

FOR IMMEDIATE RELEASE

## Volt Carbon Technologies Achieves 2023 Target and Record Milestone in its Lithium-Metal Battery Development

Dec 13, 2023, Calgary, Alberta, Canada – Volt Carbon Technologies Inc. (“Volt Carbon” or the “Company”) (TSX-V: VCT) (OTCQB: TORVF) is pleased to announce the most recent test outcomes for its exclusive lithium-ion battery enabling the company to exceed its 2023 target milestone of 500 cycles. These results mark the advancements made at Solid Ultrabattery’s Guelph facility throughout 2023 and builds upon the results disclosed previously on July 24, 2023.

### Highlights

The company utilized its exclusive technology for the production of battery pouch cells, incorporating composite electrolytes to enhance cycle life and battery stability. These cells were assembled using the company’s custom electrolytes and membranes, along with the high-energy cathode NMC811 and lithium metal, resulting in the creation of advanced lithium-metal battery cells. Additionally, the integration of carbon nanotubes (CNTs) as the conductive material in the NMC811 cathode contributed to improved cycle life exceeding 500 cycles, with a retention capacity of 87.7% at the 514th cycle, as illustrated in Figure 1 below. Furthermore, the use of CNTs allowed for a reduction of the conductive material in the cathode by less than 50% compared to carbon black.

These outcomes signify the company’s record achievement in cycle life at its Guelph battery plant.

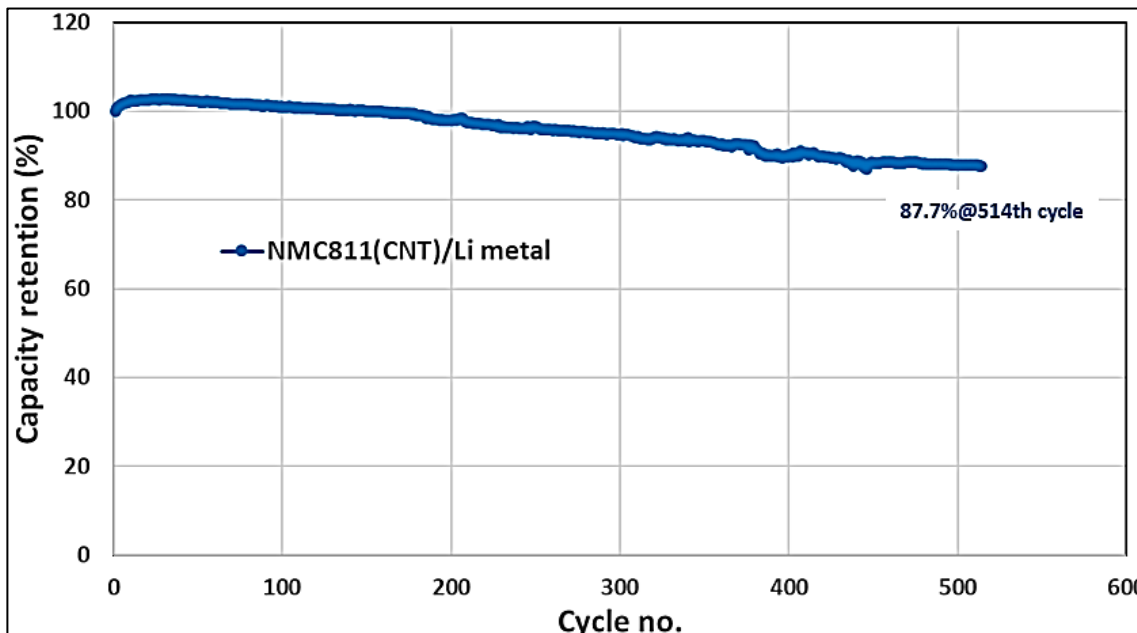


Figure. 1: NMC811 Lithium Metal Pouch Cell, CNT, C/3, 25 °C

### Next Steps

The obtained test results pave the path for the Company to set its sights on the next milestone, aiming to exceed 800 cycles and attain 80% capacity in 2024 with its lithium metal battery technology.

From an operational perspective, the company is actively preparing for the implementation of Phase Two, which involves designing and constructing a pilot battery line and dry room. These crucial additions will empower the plant to manufacture cells at pre-production levels, adhering to higher quality standards and effectively transforming it into

a megawatt-sized factory. The products from this pilot line will target specialized consumer and industrial applications. To fund this initiative, the company is actively seeking fundraising opportunities.

V-Bond Lee, the company's CEO and President, expressed, "I'm pleased with these standout results; the CNTs boosted performance measurably, while giving a slight energy density bump. We're now targeting the 800 cycles and 80% capacity goals for 2024 as laid out in our product roadmap."

### **About Volt Carbon Technologies**

Volt Carbon is a publicly traded carbon science company, with specific interests in energy storage and green energy creation, with holdings in mining claims in the provinces of Ontario, Quebec and British Columbia in Canada. For the latest information on Volt Carbon's properties and news please refer to the website [www.voltcarbontech.com](http://www.voltcarbontech.com).

On behalf of the Board of Directors

### **Volt Carbon Technologies Inc.**

V-Bond Lee, P. Eng.  
CEO, President, Chairman of the Board and Director

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*These forward-looking statements are based on current expectations and are naturally subject to uncertainty and changes in circumstances that may cause actual results to differ materially. Although Volt believes that the expectations represented in such forward-looking statements are reasonable, there can be no assurance that these expectations will prove to be correct. Such statements include statements with respect to: (i) the Company's goal to exceed 800 cycles and 80% capacity with its safe lithium metal battery technology; (ii) the Company's intention to develop an all-solid state battery by 2030 (iii) the Company's intention to implement Phase Two which involves designing and constructing a pilot line and dry room; (vii) the exception that the Phase Two additions will allow the plant to manufacture cells at pre-production levels with higher quality standards, and effectively transform it into a megawatt size factory and that the products produced from this pilot line will be targeted towards specialty consumer and industrial applications; and (vi) the Company's intention to raise funds. Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors, including those discussed above, could cause actual results to differ materially from the results discussed in the forward-looking statements. Any such forward-looking statements are expressly qualified in their entirety by this cautionary statement. All of the forward-looking statements made in this press release are qualified by these cautionary statements. Readers are cautioned not to place undue reliance on such forward-looking statements. Forward-looking information is provided as of the date of this press release, and Volt assumes no obligation to update or revise them to reflect new events or circumstances, except as may be required under applicable securities legislation.*