

## **Press Information**

# Kyocera and 24M Develop World's First SemiSolid Lithium-ion Battery System with Improved Safety, Longer Life, and Lower Cost

Plans to Build Full-Scale Mass Production System Following Initial Success with Pilot

**Kyoto/London, January 27<sup>th</sup>, 2020.** Kyocera and 24M announced that Kyocera has formally launched its residential energy storage system, **Enerezza**, **the world's first system built using 24M's novel SemiSolid electrode manufacturing process**. In addition, Kyocera has extended its commitment to 24M's unique manufacturing platform with plans to start full-scale mass production in the fall of 2020.



Next-Generation SemiSolid Lithium-ion Battery System "Enerezza," power conditioner (left), battery unit (middle), and remote controller (right)

In June 2019, Kyocera began pilot production of 24M's SemiSolid battery technology to validate its use in residential energy storage systems in the Japanese market. Based on the successful pilot, Kyocera recently rolled out its full Enerezza product line — a 24M-based residential energy storage system available in 5.0 kWh, 10.0 kWh, and 15.0 kWh capacities designed to meet diverse customer needs.

"Kyocera and our customers benefit from long battery life, unparalleled safety, and the low-cost approach enabled by 24M's unique manufacturing process," said Toshihide Koyano, Deputy General Manager of Corporate Solar Energy Group at Kyocera. "At Kyocera, we believe that 24M's SemiSolid technology is the emerging standard for lithium-ion battery manufacturing. We are delighted to be the first company to deliver residential energy storage products using 24M's novel process."



24M's **innovative manufacturing process** delivers market-leading price-performance. SemiSolid electrodes use **no binder**, **mixing electrolyte with active materials** to form a clay-like slurry with unique attributes. As a result, the 24M process eliminates the need for a significant amount of inactive materials and capital-intensive processes like drying and electrolyte filling, thus dramatically reducing manufacturing cost.

"Kyocera's launch of the Enerezza residential energy storage product line marks a significant milestone for 24M," said Naoki Ota, President and CTO of 24M. "After many years of hard work, our technology is commercially available thanks to our dedicated partner Kyocera."

#### **About 24M**

24M answers the world's need for affordable energy storage by enabling a new, more cost-effective solution—SemiSolid lithium-ion technology. By re-inventing the design of the battery cell as well as the manufacturing method, 24M solves the critical, decades-old challenge associated with the world's preferred energy storage chemistry: reducing its high cost while improving its performance. Founded and led by some of the battery industry's foremost inventors, scientists and entrepreneurs, 24M is headquartered in Cambridge, Mass. For more information, please visit <a href="https://www.24-m.com">www.24-m.com</a>.



For more information on Kyocera: www.kyocera.co.uk

### **About Kyocera**

Headquartered in Kyoto, Japan, Kyocera Corporation is one of the world's leading manufacturers of fine ceramic components for the technology industry. The strategically important divisions in the Kyocera Group, which is comprised of 286 subsidiaries (as of March 31, 2019), are information and communications technologies, products which increase quality of life, and environmentally friendly products. The technology group is also one of the most experienced producers of solar energy systems worldwide, with more than 40 years of know-how in the industry.

The company is ranked #655 on Forbes magazine's 2019 "Global 2000" listing of the world's largest publicly traded companies. With a global workforce of over 77,000 employees, Kyocera posted net sales of approximately €12,99 million in fiscal year 2018/2019. The products marketed by the company in Europe include printers, digital copying systems, semiconductor-, fine ceramic-, automotive- and electronic components as well as printing devices and kitchen products. The Kyocera Group has two independent companies in the United Kingdom: Kyocera Fineceramics Ltd. and Kyocera Document Solutions.

The company also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by Kyocera founder Dr. Kazuo Inamori — to individuals and groups worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (converted at approximately €828,000 per prize category).

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