



News for Immediate Release

Electrovaya Provides Update on its Solid State Hybrid Battery Technology

Toronto, Ontario – May 17th, 2023 – Electrovaya Inc. (“Electrovaya” or the “Company”) (TSX: EFL; OTCQB: EFLVF), a leading lithium-ion battery technology and manufacturing company, today provided an update on its proprietary solid state lithium metal battery technology at its Electrovaya Labs division.

Progress is ongoing in several areas:

- Multi-layer pouch cells have been developed, and they are amenable for scale up.
- A critical materials technology is the ionic conducting ceramic material. Electrovaya has initiated a program to synthesize the ceramic ionic conductor. A number of different synthesis routes are being developed, and the pouch cells are being fabricated using the Electrovaya-produced ceramic ion conducting material.
- The cell design is essentially anode-less. This allows higher volumetric energy density and lower cost.
- The cells have undergone very high charge and discharge-rates, and the pouch cells are amenable to such high rates.
- Design work on the production line is underway, and a prototype line is expected to be in place later in 2023.
- The target of this project is to double, if not triple, the volumetric energy density of the cell compared to a conventional lithium ion cell technology.

“Electrovaya’s solid state battery is designed for applications such as passenger vehicles and aircraft that require very high energy density performance. With its high energy density, we believe that it has the potential to become a preferred low-cost battery for these and other applications,” said Dr. Raj DasGupta, CEO of Electrovaya. “This solid state battery is complementary to Electrovaya’s Infinity battery platform, which has leading performance for cycle life and safety and is ideal for heavy duty, mission critical applications including electric forklifts, buses, trucks, energy storage.”

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About ElectroVaya Inc.

Electrovaya Inc. (TSX:EFL) (OTCQB:EFLVF) is a pioneering leader in the global energy transformation, focused on contributing to the prevention of climate change by supplying safe and long-lasting lithium-ion batteries without compromising energy and power. The Company has extensive IP and designs, develops and manufactures proprietary lithium-ion batteries, battery systems, and battery-related products for energy storage, clean electric transportation, and other specialized applications. Headquartered in Ontario, Canada, ElectroVaya has two operating sites in Canada and has acquired a 52-acre site with a 135,000 square foot manufacturing facility in New York State for its planned gigafactory. To learn more about how ElectroVaya is powering mobility and energy storage, please explore www.electrovaya.com.

Forward-Looking Statements

This press release contains forward-looking statements relating to the performance of the Company's proprietary solid state hybrid lithium metal battery, anticipated future performance based on past performance and upgrade of our current battery line, opportunity to expand product offerings and customer base, ability of the technology to meet passenger automotive and aerospace applications, ability to develop solid state batteries, ability to develop solid state batteries with pouch cells, ability to produce solid state batteries, ability of the solid state batteries to withstand high rate uses, ability to scale solid state battery cell sizes, ability to produce ion conducting ceramic material with respect to volume and quality, deployment of the Company's products by the Company's customers, and the use and performance of batteries 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 and assumptions are applied in making forward looking statements, and actual results may differ materially from those expressed or implied in such statements. Statements with respect to the performance and life of the Company's products by the Company's customers are based on an assumption that the Company's customers will deploy its products in accordance with communicated intentions and in accordance with recommended usage practices. Past performance of the batteries may not be indicative of future performance. Important factors that could cause actual results to differ materially from expectations include but are not limited to usage patterns by customers, environmental factors affecting usage, and normal product quality variation which effects are not predictable. 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, 2021 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.