
Solidion Technology's Lithium-Sulfur Batteries on a Launch Pad to Accelerate the Takeoff of the eVTOL Aircraft Industry

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Solidion Technology, Inc., an advanced battery technology solutions provider, began trading on NASDAQ on February 5, 2024. Solidion is the merged entity between Honeycomb Battery Company and Nubia Brand International Co., a special purpose acquisition company (SPAC), based in Dallas, Texas.

For those who envision taking an air taxi to go from Manhattan to JFK Airport or from the San Francisco Airport to San Jose, California, without having to endure traffic jams or inhale carbon monoxide en route, this vision of the future will come true sooner than expected.

Electric vertical takeoff and landing (eVTOL) aircraft is the next urban transportation technology breakthrough. "There are 288 companies in Electric Vertical Takeoff and Landing Aircraft"¹. At the heart of an eVTOL aircraft is a heavy battery pack. The amount of energy that can be stored in a battery pack with a reduced mass must be significantly increased before the eVTOL industry can literally take off.

Industry experts agree that "eVTOL aircraft needs a battery system with a gravimetric energy density $> 400 \text{ Wh/kg}$ "². For an air taxi to carry more passengers, a battery cell energy density higher than 450 or even 500 Wh/kg will be required.

Lithium-sulfur (Li-S) batteries are currently the only practical energy storage solution capable of delivering such a high energy density (theoretically $> 600 \text{ Wh/kg}$) to power the transition to electric air mobility.

The [Solidion](#) technical team began development of Li-S batteries in 2010. Solidion has built the most complete IP (including 100+ US patents and numerous international patents on Li-S

batteries) and essential technologies for fully commercializing these ultra-high energy batteries. These technologies, covering protected lithium metal anode, quasi-solid or solid-state electrolyte and separator, graphene-enabled cathode, and innovative battery cell-to-pack designs, position Solidion to be a global leader in high-energy batteries for air mobility.

The same solid-state lithium-sulfur batteries have the potential to revolutionize the ground transportation with their inherent safety and doubled the range on a single charge, given the same battery weight.

Solidion welcomes the opportunities to form alliances with strategic partners from various industries; together we can accelerate the time-to-market of lithium-sulfur batteries and accelerate the takeoff of the eVTOL industry.

Read the [original article](#) on GlobeNewswire.