Stony Brook Researchers Begin Testing Revolutionary Batteries

As Stony Brook University continues to perform world-class research in a wide range of fields, they have begun testing a new, energy-efficient, battery known as a <u>vanadium flow battery</u>. With additional research and development, this technology could be used to revolutionize the electric car industry by providing batteries which are <u>safer</u>, <u>longer-lasting</u>, <u>and cheaper</u> to create than the traditional Lithium lon batteries.

By design, vanadium flow batteries are relatively large and have only been able to be used in industrial settings such as a powerplant or electrical grid storage, until now. StorEn Technologies has recently had a technological breakthrough, enabling the production of condensed, smaller batteries. The objective of the Stony Brook researchers is to validate the battery across New York State standards for pollution and environmental impact.



As StorEn Technologies is picking up traction in the energy sector, StorEn CTO Angelo D'Anzi said, "Our R&D focused on building upon these proven characteristics to enhance the electrical performance of vanadium batteries as a strategy to reduce cost, and on reducing their environmental footprint" as a way of showing the companies intentions.

After passing the relevant tests and validations by Stony Brook and other New York State programs, StorEn expects to be able to commercialize their product. Since the batteries are nonflammable and are completely contained within their shell, they serve no danger to the users. Alongside those benefits, these batteries are also reusable, are rated 100% on the Index of Recyclability, and do not lose their capability to store energy after being completely discharged for over twenty years. Combined with electric vehicles, vanadium flow batteries could extend the potential mileage, minimize electricity consumption, and significantly reduce the environmental impact of car manufacturing. The testing is expected to be finished by the end of March and the company will then go through a comprehensive technical and environmental impact analysis by the New York State Pollution Prevention Institute.