

ELECTRIC VEHICLES IN AVIATION TRANSPORT

A Case Study of Swissport

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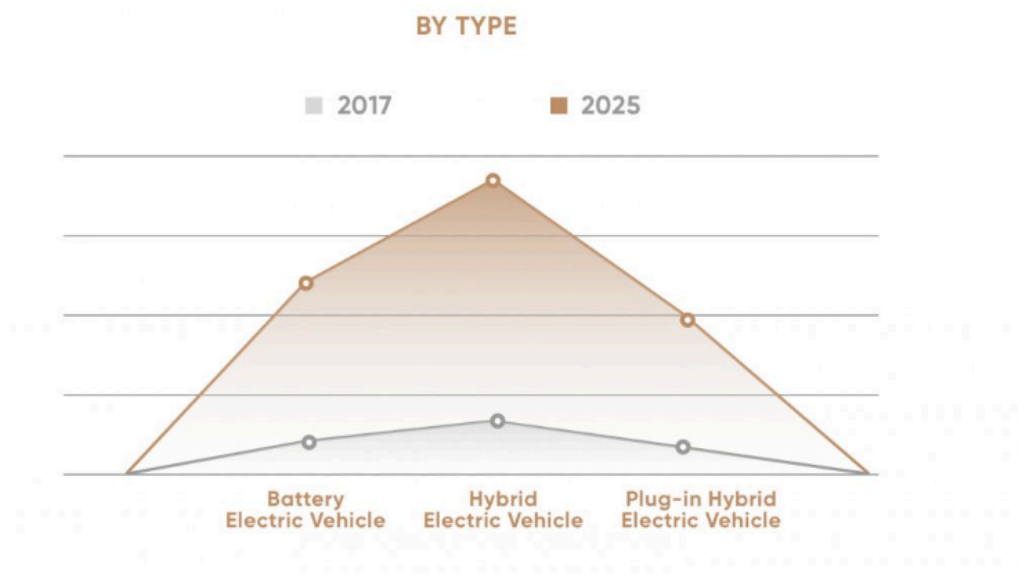
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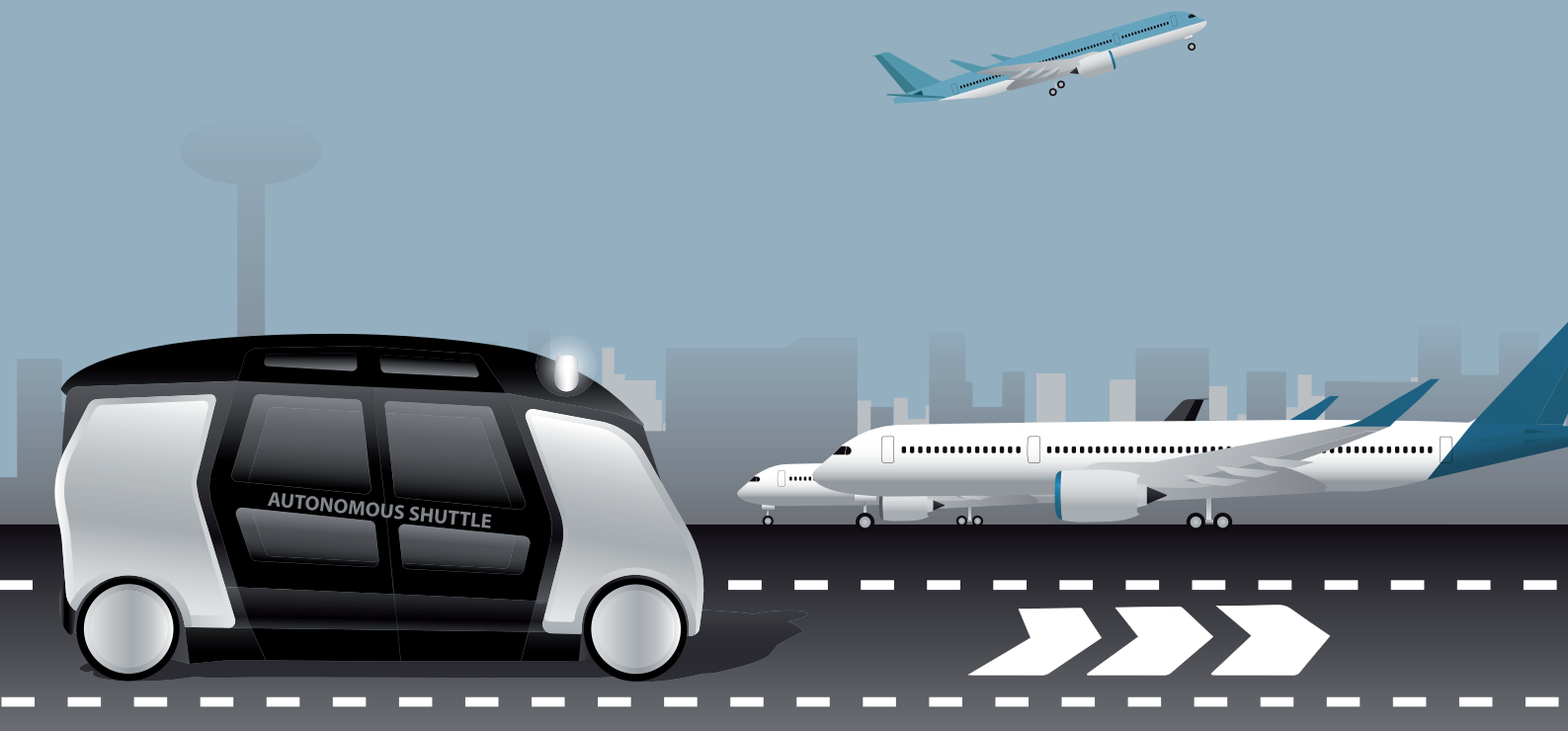


