Report

EU-PACIFIC TALKS:

IN-EV-ITABLE FUTURE OF AUTOMOTIVE INDUSTRY: WHAT IS THE ROLE OF THE PACIFIC REGION

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In the last debate of the second series of EU-Pacific Talks, organised by EUROPEUM Institute for European Policy, the guests focused on electric and fuel cell vehicles, both foreseen as a way of road transport decarbonization.

The urgent need to tackle climate change and reduce greenhouse gas emissions has brought the transport sector under scrutiny as a significant contributor to CO2 emissions. Electric Vehicles (EVs) have gained considerable attention in recent years as a promising solution. The zero-emission nature of EVs and the opportunity to integrate with renewable energy sources positions them as a powerful solution for reducing CO2 emissions in the transport sector. Despite their advantages, the widespread adoption of electric vehicles faces several challenges. To encourage EV adoption, a robust charging infrastructure must be established. Moreover, continued development is essential to address the limitations of battery range and charging time and improve the overall performance of EVs. Furthermore, it is necessary to consider the potential environmental and social impacts associated with mining, as the EV is dependent on critical minerals and rare earth elements.

To foster technological advancements in battery technology, reduce costs, and enhance performance to support the widespread adoption of electric vehicles, Japan and the European Union can undertake several collaborative efforts. As Professor Jin Kusaka from Waseda University stated, there is a level of cooperation between specific segments of the European automotive industry and their Japanese counterparts; however, achieving full collaboration may prove challenging due to various factors. When discussing the future development of electric vehicles, Professor Kusaka highlights the key technologies and the importance of the future progress of solid-state batteries. Solid-state batteries have the potential to tackle various challenges commonly associated with lithium-

ion batteries, including safety concerns, improved energy density, faster charging capabilities, and enhanced cycle life and durability. Their development holds great promise in advancing the electric vehicle industry.

Petr Knap from EY Czech Republic acknowledges the potential for collaboration within other supply chain layers, such as advanced materials in Japan, automation technologies, and other know-how for European manufacturing. Despite historical challenges posed by geographical distance and mutual caution, which have made it less straightforward to establish fruitful partnerships, it is essential to recognise the potential that collaboration holds. Europe's capabilities, markets, and experience, coupled with Japan's advanced technologies, experiences, and successful transition to a hybrid world, present a strong partnership across the Pacific that will be crucial in the future. The synergies between these two regions offer a promising foundation for future collaborations and advancements in various fields.

Concerning what role can government incentives and regulations play in accelerating the adoption of electric vehicles and encouraging sustainable mobility, Michal Hrubý, Scientific Assistant from ŠKODA AUTO University, highlights the limited effectiveness of past non-financial incentives utilised to accelerate the adoption of electric vehicles, attributed mainly to the substantial price gap between combustion engine vehicles and electric vehicles. Given the significant impact of battery cost dynamics on the affordability of electric vehicles, an essential consideration is the future trajectory of critical material prices for battery production and its potential influence on the sales of different electric vehicle technologies.