



Toyota and Panasonic Agree to Establish Joint Venture Related to Automotive Prismatic Batteries

22 January 2019

Toyota Motor Corporation (Toyota) and Panasonic Corporation (Panasonic) today concluded a business integration contract and a joint venture contract towards the establishment of a new company (joint venture) related to the automotive prismatic battery business.

Major points of the agreements: -

- Toyota and Panasonic will establish a joint venture (pending approval from the competition law authorities in the countries and regions concerned) by the end of 2020.
- The ratio of equity participation in the joint venture will be 51 per cent for Toyota and 49 per cent for Panasonic.
- The scope of the joint venture's business operations will cover research, development, production, engineering, manufacturing, procurement, order receipt and management related to automotive prismatic lithium-ion batteries, solid state batteries and next generation batteries.
- Toyota will transfer equipment and personnel to the joint venture in the areas of development and production engineering related to battery cells. Panasonic will transfer equipment, other assets, liabilities, personnel and other items to the joint venture in the areas of development, production engineering, manufacturing (at plants in Japan and Dalian, China), procurement, order receipt and management functions related to the automotive prismatic battery business.
- The total number of employees from both companies related to operations subject to transfer to the joint venture is 3,500 (as of the end of December 2018).
- Products produced by the joint venture will be sold to various auto makers through, in principle, Panasonic.

In addition to changing consumer needs for the automobile, as evidenced by shifts towards connected vehicles, autonomous driving and car-sharing services, today's automotive world is also being called on by society to help find solutions to issues such as those related to global warming, resources and energy. Batteries are a most-important element as vehicle electrification accelerates towards the solving of such environmental issues.

However, many battery-related challenges have to be tackled, including not only having the advanced technological capabilities to address issues of cost, energy density, charging time and safety, but also being able to ensure stable supply capacity and having effective recycling structures. The business environment is one in which independent efforts by battery manufacturers or automobile manufacturers are not enough to solve the issues concerned.

Against the backdrop of such a business environment, Toyota and Panasonic announced an agreement on 13 December 2017 to study the feasibility of a joint automotive prismatic battery business. Since then, the two companies have produced high-capacity and high-output automotive prismatic batteries that lead the industry in terms of performance and cost. To contribute to the popularisation of Toyota's and other auto makers' electrified vehicles, Toyota and Panasonic have also repeatedly held formal discussions on the concrete details of their collaboration.

Toyota and Panasonic are confident that the contracts concluded today will further strengthen and accelerate their actions towards producing competitive batteries.

The joint venture will integrate management and other resources from both companies, fusing the strengths of both Toyota and Panasonic. Toyota is to contribute: know-how and market data related to electrified vehicles; advanced technologies related to solid-state batteries and more; and Toyota-style manufacturing capabilities (*monozukuri*). Panasonic, demonstrating its strengths as a battery manufacturer, is to contribute: technologies related to high-capacity and high-output batteries that are high quality and extremely safe; mass-production technologies; and a customer base both in Japan and overseas. In this way, the joint venture aims to become the leader in battery development and battery manufacturing capabilities.

Specifically, for the joint venture to become the leader in battery development capability, Toyota and Panasonic intend to co-ordinate with each other from the vehicle planning and concept stage, and promote the acceleration of high-capacity and high-output battery development. For the joint venture to become the leader in battery manufacturing capability, Toyota and Panasonic intend to share their production engineering resources and *monozukuri* know-how with each other and, in addition to establishing a high-quality, low-cost, stable supply structure, plan also (among other efforts) to leverage merits of scale related to procurement and manufacturing costs.

Toyota Executive Vice President Shigeki Terashi said: "Together with Panasonic, we want to hone our competitiveness in batteries, one of the core technologies of electrified vehicles. By contributing to the popularisation of Toyota's and other auto makers' electrified vehicles, we want to help find solutions to issues such as global warming and environment and energy-related challenges. We have high expectations for the new company, including - as we aim to deliver ever-better electrified vehicles to even more customers - its role in fulfilling our plans for the popularisation of electrified vehicles (including achieving Toyota annual global sales of more than 5.5 million electrified vehicles) which we announced at the end of 2017*."

Panasonic Senior Managing Executive Officer Masahisa Shibata said: "Uniting with Toyota's battery and production engineering technologies provides us with an excellent opportunity to be able to evolve faster than ever our automotive prismatic batteries, which have an established track record of performance and safety. Through the electrification of vehicles, we want to accelerate our contribution to the realisation of a mobility society that is kind to the environment."

*<https://newsroom.toyota.co.jp/en/corporate/20353243.html>

ENDS