



FOR IMMEDIATE RELEASE

## **Volt Carbon's Mineral Processing Facility in Toronto and its Subsidiary, Solid UltraBattery in Guelph Awarded DAIR Green Fund for Aerospace Innovation Projects**

November 15, 2024, Canada – Volt Carbon Technologies Inc. (“Volt Carbon” or the “Company”) (TSX-V: VCT) (OTCQB: TORVF), in collaboration with Downsview Aerospace Innovation & Research (DAIR), is pleased to announce that both Volt Carbon’s southern Ontario-based mineral processing operation (Toronto) and its subsidiary, Solid UltraBattery Inc. (Guelph), have been selected as recipients of the DAIR Green Fund. The funded projects include: 1) “Development of High-Performance Carbon Materials for Aerospace Industries” and 2) “Advancements in Low-Temperature Performance of Lithium-Ion Batteries.” These initiatives aim to advance battery solutions for unmanned aerial systems and enhance the capabilities of graphite and graphene in aerospace materials.

### **Funding Initiative**

The DAIR Green Fund empowers small and medium-sized enterprises (SMEs) to transform the southern Ontario aerospace industry through sustainable and green aviation technologies and solutions. Funded by the Government of Canada through the [Federal Economic Development Agency for Southern Ontario](#) (FedDev Ontario), this initiative fuels DAIR's mission to revolutionize the collaborative environment by catalyzing innovation in aerospace and beyond. By strengthening forward-thinking ideas and providing SMEs with technology, collaboration, partnerships, people and services, the DAIR Green Fund drives impactful change across our industrial sectors and better outcomes for Canada's sustainable aerospace goals.

### **Funding Overview**

DAIR will fund 50% of the total project cost for each entity, up to a maximum of \$75,000. The participating companies are responsible for covering the remaining 50% over a period of 24 months.

### **Process Overview**

In spring of 2024, DAIR launched a second call for proposals. Submitted projects were evaluated by a Review Committee to identify those aligned with Canada’s 2050 net-zero targets in the aerospace and aviation sectors, focusing on one of four key pillars: energy propulsion, aircraft configuration and systems, operations, and advanced materials. Additionally, the committee assessed each project based on criteria such as commercialization potential, collaborative efforts, leveraged support, and industry impact, with a focus on advancing green aviation and sustainability.

### **Volt Carbon Project**

This project, dedicated to Volt Carbon’s mineral processing facility in Toronto, leverages Volt Carbon’s proprietary method for extracting large-flake graphite from host rock, enabling the efficient production of expandable graphite and graphene. Graphite, a critical mineral with wide-ranging industrial uses, including energy storage is central to this initiative. By developing high-performance carbon-based materials, it addresses the critical demand for aerospace-grade graphite amidst recent trade restrictions affecting North American supply chains. Graphene composites, with their superior strength-to-weight ratios, enable lighter, aerodynamically optimized designs that enhance aircraft fuel efficiency and overall performance. Additionally, graphite's thermal conductivity plays a vital role in the thermal management systems necessary for electrifying aircraft and advancing towards net-zero emissions. Through this initiative, Volt aims to deliver advanced aerospace materials that support the industry's evolving sustainability and performance standards.

"We're thrilled to be at the forefront of developing advanced carbon materials that meet the needs of the aerospace industry, and we're honoured to have the support of DAIR in this journey. With our proprietary graphite extraction process and the unique capabilities of expandable graphite, we truly believe we are opening up exciting avenues for innovation in aircraft designs, fuel efficiency, and thermal management. This project reflects Volt Carbon's commitment to sustainable, high-performance solutions and, with DAIR's partnership, we're proud to contribute to Canada's net-zero goals for aerospace." - V-Bond Lee, P. Eng., CEO, President, and Chairman of the Board

### **Solid UltraBattery Project**

This project aims to enhance the low-temperature performance of lithium-ion batteries, improving their functionality in cold environments, particularly for small unmanned aerial vehicles (UAVs). Solid UltraBattery is focused on developing a novel electrolyte to address performance issues at low temperatures, thereby increasing battery reliability and extending flight range in extreme weather conditions. Ground testing in a controlled low-temperature chamber will simulate real flight conditions, enabling Solid UltraBattery to establish a robust performance envelope for the batteries. Through a partnership with the University of Waterloo, Solid UltraBattery gains access to advanced research tools and expertise to refine the battery's performance. This initiative aligns with the shift toward net-zero aviation, reducing reliance on fossil fuels and advancing sustainable battery technology for aerospace applications.

