# Ford unveils safer, cheaper Lithium-Metal-Rich battery for EVs by 2027



Ford Motor Company has made significant advancements in battery technology with its new Lithium-Metal-Rich (LMR) battery chemistry, which promises three key advantages over existing batteries: enhanced safety, improved energy density, and reduced costs. This development is crucial as the automotive industry aims to attain cost parity with traditional gasoline vehicles. The breakthrough originated from Ford Ion Park, the company’s dedicated facility for battery research and development. If successful, the adoption of LMR battery technology could see electric vehicles equipped with this new chemistry operational as early as 2027.

Airbus has recently halted plans for hydrogen-powered aviation, facing challenges primarily related to the storage of hydrogen fuel. Hydrogen’s low energy density necessitates that it be stored either as a high-pressure gas or, more commonly, as a super-cooled liquid at extremely low temperatures of -253°C (-423°F). Although the potential for hydrogen-powered airliners exists, significant hurdles remain before they can become mainstream, particularly in the areas of production and distribution of green hydrogen.

In the realm of electric vehicles, teams are gearing up for this year's Rhino Charge, an annual charitable event in which participants drive converted off-road vehicles on a challenging 150-200km route. The event is designed to raise funds aimed at protecting the environment and wildlife, with accompanying initiatives that have already seen the construction of approximately 780 kilometres of electric fencing to mitigate human-wildlife conflict.

Recent reports indicate that electric vehicle sales in Europe experienced a substantial increase, with approximately 365,000 plug-in vehicles registered in March, marking a 22% rise year-on-year. Battery Electric Vehicles (BEVs) led this growth, with a 24% increase in registrations. While Tesla remains the dominant player in the European EV market, Volkswagen Group has shown strong performance, with several models achieving record sales figures.

Concerns about cybersecurity in the automotive sector have emerged, with security experts warning that electric vehicles may be vulnerable to hacking attempts. Modern electric cars, being technologically advanced, generate extensive data, with potential access points including built-in microphones, cameras, and Wi-Fi connectivity. Furthermore, any mobile devices connected to the vehicle can also serve as data sources.

On a related note, Tesla insurance premiums are reportedly increasing at a rate that is more than double the average across the US auto market, partly due to rising repair costs and an increase in vandalism incidents. Premiums for Tesla vehicles, especially the Model Y, have seen substantial hikes in comparison to other vehicles' insurance rates.

In regulatory news, proposed changes by the Consumer Product Safety Commission (CPSC) could have ramifications for e-bike manufacturers in the US. If the regulations are approved, e-bikes not meeting specific testing standards could be banned from sale, raising concerns about the impact on current inventory without clear guidance on compliance.

Meanwhile, analysts have critically examined the future of fuel cells in the automotive sector, noting a marked decline in registrations of hydrogen-powered vehicles. The figures have dropped from 900 in 2022 to just 150 in 2023, while battery-electric trucks are outpacing their hydrogen counterparts, with an annual increase of around 75,000 new registrations in recent years.

In product launches, Isuzu has unveiled its first electric pickup, the D-MAX EV, which closely resembles the traditional diesel D-MAX model, utilising dual electric motors to deliver a performance comparable to existing gas models. The vehicle features a 66.9 kWh battery, offering a driving range of up to 263 km (162 miles) according to the WLTP standards.

Finally, advancements in fusion reactor technology are being made, particularly with TAE Technologies' new reactor dubbed "Norm." The company asserts that this reactor design could potentially yield 100 times more power than existing models while reducing costs by up to 50%, although many industry experts remain cautious due to historical overpromises within the fusion energy sector.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

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