WinterGreen Research, Inc.

Press Release

Vehicle Company Hybrid Solid-State Batteries—Markets Grow At A Compound Annual Growth Rate (CAGR) of 147.8% from 2022 to 2028.

LEXINGTON, Massachusetts (March 19, 2022) – WinterGreen Research announces that it has a new study on Vehicle Company Hybrid Solid-State Battery Next Generation Power for Transportation and Energy Storage: Market Shares, Market Forecasts, Market Analysis, 2022-2028. The 2022 study has 142 pages, 75 tables and figures.

Solid-State Batteries represent next generation automation of electricity storage, a market in line for significant growth. It is expected to grow at a compound annual growth rate (CAGR) of 147.8% from 2022 to 2028. Rising demand for solid-state batteries among end-use sectors along with the rising research and development activities are focused on commercializing the battery. Lower costs for solid state batteries are expected to propel market growth.

EVs represent a primary market. The electrical solid state battery energy industry will reshape the future. The integrated business model of storage is becoming an application for energy consumption. Amid a greater industry focus on battery technology, automakers with EVs in their lineups are scrambling to position themselves for the arrival of solid-state battery cells soon.

As EV sales increase driven by tighter regulation of carbon emissions, solid-state battery makers become indispensable for the renewable energy industry. Solid-state battery products are evolving an ability to be mass produced. Toyota has a timeline to achieve mass production of solid-state electric vehicle batteries by 2025. ProLogium said it aims to achieve mass produce solid-state batteries in 2022.

With war between Russia and the Ukraine, the world has embraced EVs as a way to reduce dependence on oil. This is being embraced as a shift to renewable energy. Transforming the economy to run electric vehicles, powered by solid state batteries, means that, no one has to worry about gas prices. With gas prices more than doubling in less than a week, demand of EVs is accelerating at a rapid pace.



Copyright 2022 WinterGreen Research, Inc.



# WinterGreen Research, Inc.

## Press Release

Amid a greater industry focus on solid state battery technology, automakers with EVs in their lineups are scrambling to position themselves for the arrival of hybrid solid-state battery cells. Ilika, a materials research firm that has helped Toyota develop solid-state batteries, says the carmaker has been working on solid electrolyte technology for 10 years. Toyota's vision is to replace the flammable liquid electrolyte in a lithium-ion battery with a conductive ceramic material.

In Japan, as is true all over the world, carmakers are rushing to commercialize solid-state batteries. Toyota, Nissan and Honda joined forces with Panasonic to work on solid-state batteries for electric cars. The consortium includes 23 firms in total. They aim to commercialize solid-state batteries in the early 2020ies. The race for the next generation of battery technology is on.

The significant growth of automotive industry in the US, North America, Europe, China, India, Japan, and South Korea is expected to promote the demand for solid state batteries. Amprius Technologies' 100% silicon nanowire batteries are a breakthrough technology that is revolutionizing the battery industry. With the highest energy density, Amprius Technologies batteries improve the performance of electric vehicles, aircraft, drones. Amprius Technologies equipment for high volume manufacturing of 100% silicon nanowire anodes employs inline, continuous, and roll-to-roll production methods.

Worldwide Solid-State Battery markets are poised to achieve remarkable uptake in the market. Next generation Solid-State Batteries promise to bring the biggest change in human labor that has ever occurred. BMW is testing a solid-state battery that can be completely recharged in four minutes. BMW's is teamed with a company Solid Power, dedicated to developing solid-state batteries.

Innovative solid state battery component techniques bring the industry closer to realizing all-solid-state battery, greatly diversifying the battery product lineup. Battery manufacturers and automakers around the globe strive to develop a next-generation electric vehicle battery, called an all-solid-state battery (ASSB), which enables longer mileage and a shorter charging time than current EV batteries due to its higher energy density.



Copyright 2022 WinterGreen Research, Inc.



# WinterGreen Research, Inc.

## **Press Release**

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by identifying next generation technology. It is next generation technology that drives market growth. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

#### Contact:

**Susan Eustis. President and Co-Author** WinterGreen Research susan@wintergreenresearch.com 6 Raymond St. Lexington, MA 02421 www.wintergreenresearch.com

Key Words: Solid-State Battery, Solid-State Battery, Solid-State Market Driving Forces, Solid-State Market Forecasts, Solar Energy Storage, Wind Energy Storage, Cities of the Future, Structure of Rechargeable Battery, Solid-State EV Electric Car, Forecast Electric Car Battery, Solid-State Cathode, Ceramics, Cobalt, Lithium Ion Battery, EV, Electric Vehicle, Electric Vehicles, Drones, UAV, UUV, Power Tools, Smart Phone Equipment, Consumer Electronics, Manganesem, Nickel Cobalt Manganese



Copyright 2022 WinterGreen Research, Inc.

(781) 863-5078 (Work)

(617) 852-7876 (Cell)