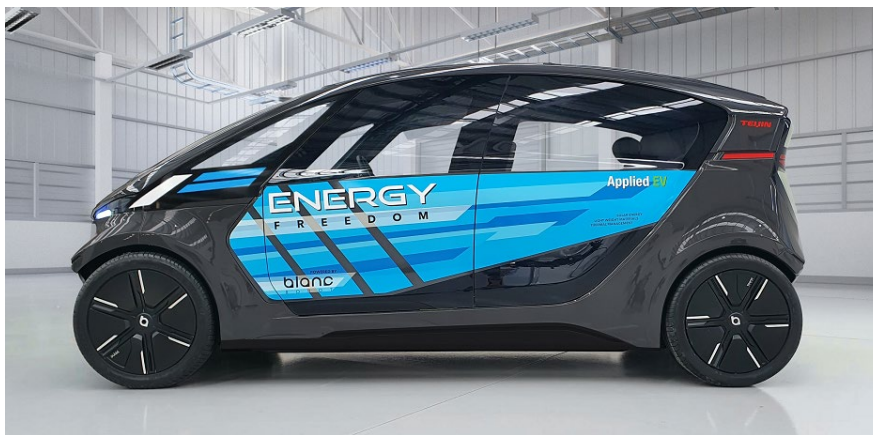


NEWS RELEASE

**Teijin and Applied EV Develop Energy-efficient  
Autonomous LS-EV for Future Mobility**

Tokyo, Japan, March 30, 2021 --- [Teijin Limited](#) announced today that together with Applied Electric Vehicles ([Applied EV](#)) it has developed a highly energy-efficient low-speed electric vehicle (LS-EV) prototype for autonomous driving systems and other mobility applications that are expected to help realize zero-emission mobility.



The four-seat LS-EV embodies a Well-to-Wheel Zero-Emission approach that combines Teijin's proprietary technologies and expertise in strong, lightweight materials, processing and molding technologies and Applied EV's technologies including an entirely new mobility vehicle platform called [Blanc Robot](#), built entirely from first principles, integrating a new, high efficiency driveline and full "drive-by-wire" technologies.

The vehicle, which is built on the [Blanc Robot](#) zero-emission robotic vehicle platform developed by Applied EV, incorporates Teijin materials and technical know-how. It runs on remarkably little energy, achieving unprecedented energy efficiency for an autonomous vehicle, consuming roughly the same amount of energy as a human pedestrian. It can also be used for autonomous driving systems.

Teijin's lightweight and highly impact resistant *Panlite*<sup>®</sup> polycarbonate resin glazing is the material used for the windows and doors, the vehicle's main components, enabling the stylish body. *Panlite*<sup>®</sup> used for the prototype also provides excellent infrared blocking and help to moderate temperatures in the cabin interior.

The curved roof, which has been integrally molded with a *Panlite*<sup>®</sup> glazing, is fitted with a solar panel and lightweight power supply module. The system achieves output of about 330W, which is equivalent to that of a conventional solar panel housed under glass.

Moreover, Teijin Frontier's vertically oriented polyester non-woven fabric provides insulation from ambient temperatures and road noise outside of the vehicle.

The field of mobility is undergoing a significant transformation propelled by new concepts such as connected, autonomous, shared and electric (CASE) vehicles and Mobility as a Service (MaaS). Electrification and autonomous technologies are rapidly being developed for next-generation mobility applications that will help to reduce environmental impact and address new needs in society, such as transportation for aging societies.

The shift to electric mobility is focusing attention on the benefit of the Well-to-Wheel Zero-Emission approach, which takes into account the total energy efficiency of vehicles, including how their electricity is sourced and how efficiently it is used during driving. Teijin and Applied EV, which commenced their joint-development collaboration in 2019, are committed to establishing a technological foundation for supporting practical multipurpose zero-emission vehicles in future society.

“A focus on sustainable solutions can be very good for business economics” said Julian Broadbent, CEO of Applied EV. “By working in collaboration with Teijin, reducing the mass of an entire vehicle, one requires less energy for a given task and therefore less battery size. As a net result, with a similar roof area as a traditional vehicle, we find solar technology makes very good sense with real world impacts and a very nice business case”

Toshiaki Hotaka, General Manager of Teijin Limited's Mobility Division, said: “Through our collaboration with Applied EV, we are working to realize Well-to-Wheel Zero-Emission solutions that anticipate mobility needs in the near future. To this end, we are strengthening our technological capabilities by applying our know-how in high-performance materials, design and composites. Aiming to become a company that supports the society of the future, we have positioned environmental-value solutions as a priority field in which Teijin can contribute to circular economies and sustainability.”

### **About the Teijin Group**

Teijin (TSE: 3401) is a technology-driven global group offering advanced solutions in the fields of environmental value; safety, security and disaster mitigation; and demographic change and increased health consciousness. Originally established as Japan's first rayon manufacturer in 1918, Teijin has evolved into a unique enterprise encompassing three core business domains: high-performance materials including aramid, carbon fibers and composites, and also resin and plastic processing, films, polyester fibers and products converting; healthcare including pharmaceuticals and home healthcare equipment for bone/joint, respiratory and cardiovascular/metabolic diseases, nursing care and pre-symptomatic healthcare; and IT including B2B solutions for medical,

corporate and public systems as well as packaged software and B2C online services for digital entertainment. Deeply committed to its stakeholders, as expressed in the brand statement “Human Chemistry, Human Solutions,” Teijin aims to be a company that supports the society of the future. The group comprises more than 170 companies and employs some 20,000 people across 20 countries worldwide. Teijin posted consolidated sales of JPY 853.7 billion (USD 8.0 billion) and total assets of JPY 1,004.2 billion (USD 9.4 billion) in the fiscal year that ended on March 31, 2020.

Please visit [www.teijin.com](http://www.teijin.com)

**Press Contact**

Corporate Communications

Teijin Limited

+81 (0)3 3506 4055

[pr@teijin.co.jp](mailto:pr@teijin.co.jp)