

Panasonic Energy Ready to Commence Mass Production of 4680 Automotive Lithium-ion Batteries

In anticipation of global deployment, Wakayama factory relaunched as primary production facility

Osaka, Japan – September 9, 2024 – Panasonic Energy Co., Ltd. (“Panasonic Energy”), a Panasonic Group Company, today announced that it has finalized preparations for mass production of the 4680 cylindrical automotive lithium-ion batteries, marking a much-anticipated breakthrough in the industry. The company has also revamped its Wakayama factory in Western Japan, which will serve as the mother factory for the new cells. An opening ceremony was held today to commemorate the occasion. The mass production is set to start after the final evaluation.



The 4680, a revolutionary cell format of cylindrical lithium-ion batteries for electric vehicles (EVs), offers substantial improvements over the conventional 2170 cells. These new cells possess five times the capacity of the 2170 cell. This not only extends the driving range of EVs, but also reduces the number of cells required for the same battery pack capacity. This results in a more efficient battery pack assembly process and ultimately lowers the cost of EVs, making them more affordable to a wider market.

The manufacturing process of the 4680, with its larger capacity per cell, requires more advanced technology and expertise. Leveraging its 30 years of know-how in the development of cylindrical

lithium-ion battery technology, Panasonic Energy has pioneered a mass production method for high-performance 4680 cells, setting a benchmark in the industry.

The Wakayama factory, a base for the manufacture of lithium-ion battery parts, has undergone a transformation. It will now act as the mother factory for the production of 4680 cells and will serve as a demonstration hub for new products and methods. The factory will play a key role enhancing product quality and competitiveness, with processes newly trialed there set to be implemented globally in other factories. By March 2025, it is expected that roughly 400 staff will be involved in the development and production of next-generation batteries at the Wakayama factory.



With the goal of achieving environmentally-friendly manufacturing, the Wakayama factory plans to utilize renewable energy sources like solar power and onshore wind power to the fullest extent, aiming for virtually zero CO₂ emissions during its production processes. This eco-conscious approach has already been successfully implemented at the company's Moriguchi base and Kaizuka factory in Osaka, resulting in the achievement of carbon neutrality across all nine of the company's domestic bases as of September 2024. Panasonic Energy aims to extend this achievement to all 20 of its global bases by March 2029.

Kazuo Tadanobu, President and Executive Officer, Panasonic Energy, said, "I am excited that we are ready to start the mass production of the cutting-edge 4680 cell. This milestone is the result of years of expertise in cylindrical lithium-ion battery manufacturing. I'm confident it will significantly revolutionize the battery and EV industry. As we add the 4680 cell to our lineup, we'll cater to a broader range of needs, further promoting the use of EVs and advancing our mission of fostering a sustainable society."

Wakayama Factory Details

Factory name	Panasonic Energy Co., Ltd. Wakayama Factory
Location	612-1 Uchita, Kinokawa City, Wakayama Prefecture
Date of establishment	April 1991
Items produced	Cylindrical automotive lithium-ion batteries (4680 cells) and components for lithium-ion batteries
Total site area	99,177m ²
Building area	60,907 m ²
Number of personnel	Approximately 400 (planned for fiscal year ending March 2025)

About Panasonic Energy

Panasonic Energy Co., Ltd. provides innovative battery technology-based products and solutions globally. Through its automotive lithium-ion batteries, storage battery systems and dry batteries, the company brings safe, reliable, and convenient power to a broad range of business areas, from mobility and social infrastructure to medical and consumer products. Panasonic Energy is committed to contributing to a society that realizes happiness and environmental sustainability, and through its business activities the Company aims to address societal issues while taking the lead on environmental initiatives. For more details, please visit <https://www.panasonic.com/global/energy/>.

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