

## Stellantis and Factorial Energy Reach Key Milestone in Solid-State Battery Development

- Stellantis and Factorial Energy successfully validated automotive-sized solid-state battery cells with 375Wh/kg energy density, a major step toward commercial use
- Breakthrough FEST® technology enables fast charging from 15% to 90% in 18 minutes
- The battery cells can operate in temperatures from -30°C to 45°C (-22°F to 113°F), with potential for further expansion and demonstrate high power capabilities up to 4C discharge
- Stellantis is incorporating Factorial's solid-state batteries into a demonstration fleet by 2026
- Stellantis and Factorial Energy's collaboration extends beyond cell development to optimizing pack architecture, improving vehicle integration, and enhancing overall range and cost efficiency

**Amsterdam and Boston, MA – April 24, 2025** – Stellantis N.V. and Factorial Energy ([Factorial](#)) today announced the successful validation of Factorial's automotive-sized FEST® (Factorial Electrolyte System Technology) solid-state battery cells. This achievement marks a significant step forward on the path to bringing next-generation electric vehicle (EV) batteries to market.

“Reaching this level of performance reflects the strengths of our collaboration with Factorial,” said Ned Curic, Stellantis Chief Engineering and Technology Officer. “This breakthrough puts us at the forefront of the solid-state revolution, but we are not stopping there. We continue working together to push the boundaries and deliver even more advanced solutions, bringing us closer to lighter, more efficient batteries that reduce costs for our customers.”

Unlike conventional lithium-ion batteries, solid-state batteries offer higher energy density and faster charging. The validated 77Ah FEST® cells demonstrated an energy density of 375Wh/kg with over 600 cycles progressing towards automotive qualification, a milestone for large-format lithium-metal solid-state battery. The cells enable a significant reduction in charging time, from 15% to over 90% charge in just 18 minutes at room temperature. Additionally, the cells deliver high power output with discharge rates up to 4C, supporting greater performance demands in electric vehicles.

Factorial's scientific engineering and AI-driven tools developed the latest electrolyte formulation that allows the battery to perform in temperatures ranging from -30°C to 45°C (-22°F to 113°F). This surpasses previous solid-state limitations and opens the possibility for better performances across various climates.

“Battery development is about compromise. While optimizing one feature is simple, balancing high energy density, cycle life, fast charging, and safety in an automotive-sized battery with OEM validation is a breakthrough,” said Siyu Huang, CEO of Factorial Energy. “This achievement with Stellantis is bringing next-generation battery technology from research to reality.”

By closely collaborating on pack design and leveraging this disruptive technology, Stellantis and Factorial are optimizing battery pack architecture to reduce weight and improve overall system efficiency for seamless integration. These weight savings directly enhance vehicle range and support more sustainable and affordable EV solutions.

Building on Stellantis’ \$75 million investment in Factorial Energy in 2021, this milestone strengthens the strategic collaboration between the two companies. With this achievement, Stellantis will advance its previously announced plan to integrate Factorial’s solid-state batteries into a demonstration fleet by 2026. This demonstration fleet represents the next step toward commercializing this promising technology, enabling further validation of Factorial’s solid-state batteries and assessment of performance in real-world driving conditions.

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#### **About Stellantis**

Stellantis N.V. (NYSE: STLA / Euronext Milan: STLAM / Euronext Paris: STLAP) is a leading global automaker, dedicated to giving its customers the freedom to choose the way they move, embracing the latest technologies and creating value for all its stakeholders. Its unique portfolio of iconic and innovative brands includes Abarth, Alfa Romeo, Chrysler, Citroën, Dodge, DS Automobiles, FIAT, Jeep®, Lancia, Maserati, Opel, Peugeot, Ram, Vauxhall, Free2move and Leasys. For more information, visit [www.stellantis.com](http://www.stellantis.com).

#### **About Factorial Inc.**

Founded and headquartered in the United States, Factorial is at the cutting edge of solid-state battery technology, developing solutions that offer longer range per charge, increased safety, and cost competitiveness with conventional lithium-ion batteries. The company’s proprietary solid-state platforms FEST® (Factorial Electrolyte System Technology) and Solstice™ utilize electrolyte innovations that enable safe and reliable cell performance with high-capacity cathode and anode materials. Factorial’s solid-state batteries are designed to integrate seamlessly with existing manufacturing processes, ensuring scalability and efficiency. The company has established joint development agreements with leading global automakers, including Mercedes-Benz, Stellantis, Hyundai Motor Company, and Kia Corporation. For more information, visit [www.factorialenergy.com](http://www.factorialenergy.com).



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**Stellantis Forward Looking Statements**

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*Actual results may differ materially from those expressed in forward-looking statements as a result of a variety of factors, including: the ability of Stellantis to launch new products successfully and to maintain vehicle shipment volumes; changes in the global financial markets, general economic environment and changes in demand for automotive products, which is subject to cyclical; Stellantis’ ability to successfully manage the industry-wide transition from internal combustion engines to full electrification; Stellantis’ ability to offer innovative, attractive products and to develop, manufacture and sell vehicles with advanced features including enhanced electrification, connectivity and autonomous-driving characteristics; Stellantis’ ability to produce or procure electric batteries with competitive performance, cost and at required volumes; Stellantis’ ability to successfully launch new businesses and integrate acquisitions; a significant malfunction, disruption or security breach compromising information technology systems or the electronic control systems contained in Stellantis’ vehicles; exchange rate fluctuations, interest rate changes, credit risk and other market risks; increases in costs, disruptions of supply or shortages of raw materials, parts, components and systems used in Stellantis’ vehicles; changes in local economic and political conditions; changes in trade policy, the imposition of global and regional tariffs or tariffs targeted to the automotive industry, the enactment of tax reforms or other changes in tax laws and regulations; the level of governmental economic incentives available to support the adoption of battery electric vehicles; the impact of increasingly stringent regulations regarding fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions; various types of claims, lawsuits, governmental investigations and other contingencies, including product liability and warranty claims and environmental claims, investigations and lawsuits; material operating expenditures in relation to compliance with environmental, health and safety regulations; the level of competition in the automotive industry, which may increase due to consolidation and new entrants; Stellantis’ ability to attract and retain experienced management and employees; exposure to shortfalls in the funding of Stellantis’ defined benefit pension plans; Stellantis’ ability to provide or arrange for access to adequate financing for dealers and retail customers and associated risks related to the operations of financial services companies; Stellantis’ ability to access funding to execute its business plan; Stellantis’ ability to realize anticipated benefits from joint venture arrangements; disruptions arising from political, social and economic instability; risks associated with Stellantis’ relationships with employees, dealers and suppliers; Stellantis’ ability to maintain effective internal controls over financial reporting; developments in labor and industrial relations and developments in applicable labor laws; earthquakes or other disasters; risks and other items described in Stellantis’ Annual Report on Form 20-F for the year ended December 31, 2024 and Current Reports on Form 6-K and amendments thereto filed with the SEC; and other risks and uncertainties.*

*Any forward-looking statements contained in this communication speak only as of the date of this document and Stellantis disclaims any obligation to update or revise publicly forward-looking statements. Further information concerning Stellantis and its businesses, including factors that could materially affect Stellantis’ financial results, is included in Stellantis’ reports and filings with the U.S. Securities and Exchange Commission and AFM.*