"We are excited to be pushing the boundaries of battery technology with this project, which is now our second DAIR-funded initiative for Solid UltraBattery. Building on the success of our first project, we expect this effort to further boost our program in low-temperature applications. By developing lithium-ion batteries that perform reliably in low temperatures, we are not only improving the performance of unmanned aerial systems but also contributing to the broader goal of sustainable aviation. Our work at Solid UltraBattery focuses on providing innovative, high-performance solutions that meet the demanding needs of the aerospace industry, and this project is a significant step toward achieving that vision." - Dr. Hey Woong Park, Head of Battery Development, Solid UltraBattery

"Businesses and organizations and the entrepreneurs and workers behind them are an integral part of what keeps Canada's economy strong. Our government is pleased to support organizations like DAIR as they help businesses, like Solid UltraBattery and Volt Carbon Technologies, grow and create new scalable and sustainable technologies and innovations for the aerospace industry. These efforts will help strengthen our aerospace sector while boosting our economy and creating good jobs." - The Honourable Filomena Tassi, Minister responsible for the Federal Economic Development Agency for Southern Ontario

"DAIR is excited to support Volt Carbon Technologies in Toronto and Solid UltraBattery in Guelph through the DAIR Green Fund, as they research and develop graphene battery technologies and their performance in cold environments. As recently showcased at the DAIR To Innovate conference, the work by the teams at Volt Carbon Technologies and Solid UltraBattery is critical in advancing battery integration in the aerospace sector." – Phil Arthurs, Executive Director, DAIR

### **About Volt Carbon Technologies**

Volt Carbon Technologies, headquartered in Calgary, is a publicly traded carbon science company focused on energy storage and green energy solutions. The company operates a lithium-ion battery plant in Guelph and a mineral processing facility in Toronto. Volt Carbon also holds mining claims across Ontario, Quebec, and British Columbia, supporting its commitment to sustainable resource development. For the latest updates on Volt Carbon's projects and news, visit [www.voltcarbontech.com](http://www.voltcarbontech.com).

### **About DAIR**

Downsview Aerospace Innovation & Research (DAIR) is a not-for-profit whose mission is to revolutionize the collaboration environment by catalyzing innovation in aerospace and beyond. DAIR supports its members and network

by offering access to state-of-the-art equipment and infrastructure to accelerate leading-edge and sustainable research and technology adoption; creating training solutions for the business and technology challenges of today and tomorrow; providing a platform for industry, academia, and government synergies, fostering and advancing R&D partnerships; and bringing awareness to the aerospace industry locally, nationally, and globally. To learn more about DAIR please visit the website [www.dairhub.com](http://www.dairhub.com).

### **About FedDev Ontario**

For 15 years, the Government of Canada, through [FedDev Ontario](#), has worked to advance and diversify the southern Ontario economy through funding opportunities and business services that support innovation, growth and job creation in Canada's most populous region. The Agency has delivered impressive results, which can be seen in southern Ontario businesses that are creating innovative technologies, improving productivity, growing revenues, creating jobs, and in the economic advancement of communities across the region. Learn more about the impacts the Agency is having in southern Ontario by exploring our [investment profiles](#), our [Southern Ontario Spotlight](#), and FedDev Ontario's [X](#), [Facebook](#), [Instagram](#) and [LinkedIn](#).

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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**FORWARD LOOKING STATEMENTS:** *This press release contains forward-looking statements, within the meaning of applicable securities legislation, concerning Volt's business and affairs. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "intends" "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved".*

*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. 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. Such statements include the statement with respect to: Solid UltraBattery's (i) the aim to advance battery solutions for unmanned aerial systems and enhance the capabilities of graphite and graphene in aerospace materials; (ii) Volt aims to deliver advanced aerospace materials that support the industry's evolving sustainability and performance standards; (iii) management's belief that Volt Carbon is opening up exciting avenues for innovation in aircraft designs, fuel efficiency, and thermal management; (iv) Volt's attempt to contribute to Canada's net-zero goals for aerospace; (v) the aim to enhance the low-temperature performance of lithium-ion batteries, improving their functionality in cold environments, particularly for*

*small unmanned aerial vehicles (UAVs); (vi) Solid UltraBattery's goal to develop a novel electrolyte to address performance issues at low temperatures, thereby increasing battery reliability and extending flight range in extreme weather conditions; (vii) Solid UltraBattery's expectation that its efforts may further boost our program in low-temperature applications; (viii) Solid UltraBattery's goal to develop lithium-ion batteries that perform reliably in low temperatures to improve the performance of unmanned aerial systems and contribute to the broader goal of sustainable aviation; (ix) Solid UltraBattery's vision to provide innovative, high-performance solutions that meet the demanding needs of the aerospace industry; (x) Solid UltraBattery's anticipated it is involved in; and (xi) Volt Carbon's anticipated contribution of up to 50% of the total project cost it is involved in. 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.*