EDMOND DE ROTHSCHILD

EV – THIS IS A WAR EUROPEAN AUTOMAKERS CANNOT LOSE

"It must be a battle. They (Chinese EV makers) are clearly very competitive in the electric car value chain. I think they are a generation ahead of us. We need to catch up very quickly." Renault CEO Luca de Meo said in the Munich IAA car show.

In the early 21st century, the automotive industry underwent a seismic shift driven by the emergence of EVs (electric vehicles), with Tesla's Roadster leading the charge since 2008. This transformation resulted in global NEV (New Energy Vehicle) sales exceeding 10 million vehicles in 2023, nearly tripling in just two years.

China stands at the forefront, representing nearly 60% of new global electric car registrations in 2022. NEV sales in China soared to 29% of the country's total domestic car sales in 2022, surpassing the 2025 national target of 20%. Meanwhile, Europe witnessed a nearly 55% surge in EV sales during the first seven months of 2023, constituting 13% of total car sales. Remarkably, Norway and Iceland lead the charge with EV penetration rates of 86% and 72%, respectively.

Passenger cars contribute approximately 12% of total EU emissions of CO2. The EU Commission plans to cease the production of ICE (Internal Combustion Engine) vehicles starting in 2035. To further accelerate the decarbonization, among other infrastructure challenges, two pressing issues loom on the horizon for automobile manufacturers:

1. The Cost Barrier: Electric vehicles often come with a substantial price premium compared to their ICE counterparts. For instance, the Peugeot 208-electric in France commands a price of over 35,000 euros, marking a 57% increase compared to its petrol version, even after factoring in government incentives. This price gap is exacerbated by the current inflationary climate, with the same model experiencing a 20% price hike over the past three years.
2. Limited Model Variety: European markets lack diversity in EV offerings, with only a handful of dominant models. Tesla holds a substantial market share with just two models: the Model Y and Model 3, followed by e208, Fiat 500e, and MG4 (owned by Chinese automaker SAIC).

To address these challenges, Chinese EV manufacturers have emerged as a potential solution. We attended the IAA Munich, where Chinese EV exhibitors more than doubled compared to the previous year, with BYD standing out. Armed with cost-effective vehicles and advanced features, they aim to strengthen their foothold in the European market.

Competition in the Chinese market has honed Chinese automakers, positioning them as formidable competitors in Europe. Notably, newcomers like Li Auto have achieved an impressive 20% gross margin in Q2 2023, delivering around 30,000 vehicles monthly. This success contrasts sharply with many traditional car manufacturers that are grappling with losses in their EV divisions. Additionally, Chinese battery manufacturers lead in LFP battery production, which is gaining traction due to its cost advantage and reasonable range, despite lower energy density compared to NCM.