Market Research Future (MRFR) on the global electric vehicle market is anticipated to expand at a CAGR of about 18.4% during the forecast period between 2017-2023¹. Growth projections in the electrical vehicle industry tend to be very positive within the near future, which will open up attractive investment opportunities in 2019. According to recent estimates, the electric vehicles industry will reach a total market cap of USD 567 billion by 2025².

From a technological viewpoint, the global electric vehicle industry is divided into the following categories: Battery, Hybrid and Plug-in hybrid. The battery-powered electric vehicle (BEV) is an electric vehicle (EV) type that runs on the chemical energy contained within the rechargeable battery pack. A hybrid electric vehicle (HEV) is a type of hybrid vehicle, which combines both an electrical propulsion system and a conventional internal combustion engine. A plug-in hybrid electric vehicle (PHEV) is a type of hybrid electric vehicle that combines a gasoline or diesel engine with an electric motor and a large battery that can be recharged by plugging into an electrical outlet or electric vehicle charging station³.

The upward trend in the electric vehicle market is driven by a number of key factors, such as commitment to new sustainable goals around environmental protection and carbon reductions, rising fuel prices and the expansion of top global auto-manufacturers into emerging markets. Furthermore, the surge in demand for electric vehicles is affected by government initiatives and emerging economies seeking to increase the market for these sorts of vehicles. While today's market growth may remain slightly hindered by high prices for electric cars and underdeveloped aftermarket infrastructure, technological innovation, regulatory pollution regulations and shifting market dynamics will continue to move globally towards environmentally-friendly electric vehicles rather than gas-powered vehicles.

The goal of a stable Energy Union featuring an ambitious climate policy at its heart is to ensure secure, low-carbon, efficient and affordable energy for EU businesses with a climate-friendly economy that is designed to last. A fundamental transformation of the European energy system will be needed to achieve this goal. To do so it needs to move away from an economy driven by fossil fuels, where energy is based on a centralized, supply-side approach and which relies on old technologies and outdated business models⁴. Electric vehicles (EVs) are a key part of meeting the strategic objectives of global climate change. If the climate targets set out in the Paris Agreement are to be met, the production of electricity will be considerably less carbon-intensive and the benefits of electric vehicles over conventional ones will be further increased.



Eight of Europe's largest cities¹ aim to demonstrate in the FREVUE project that electric vehicles operating 'last mile' freight movements in urban centers can offer significant and achievable decarbonization of the European transport system⁵. FREVUE (Freight Electric Vehicles in Urban Europe) would provide evidence of how innovative solutions such as electric freight vehicles can reduce emissions and show that electric freight vehicles can be used in urban areas for industry, customers and policy makers.

Increasing numbers of companies are responding to the climate targets set out in the Paris Agreement by announcing their own emission targets. While companies aim to be more energy efficient and as many European countries focus on reducing the use of gas-powered vehicles as part of the Paris Climate Agreement, several air freight companies are investing in increasing their fleets of electric vehicles. Swissport, as the world's largest provider of ground and cargo handling services in the aviation industry, has committed to increasing its fleet share of electric vehicles to at least 50% in order to further reduce its carbon footprint and boost the direct working environment of its employees.

¹ Demonstrators will be deployed in Amsterdam, Lisbon, London, Madrid, Milan, Oslo, Rotterdam and Stockholm.



Swissport is committed to responsible business principles as a signatory to the United Nations Global Compact. The number of electric vehicles in the Swissport Group has almost tripled since 2016, in line with its plans to purchase GSE or eGSE electrically powered vehicles. Between 2016 and 2018, Swissport increased the number of eGSE from 925 to 2,420 vehicles, among them electrical cargo lifters and battery-powered aircraft pushback tractors⁶.

The integration of sustainability is part of Swissport's strategic and operational objectives and decision-making processes. Swissport is committed to leading the industry by taking steps to continually reduce the harmful environmental impact of its operations. The modernized fleet of Swissport provides significant environmental benefits. Swissport promotes environmental responsibility in its services and among its employees and encourages the development and application of environmentally sustainable technologies.

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