at \$5.75 million (12%)

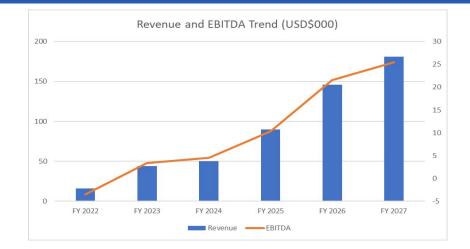
*Approximately \$20 million of the FY24 anticipated revenue is dependent on customers' new distribution center sites. Any delays in the startup of these sites may lead to a proportion of revenue moving into the subsequent fiscal year.

Financial Performance: Profitability Inflection Achieved

Reaching an inflection point... set to be one of the only profitable battery companies in North America



- Operational efficiencies and cost savings drove positive EBITDA in FY23 and into FY24.
- Trends illustrate positive trajectory



- Significant growth expected in Revenue and EBITDA
- Jamestown production coming online mid 2025
- Expansion into multiple revenue streams

* Non-IFRS Measure: Adjusted EBITDA does not have a standardized meaning under IFRS. Therefore it is unlikely to be comparable to similar measures presented by other issuers. We believe that certain investors and analysts use Adjusted EBITDA to measure the performance of the business. Adjusted EBITDA is defined as loss from operations, plus finance costs, stock-based compensation and depreciation costs.



Summary Balance Sheets and Cap Table

Select Balance Sheet Items (\$USD)					
(US\$ in thousands)	<u>03/31/2024</u>	<u>03/31/2023</u>			
Cash	\$1,116	\$1,032			
Trade and other receivables	8,875	10,611			
Inventories	11,261	8,266			
Other current assets	5,916	5,997			
Long-term assets	10,412	10,608			
Total Assets	\$37,580	\$36,514			
Trade & other payables	\$7,982	\$8,429			
Short-term debt	18,044	16,304			
Other Liabilities	3,798	4,635			
Total Liabilities	\$29,824	\$29,368			
Total Equity (Deficiency)	\$7,756	\$7,146			
Total liabilities and equity	\$37,580	\$36,514			

CapTable As of 03/31/2024				
Outstanding shares	34,134,165			
Outstanding warrants	1,711,924			
Outstanding stock options	4,448,988			
Total	40,295,077			

Select Equity Items (Nasdaq \$USD) As of 5/24/2024				
Share price	\$2.86			
Market Cap	\$96.8M			
Insider ownership	~33%			

Management Team









Dr. Raj S. Das Gupta, CEO, Director

Raj has been with the company since 2009 and became CEO in 2022 following his previous role as COO. Raj attended Imperial College, London; MIT; and the University of Cambridge, where he received his Doctorate in Materials Science

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John Gibson, _{CFO}

John is a Certified Professional Accountant ("CPA, CA") with over 15 years of experience in public and private corporations and brings significant experience in corporate accounting and finance, strategic and financial planning, internal controls, and systems.

Dr. Jeremy Dang, VP, Business & Project Development

Jeremy's client portfolio includes lift truck OEMs and Fortune 500 clients from material handling, and energy storage industries. Jeremy is a Certified Chartered Chemist and Project Management Professional with a doctorate in Chemical Engineering. Dr. Elmira Memarzadeh VP, Cell Operations

Elmira has been with Electrovaya since 2014 and currently manages cell production. She has worked on several development projects with other Engineering departments within Electrovaya as well as Vendors and Clients. Elmira received her PhD in Material Science from the University of Alberta.



Jason Roy, VP, Corporate Development and Investor Relations

Jason has been with the company since 2018. He brings with him over 18 years of Capital Markets experience, in various roles of Investor Relations, Communications, Business & Corporate Development with both Publicly traded and Private companies.

Board of Directors

Prof Carolyn Hansson, Director

Professor Carolyn Hansson CM, FCAE, FRSC has a long and distinguished career in industries such as Lockheed Martin (Martin Marietta), Danish Corrosion Labs and Bell Labs as well in academia (Waterloo, Queens, Columbia & SUNY) and was earlier a member of the Board of a TSX and NASDAQ listed Alternate Energy Company (Hydrogenics). Dr Jim Jacobs, Director

Dr. Jacobs' innovations have been instrumental in the development of Electrovaya's SuperPolymer technology. He co-founded the company with Sankar DasGupta in 1996 and was an instrumental part of its IPO in 2000. He served as CTO of the company until 2003. Dr. Jacobs received a BA from Oberlin College, Ohio and completed both his MA and PhD in solid-state physics at the U of Toronto. Dr. Sankar Das Gupta, Executive Chairman

Sankar is an entrepreneur and an award-winning scientist with over 50 US patents who is passionate on the urgency to reduce the effects of Climate Change. He has been a member of many committees including the White House Committee on Energy & Environment, chaired by then Vice- President Al Gore. Recently he was an Advisor to the Indian PM on Climate Change and Energy Kartick Kumar is a seasoned climate change and sustainability investor. Has two decades of investment and operations experience in energy and decarbonization transition issues across Europe, Asia, Latin America, Africa, and the Middle East. Held a range of senior roles within the World Bank Group, the International Finance Corporation (IFC).Holds degrees in economics and law from U of Cambridge, U of Columbia and the U of Toronto.

Kartick Kumar.

Director

Steven Berkenfeld, Director

> Steven is a seasoned industry veteran within both the clean energy and finance industries. Founder and principal of Ecotopia Consulting. Former Managing Director Investment Banking at Barclavs of the Environmental and Social Impact Banking Initiative, was co-head of the firm's Cleantech Initiative, led the banking effort for Emerging Industrial Technology companies. Former Chair of the Board of the Sierra Club Foundation, an organizations focused on social impact and sustainability



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Solid State

Battery technology

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Investor & Media queries, please contact:

Jason Roy VP, Corporate Development & Investor Relations Phone: 905-855-4618

Email: jroy@electrovaya.com Web: www.electrovaya.com



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