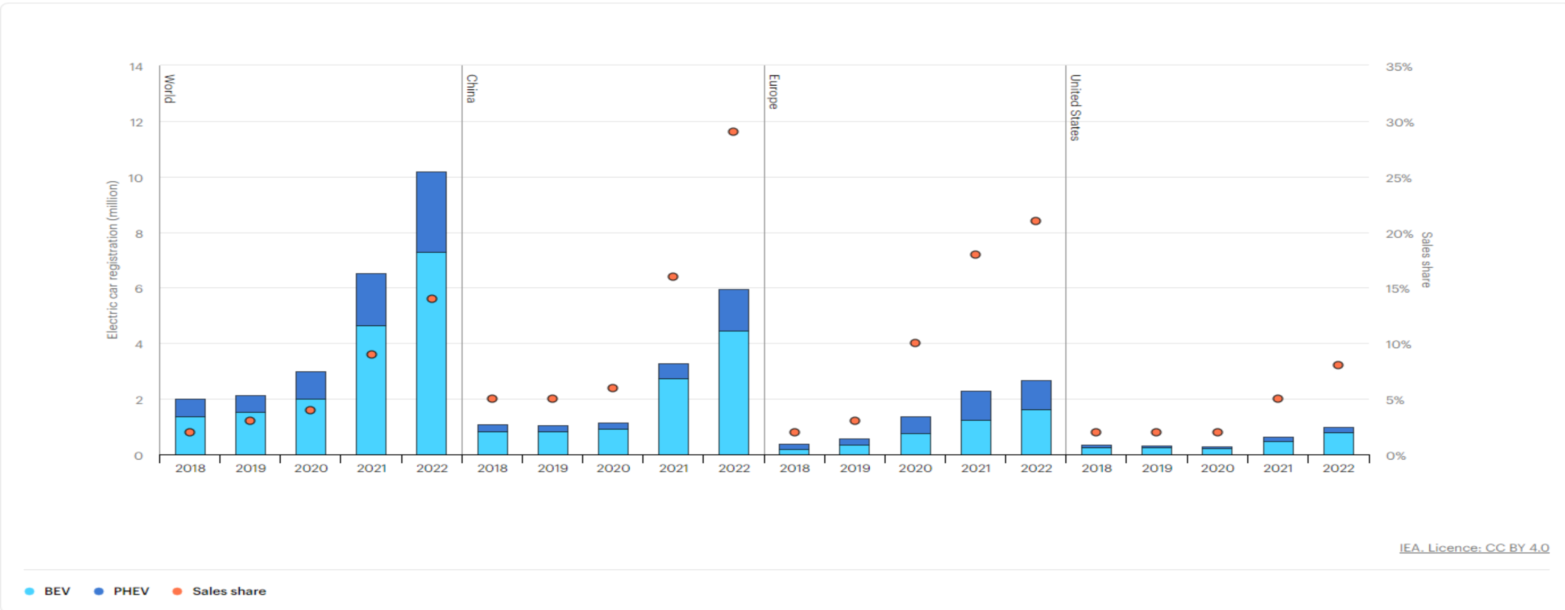
CAN EUROPEAN CAR MANUFACTURERS REGAIN THEIR COMPETITIVE EDGE?

The arrival of Chinese EV makers in Europe has raised concerns about their potential dominance. European car manufacturers must address cost competitiveness, as emphasized by Renault's CEO. Europe must safeguard its EV manufacturing while acknowledging that complete independence in the EV supply chain is impractical. The most viable approach is collaboration with experienced Chinese partners, who possess a decade's worth of knowledge in EV production.

Battery technology plays a pivotal role in reducing EV costs, constituting up to 40% of an EV's total expense. Although Western countries pioneered battery technology decades ago, the production expertise is now predominantly in the hands of Asian nations. Battery manufacturing entails significant capital requirements and may involve longer-than-expected ramp-up periods for optimal production yields. ACC, backed by SAFT, Stellantis, and Mercedes, aims to lead in European LiB batteries with support from governments and institutions. It plans 3 gigafactories in France, Germany, and Italy with 120 GWh capacity. Partnering with Wuxi Lead, a leader in new energy equipment and Li-ion battery production solutions, accelerates the French Gigafactory construction with their advanced equipment and services. Volkswagen has set an ambitious target, aiming for a 50% reduction in battery costs by 2025 through strategic collaborations with CATL, a global battery leader. This trend suggests the potential for more affordable EVs in Europe in the near future.

Addressing EV supply chain challenges necessitates a coordinated, integrated approach. European policymakers must ensure these partnerships flourish while avoiding counterproductive decoupling strategies. Unlike the smartphone industry dominated by a few giants, the automotive sector is diverse, offering European manufacturers an opportunity to catch up in this highly competitive market.

Electric car registrations and sales share in China, the United States and Europe



Source: IEA. Data as at 08/09/2023.

By Bing Yuan, International Equities Fund Manager at Edmond de Rothschild Asset Management

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EDMOND DE ROTHSCHILD ASSET MANAGEMENT (FRANCE)

47, rue du Faubourg Saint-Honoré 75401 Paris Cedex 08

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332.652.536 R.C.S. Paris